

STATE OF TEXAS

FLEET AUTOMOBILES AND TRUCKS

TEXAS SPECIFICATION NO: 071-072-AT

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Comptroller of Public Accounts

Texas Procurement and Support Services

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SPECIFICATION FOR FLEET AUTOMOBILES AND TRUCKS

SECTION A – GENERAL INFORMATION, REQUIREMENTS, AND CONDITIONS

1. **SCOPE:** This specification describes the majority of automobile and truck categories required by the various agencies and political subdivisions of the State of Texas. Tables of minimum requirements for each category automobile and truck covered by this specification are included. Specifications pertaining to the make and model of the automobile or truck available from the various manufacturers are included in the tables.
2. **DEFINITIONS AND ABBREVIATIONS:** The following definitions and abbreviations are used throughout this specification:

Abbreviation	Definition
4WD	Four Wheel Drive
ASE	National Institute of Automotive Service Excellence
ASTM	American Society for Testing and Materials.
AWD	All-Wheel Drive (May not be suitable for off road terrain. Check manufacturer's literature)
BCI	Battery Council International.
CARGO LENGTH	Length in inches behind the first row of seats
CFR	United States Code of Federal Regulations.
CNG	Compressed Natural Gas
CPA	Comptroller of Public Accounts, Purchasing Division, PO Box 3047, Austin, Texas 78711-3047
CPA (COMMISSION)	Comptroller of Public Accounts
DMV	Texas Department of Motor vehicles
DOT	United States Department of Transportation.
DPS	Texas Department of Public Safety.
EPA	United States Environmental Protection Agency.
FFV	Flex Fuel Capable
FMVSS	United States Federal Motor Vehicle Safety Standards.
FWD	Front Wheel Drive
GAWR	Gross Axle Weight rating
GCWR	Gross Combination Weight Rating
GVWR	Gross Vehicle Weight Requirement
IFB	Invitation for Bids.
LPG	Liquefied Petroleum Gas
MANUFACTURER	A fabricator of automobile trucks, bodies, chassis, or components.
MPG	Miles Per Gallon
MSO	Manufacturer's Statement of Origin
NGV	Natural Gas Vehicle.
NTEA	National Truck Equipment Association.
OEM	Original Equipment Manufacturer:
OSHA	United States Occupational Safety and Health Administration.
PAYLOAD	Approximate payload allowance is defined as (GVWR - Curb Weight of the vehicle) and includes weight of all passengers including driver.
PSI	Pound Per Square-Inch
RBM	Resistive Bending Movement Rating for Frames
RFP	Request for Proposal
RRC	Railroad Commission of Texas
RPM	Revolutions Per Minute
RWD	Rear Wheel Drive (Also all 2-Wheel Drive vehicles will be assumed to be RWD unless

	specified)
SAE	Society of Automotive Engineers.
TCEQ	Texas Commission on Environmental Quality
TDCJ	Texas Department of Criminal Justice
TxDOT	Texas Department of Transportation
VENDOR	A manufacturer's representative or dealer authorized to make sales and supply parts and service in Texas.
VER	Vehicle Emissions Rating
VIN	Vehicle Identification Number
ZEV	Zero-emissions Vehicle

3. APPLICABLE SPECIFICATIONS, STANDARDS, RULES, AND REGULATIONS:

- 3.1. **EXHAUST EMISSION STANDARDS:** Vehicles furnished to this specification shall meet the applicable requirements of the EPA's Exhaust Emission Standards (40 CFR 85, 86, and 88) and all revisions as issued under authority of the Clean Air Act, current version.
- 3.2. **FEDERAL MOTOR VEHICLE SAFETY STANDARDS (PUBLIC LAW 89-563):** Automobiles and trucks shall meet or exceed the minimum requirements of this specification and all applicable requirements of the FMVSS. All requirements of this specification shall be met unless they are in conflict with the applicable FMVSS.
- 3.3. **HORSEPOWER AND WHEELBASE LIMITATIONS (Section 2158.003, Texas Government Code, title 10. Formerly Section 3.29, Art. 601b, VTCS):** "A state agency/entity may not purchase or lease a vehicle designed or used primarily for the transportation of persons, including a station wagon that has a wheelbase longer than 113 inches or that has more than 160 SAE net horsepower, except that the vehicle may have a wheelbase of up to 116 inches or SAE net horsepower of up to 280 if the vehicles will be converted so that it is capable of using compressed natural gas or another alternative fuel..." "The wheelbase and horsepower limitations prescribed by this subsection do not apply to the purchase or lease of a vehicle to be used primarily for criminal law enforcement or a bus, motorcycle, pickup, van, truck, three-wheel vehicle, tractor or ambulance."
- 3.4. **TEXAS MOTOR VEHICLE DIVISION CODE :** ". . . any entity or person that manufactures, distributes, converts new motor vehicles (or represents any entity that manufactures, distributes, or converts new motor vehicles) or is in the business of buying, exchanging, or selling new motor vehicles is required to be licensed by the Texas Department of Motor Vehicles (DMV).
- 3.5. **OTHER SPECIFICATIONS AND STANDARDS:** Reference to specifications, standards and test methods shall be to those in effect on the date of the Request for Proposals. The following publications form a part of this specification to the extent that they meet all of OSHA's requirements and others as specified herein
- 3.5.1. **AMERICAN SOCIETY FOR TESTING AND MATERIALS (ASTM)**, 1916 Race Street, Philadelphia, Pennsylvania 19103:
ASTM A 606 – Standard Specification for Steel Sheet and Strip, Hot-Rolled and Cold-Rolled, High Strength, Low-Alloy, with Improved Corrosion Resistance.
- 3.5.2. **NATIONAL TRUCK EQUIPMENT ASSOCIATION (NTEA)**, 25900 Greenfield Rd. #410, Oak Park, Michigan:
NTEA– Hydraulic Conversion Hoist Classification Charts.
- 3.5.3. **SOCIETY OF AUTOMOTIVE ENGINEERS (SAE)**, 400 Commonwealth Drive, Warrendale, Pennsylvania 159096:
SAE J377 – Standard for Performance of Vehicle Traffic Horns.
SAE J544b – Recommended Practice for Starting Motor and Generator Curves.
SAE J551/12 – Vehicle Electromagnetic/Interference (EMI/RF) March, 1994 or latest revision.
- 3.5.4. **SUPERINTENDENT OF DOCUMENTS**, U.S. Government Printing Office, Washington, D.C. 20402:
CFR, Title 40, Part 85 – Control of Air Pollution from New Motor Vehicles and New Motor Vehicle Engines, Environmental Protection Agency.
DOT, Title 49, Part 393 – Liquid Fuel Systems of Commercial Motor Vehicles, Certification of Fuel Tank.
FMVSS (Public Law 89-563):
FMVSS No. 108 – Lamps, Reflective Devices and Associated Equipment.
FMVSS No. 126 - Electronic Stability Control Systems; Controls and Displays
FMVSS No. 209 – Seat Belt Assemblies for Passenger Cars, Multipurpose Passenger Vehicles, Trucks and Buses.
FMVSS No. 210 – Seat Belt Assembly Anchorages – Passenger Cars, Multipurpose Passenger

Vehicles, Trucks and Buses.
FMVSS No. 301 – Fuel System Integrity.

FEDERAL STANDARDS:

No. 595a – Colors.

No. TT-C-5208 – Coating Compound, Bituminous, Solvent Type, Underbody (for Motor Vehicles).

U.S. OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION (OSHA):

Construction Safety and Health Regulations, Section 1926.601 – Motor Vehicles.

3.6. STATE OF TEXAS:

3.6.1. **RAILROAD COMMISSION OF TEXAS (RRC)**, Liquefied Petroleum Gas Division, P.O. Box 12967, Austin, Texas 78711-2967:

Regulations for Compressed Natural Gas (current edition).

Safety Rules: Liquefied Petroleum Gas Division (current edition).

3.6.2. **TRANSPORTATION CODE:** Uniform Act Regulating Traffic on Highways.

<http://www.statutes.legis.state.tx.us/>

3.6.3. **TEXAS OCCUPATIONS CODE:** Title 14 Chapter 2301 <http://www.statutes.legis.state.tx.us/>

4. GENERAL INFORMATION AND REQUIREMENTS:

4.1. **ACCESSORIES, REQUIRED AND OPTIONAL:** Unless otherwise specified in the Request for Proposal (RFP), vehicle manufacturer's standard advertised/published accessories and other options shall be chassis-factory installed, on all vehicles except medium-duty cab and chassis units, but including light-duty cab and chassis units. An individual option shall be factory installed whether the option is available separately, or as part of an option package. Where available, the vendor shall provide the manufacturer's standard and optional feature codes as they align with these specifications. When only provided as part of an option package, all package items, including the individual option shall be provided. Vehicle manufacturer's standard advertised/published accessories for medium-duty cab and chassis units shall be chassis-factory installed. Requested optional equipment on medium-duty cab and chassis units shall be furnished and installed by the chassis manufacturer (if available) or they shall be furnished and installed by dealer or other manufacturers, provided all specified minimum requirements are met. All installed options shall be priced including the installation cost. Dealer bids on all non-OEM/after-market options on this contract should be accompanied by the item's manufacturer part/model/series number to be provided at the given price.

NOTE: All options shall be OEM, unless otherwise noted. Furthermore, adding some options to vehicles may result in a change in vehicle model (within a particular series).

4.2. **BATTERIES:** OEM Standard Batteries required.

4.3. **KEYS:** At no additional cost, (where available) each vehicle will be delivered with three (3) ignition/door keys and three (3) fobs/remote keyless entry/ignition devices. ***This applies to ALL vehicles on state contract.***

4.4. **COMPARABLY EQUIPPED VEHICLES:** An attempt has been made to ensure that manufacturer's models in each Series are furnished with comparable equipment (whether optional or standard as provided by the manufacturer). Any imbalance in the requirements for a listed series, i.e., an item that is an optional accessory for one brand and standard on another, should be called to the attention of the Purchasing Division immediately.

4.5. **DEALER BODY/COMPONENT REQUIREMENTS:** Dealer to submit manufacturer's current, regularly published literature on the body, toolbox, and other aftermarket components offered. Literature shall be sufficiently detailed to permit CPA or the ordering entity to determine if the items offered meet specified requirements.

If the bodies/components are discontinued by the manufacturer or become otherwise unavailable, dealer shall submit literature on proposed alternate(s) for CPA or the ordering entity's approval.

Apparent low bidder shall (within 3 business days of request) furnish CPA or the ordering entity written verification that the selected up fitter has read, understands, and will comply with all specification requirements, including delivery timelines. The verification shall be signed by a representative of the selected up fitter. Vendor shall submit written verification from any additional or alternate up fitter(s) to be used under the contract.

4.6. **EQUIPMENT MOUNTING:** No equipment mounted on State of Texas trucks shall, under any circumstances, be welded to the vehicle frame at any point between the front of the front spring hanger and the rear of the rear spring hanger. Also, all holes for bolting must be drilled in the accepted manner and the burning of said holes shall not be acceptable under any condition. Further, no holes shall be drilled in top or bottom flange of

truck frame unless drilling is confined to the section behind the rearmost attachment of the rear spring hangers or for pre-formed factory-made frame rail bolt holes for subsequent body installation. Welding or torch cutting shall be confined to "boxing" the rear end of truck frame (as required for dump equipment to allow full dumping angle). All such work shall be confined to area behind rear spring hangers. Mounting strip between hoist sub-frame of dump body and truck frame may have flame cut holes to countersunk rivets on truck frame. Chassis frame rivets shall not be removed or cut flush with frame for any reason. Any mounting of aftermarket bodies or equipment may require special wheelbase and cab/axle dimensions to achieve correct weight distribution. Dimensions will be verified by ordering entity and/or CPA, and aftermarket vendor to accommodate intended use of vehicle." All mounting of special after-market equipment shall meet manufacture's installation requirements and all state and federal standards.

- 4.7. **SAFETY PLAQUES OR DECALS:** Safety plaques or decals shall be furnished on vehicles and bodies, and shall be affixed at any hazardous area. The safety plaques or decals shall describe the nature of the hazard, level of hazard seriousness, how to avoid the hazard, and the consequence of human interaction with the hazard. Permanent plaques are preferred to decals. Type, size and locations of product safety plaques or decals shall be in accordance with ANSI 535.4-1995, or latest revision thereto.
- 4.8. **GRILLE GUARDS AND HEADACHE RACKS:** are required to have, permanently affixed, model and manufacturer identification (matching the description provided by the vendor at the time of bidding). Lack of this identification or providing different items than described in the bid will be cause for rejection of the unit. The option price shall include the installation cost.
- 4.9. **LAMPS, SIGNALS, AND REFLECTORS (SERIES 650C THROUGH 1201D):** Reflectors and clearance, side-marker and identification lamps for Series 650 through 990 vehicles shall also meet the following requirements: Reflectors must be housed type with screw or bolt type mounting; stick-on type is not acceptable. Surface-mounted clearance and side-marker lamps shall be metal armored type. Recess-mounted side marker and clearance lamps must be recessed sufficiently to provide protection for the lens. Lenses for side-marker and clearance lamps shall be secured to the lamp by a fastening method which required a tool to remove the lens.
- 4.10. **LICENSE PLATE ATTACHMENT:** Each vehicle, except cab and chassis units, shall be furnished with means and adequate space for attaching the rear license plate without modification. Illumination provided for the license plate shall be in compliance with Texas motor vehicle laws.
- 4.11. **LOGOS AND DECALS:** Do not place decals or markings of any type pertaining to advertisement other than manufacturer's name or model designation normally installed by manufacturer on equipment delivered to any state agency or entity.
- 4.12. **MANUALS:** Each awarded vendor will include in each vehicle an owner's or operator's manual. This will include all standard manufacturer/vendor literature normally furnished and as required by law with the purchase of a new vehicle. In addition to the print version of the manual, the OEM or Dealer shall provide these documents in an electronic format as a CD-ROM and/or a link to their website.
- 4.13. **MUD FLAPS:** See (Section C.8.a.3) for mud flaps prescribed by law.
- 4.14. **NEW MODELS:** The vehicles furnished under this specification shall be the latest production model and shall be of good quality workmanship and material. The bidder represents that all units offered under this specification shall meet or exceed the minimum requirements specified for each vehicle series listed.
- 4.15. **ODOMETER STATEMENT:** The Truth in Mileage Act requires the selling dealer to furnish a complete odometer statement to the purchaser. This statement must be complete and shall include mileage accrued at the point of delivery. The delivered unit shall not have more than 300 miles on the Odometer, unless previously agreed upon in writing with the purchaser. In addition to the signature of the seller/agent certifying the odometer reading, both the dealership and the name of the agent shall be printed on the Odometer Disclosure Statement. The odometer statement on the MSO will satisfy this requirement.
NOTE: ODOMETER STATEMENT IS NOT REQUIRED ON TRUCKS WITH A GROSS VEHICLE WEIGHT RATING OF 16,000 POUNDS OR MORE.
- 4.16. **SERVICING AND EQUIPPING:** Awarded vendor(s) shall furnish automobiles and trucks meeting or exceeding the minimum requirements in the appropriate Series table and equipped exactly as listed for makes and models in the various tables of this specification and with any other requirements specified in the RFP. The vehicles shall be completely assembled, serviced, adjusted, and all equipment including standard and optional equipment shall be installed and the units made ready for continuous operation. If vehicles are delivered not made ready for continuous operation, it will be the vendor's responsibility to have the units made ready for continuous operation prior to acceptance. It shall not be the ordering entity's responsibility to arrange for the units to be made ready, including transporting units to local dealership for warranty repairs

prior to acceptance. Standard equipment means those components and accessories usually and ordinarily furnished without additional cost on regular production models.

- 4.17. **SPEEDOMETER:** Each vehicle shall be equipped with a speedometer having an odometer as an integral part. The speedometer drive mechanism must be properly calibrated in relation to each axle ratio and tire size to give accurate readings.
- 4.18. **TIRES:** All tires shall be new and the tread style shall be the tire manufacturer's standard design and the brand normally furnished on regular production orders, unless otherwise specified in the Invitation for Bid. All tires shall be "ORIGINAL EQUIPMENT LINE" quality **and have not less than a "B" heat rating.**
NOTE: UNLESS OTHERWISE SPECIFIED IN THE RFP, RAISED WHITE LETTERS ARE NOT ACCEPTABLE ON LIGHT-DUTY TRUCK AND TRUCK TYPE TIRES. VEHICLES EQUIPPED WITH RH5 DEGREE MULTIPLE PIECE CENTER-LOCKING RIMS ARE NOT ACCEPTABLE.
- 4.19. **WIRING:** With the exception of factory-installed wiring, all electrical wiring shall be insulated and enclosed in a fibrous loom, plastic loom, or flexible conduit for protection from external damage and short circuits. It shall be securely fastened at sufficient intervals to prevent sagging and to ensure clearance of mechanical parts. Routing of the wiring through the cab, frame, body, compartment box, and the like shall be placed in such a manner so as not to interfere with normal operation and use, or present a safety hazard. Rubber grommets shall be used wherever wires, hoses or harness pass through metal. (Refer to Section F.4.6 for the wiring requirements for dump bodies.)
- 4.20. **SAFETY NOTICES AND RECALLS:** All safety notices and recalls shall be mailed to the entity address designated on the purchase order for the destination of goods.
- 4.21. **FLEET NUMBERS:** The assignment of manufacturer's fleet numbers to ordering agencies shall be the sole responsibility of the awarded vendor(s).
- 4.22. **TAX, TITLE, AND LICENSE:** Agencies that do not qualify for exempt license plates and/or are classified as a non-profit organization will be responsible for any applicable tax, title, and license fees, in addition to vehicle contract price. **All vehicle contract prices exclude tax, title, and license.** It shall be the responsibility of the entity/organization to inform the vendor(s) of their status as non-exempt and/or non-profit, so that vendor(s) may collect applicable taxes and fees, and process any required licensing and titling applications. Non-exempt agencies and/or non-profit organizations shall direct any questions concerning applicable tax, title, and license fees to their appropriate County Tax Assessor/Collector Office. Questions concerning taxes may also be directed to the Texas Comptroller of Public Accounts at 1-800-252-1382.
- 4.23. **EPA EMISSION LEVEL:** Bidders must indicate on their response the EPA emission level of the engine and engine family, for each vehicle they bid. OEM/vendor must provide the published EPA Greenhouse Gas Score including appropriate references to Tier and Bin. OEM/vendor must provide separate scores if they vary by transmission type on the same model. Alternate engines, with an emission level different from that originally quoted, must have prior approval of the ordering entity. Emission level changes to vehicles on state contract require prior written approval of the CPA and will be documented through an addendum to the specification and changed in the automated contract. This information is published by the OEM and is required for the State's fleet management software program. It will not affect any bid.

E85 FLEX FUEL ENGINES(FFV): All vehicles are to be delivered with E85 Flex fuel engines if available from OEM at no additional cost to dealers.

5. CERTIFICATION, COMPLIANCE, AND MANUFACTURER BUILD-OUT/ORDER DEADLINES:

5.1. DELIVERY TIME FRAMES: (Calendar Days)

120 days

General Purpose Automobiles
Carryalls, Utility Vehicles, Cargo Vans
Passenger Vans, Light Duty

Light Duty and Crew Cab Trucks
Light- and Medium-Duty Chassis w/No Bodies

150 Days

Special Purpose Automobiles (LE)
OEM Alternative Fuel Vehicles

180 Days

Light- and Medium-Duty
Chassis with Optional Bodies
***Except Series 985D and 986D
(240 days ARO)***

Extensions of delivery may be granted on a case by case basis by the ordering entity, **upon written request by awarded vendor(s)** Written requests for delivery extensions **shall include** ordering entity requisition/ purchase order number(s), **reason for extension, and time frame in number of days** needed for extension, and must precede the late delivery of the vehicle.

LATE DELIVERY FEE: The ordering entity will have the option to charge the vendor a fee of \$50 per vehicle per day for late delivery. Late fee applies **ONLY** when vendor has not requested and received **PRIOR WRITTEN** approval from the ordering entity, to make delivery after the number of days established by the contract or the purchase.

Vendors must ensure that excessive mileage is not put on vehicles during the delivery process. The delivered unit shall not have more than 300 miles on the Odometer, unless previously agreed upon in writing with the purchaser. If a vehicle is delivered with more than three hundred miles on the odometer, without prior written approval from the ordering entity, the ordering entity will have the option to reject the vehicle without penalty to the ordering entity.

NOTE: Providing vehicle(s) which do not meet all specification requirements does not constitute delivery, and the late fee will continue to accrue until the vendor delivers vehicles in full compliance with the specifications to the ordering entity's FOB point.

The ordering entity will have the option to deduct any accumulated late delivery fees prior to payment of the invoice.

- 5.2. **VENDOR RETRIEVAL OF VEHICLES:** Vendor shall remove noncompliant vehicle(s) from ordering entity premises within 5 working days after receiving written notification from the ordering entity. If vehicle is not removed by vendor within the specified time frame, ordering entity may arrange for vehicle to be removed and secured by a local towing and storage facility. Vendor will be responsible for payment of all related towing and storage charges. Ordering entity will not be responsible or liable for damage or loss of noncompliant vehicles which remain on ordering entity premises, or which are removed by towing company, 5 working days after vendor notification.
- 5.3. **VENDOR PERFORMANCE:** Late delivery without pre-approval or delivery of vehicles that do not meet specifications may result in submission of negative vendor performance reports to CPA.
- 5.4. **SUBMITTAL OF LITERATURE:** Bidder(s) should submit with their bids, or have on file with the CPA, the latest printed literature on equipment the bidder proposes to furnish. This literature shall include an engine chart showing SAE gross horsepower, SAE gross torque rating, and other operating characteristics. If printed material is not published by the manufacturer, an electronic copy of the same shall be submitted with the proposal.
- 5.5. **SUBMITTAL OF MANUFACTURER BUILD-OUT/ORDER DEADLINES:** Awarded vendor(s) shall furnish CPA with order deadlines in writing by vehicle series number a minimum of three weeks prior to deadline. Order deadlines not designated by series number will not be accepted. Awarded vendor(s) shall be responsible for fulfilling all purchase orders issued pertaining to each series in which a deadline has not been provided in accordance with the above requirements. Only one order deadline will be permitted for each vehicle series.

Model year build out order deadline will be posted for each manufacturer's model as they become available. After model year build out deadline, "in stock" vehicles may be available through the contract from the awarded contract vendors. Agencies should contact the awarded contract vendor for availability and delivery for orders placed after the deadline has passed. Receiving entities will have the option, if offered, of accepting the next year's model at the current awarded pricing. When this occurs, the vendor will provide written notification of expected delivery dates to the receiving entity.

- 5.6. **STATE OF TEXAS VEHICLE DELIVERY DATA SHEET:** At delivery, the awarded vendor (s) shall provide with each vehicle a State of Texas Vehicle Delivery Data Sheet to include the following information. Additional information may be added during the life of the contract.
SUMMARY: Purchase Order Number, Requisition Number, delivery date, purchase cost, odometer ready at delivery, warranty expiration (date & miles or delayed).
IDENTIFICATION: Vehicle Identification Number (VIN), year, make, model.
READINGS: meter type (miles or hours), primary fuel type, secondary fuel type, fuel capacity (with units), engine oil capacity (with units), and transmission fluid capacity (with units).
RATINGS: Gross Vehicle Weight Rating (GVWR), Vehicle Emissions Rating (VER), EPA Miles per Gallon (MPG) Rating, Engine Family Code.
SPECIFICATIONS: Number of tires, tire size, wheelbase, transmission type (manual or automatic), drive type (2-wheel, 4-wheel, etc.), engine size, number of cylinders.
- 5.7. **OEM VEHICLE WINDOW STICKER/DECAL:** The OEM Window Sticker/Decal as affixed by the manufacturer shall be considered part of the required delivery documents. The vendor shall ensure this

document is safeguarded during the pre-delivery and delivery processes and must replace it if it is destroyed or lost. This requirement does not apply to medium duty (Series 960 and above) and heavy duty trucks.

6. INSPECTION

- 6.1. **VEHICLE INSPECTION:** The vendor shall have each vehicle (except cab and chassis units delivered without bodies) properly inspected in compliance with Texas motor vehicle laws.
- 6.2. **ENTITY CHECK-IN INSPECTION:** Receiving entity should check the vehicle upon delivery to ensure compliance with this specification and any other specific requirements. The vendor shall deliver with the vehicle a vehicle-specific line-setting ticket, manufacturer's invoice, and MSO or any official documentation to verify the fact that ordered options, GVWR rating, and other requirements have been met.
 - 6.2.1. Failure to provide information in 6.2 may cause the delay of entity-processing of payment. Payment will be made within 30 days after vehicle's acceptance or receipt of correct invoice, whichever is later. Acceptance will not be made, nor payment initiated on vehicles failing to meet specifications (unless they are brought into full compliance), and all necessary documents (i.e. MSO, odometer statement, etc.) are received by the ordering entity.
 - 6.2.2. Unless otherwise specified in the Invitation for Bid, agencies are permitted a maximum of 5 working days to complete this inspection.
 - 6.2.3. Pre-acceptance sample checklists for new vehicles are available in Section K, page 143 and 144 of this specification.

7. INTENT OF SPECIFICATIONS

- 7.1. **GENERAL:** The vehicles covered by this specification are categorized into nine general classifications. Each classification is further divided into sub-classifications, which are specifically identified by generic title and description and by an assigned vehicle Series number. For example, **Series 360B** represents a 4-door intermediate sedan under the classification of "General Purpose Automobiles" as categorized by the state. The table of each vehicle Series contains the make, model, and other specifications for each vehicle submitted by manufacturers for sale to the state of Texas. All models shown in a vehicle table may not be awarded a contract. It should be understood that vehicles listed as "Full Size" are not acceptable as "Intermediate" automobiles. It should also be further understood that any vehicles bid which fail to meet the minimum requirements of the Series number will not be considered for purchase. The purpose of listing vehicles in a given Series is so that the user will have the information necessary to match requirements with available vehicles. However, the fact that a vehicle is not listed in a given Series will not preclude its being purchased by the State of Texas, provided that (1) it is determined to be the lowest and best bid, (2) it meets the minimum requirements of the Series number by which the state classifies vehicles, and (3) it is approved by the CPA. The examples in Paragraphs 7.2 through 7.5 will clarify the intent of these specifications. These specifications may be used for Open Market Invitation for Bids (IFB) and shall be considered without exception unless documented in writing. Documents providing exceptions do not invalidate any other required specifications herein.
- 7.2. **ENGINE SUBSTITUTION:** For Open Market Invitation for Bids (IFB), if the state requests bids on a Small Utility Category Vehicle listed in Series 661B (which requires a 6-cylinder engine), a vehicle listed in this table but having an 8-cylinder engine would not be acceptable. It is assumed that the using entity requires a 6-cylinder engine unless it is stated on the IFB that an 8-cylinder engine would be acceptable.
- 7.3. **EXCEEDING SPECIFICATIONS:** Vendor(s) may exceed specifications only when the ordering entity requests or agrees to the vendor providing heavier or alternate components.
- 7.4. **MODEL SUBSTITUTION:** If the state requests bids for a Series 861C, ½ Ton Pickup, for example, then a ¾ Ton Pickup normally purchased under Series 867C will not be acceptable. The latest model year vehicle available at the time of the purchase order shall be provided unless agreed upon between the Customer and the Contractor.
- 7.1. **MANUFACTURER'S STATEMENT OF ORIGIN (MSO):** Awarded vendor(s) shall furnish the receiving entity a MSO (Certificate of Title will not meet this requirement). A vehicle shall not be considered "delivered" until the MSO is received by the ordering entity. MSO shall either be furnished at the time of

vehicle delivery or within 48 hours of vehicle delivery to the receiving entity and shall be made out in the name of the individual entity (see NOTE below), providing the following:

- 8.1.1. GVWR for the particular model specified, or;
- 8.1.2. The GVWR required for the entity's written exception, or;
- 8.1.3. A greater GVWR required by extra equipment, and;
- 8.1.4. Nominal weight rating (in tons),
- 8.1.5. Odometer Disclosure Statement.

NOTE: Vendor should contact the ordering entity to obtain proper entity name and address for assignment of the MSO.

9. PRE-DELIVERY SERVICE: All units (including complete vehicles and cab and chassis units) shall include new vehicle pre-delivery service.

9.1. The following service shall be performed before the units are delivered to the receiving entity:

- 9.1.1. All fluid levels checked and maintained with the proper grade and type of fluids.
- 9.1.2. Pre-delivery inspection and service on chassis.
- 9.1.3. The interior and exterior of units shall be clean and freshly washed at time of delivery.
- 9.1.4. A minimum of 1/4 tank must show on the fuel gauge when delivered.
- 9.1.5. The delivered unit shall not have more than 300 miles on the Odometer, unless previously agreed upon in writing with the purchaser.

9.2. When so specified in the Invitation for Bid, the awarded vendor(s) or their representative who is responsible for the final delivery shall attach signed certificates to the units stating that the above service was performed and that inspection indicates they are in good condition and ready for delivery.

9.3. Unless specifically permitted by the ordering entity, vehicles shall be equipped with all accessories as stated in the purchase order prior to delivery. Generally, the upfitting or servicing of ordered vehicles on the premises of the ordering entity is not permitted.

9.4. All shipping tickets shall reference the applicable entity requisition/purchase order number(s) and will accompany each delivery shipment. If shipping tickets are received without applicable entity requisition/purchase order number(s), delivery may be rejected at entity's option.

9.5. Window sticker shall remain attached to the vehicle.

9.6. The vendor shall provide an official and acceptable weight certificate when applicable and required for vehicle registration. This section excludes cab and chassis vehicles delivered for later up-fit.

10. VENDOR DELIVERIES:

Vendor shall prevent undue delay or imposition upon state personnel at the time of delivery. The delivered unit shall not have more than 300 miles on the Odometer, unless previously agreed upon in writing with the purchaser. Agencies will not provide equipment (crane, winch, etc.) or assistance for unsaddling piggybacked chassis, off-loading convoyed units, or other delivery processes.

11. WARRANTY, SERVICE, AND SERVICE CONTRACTS:

11.1 WARRANTIES, ACCESSORIES: The awarded vendor(s) shall furnish a copy of the manufacturer's standard warranty on minor accessories such as batteries and tires and major accessories such as Dump, Stake, Platform and Utility Bodies, side-mounted tool compartments and tool boxes at the time of delivery to the receiving entity.

11.2 WARRANTIES, NEW VEHICLE: The awarded vendor(s) shall furnish the receiving entity a New Vehicle and/or Chassis Manufacturer's Warranty which will be honored by any of the manufacturer's authorized dealers. This warranty shall be comparable to or better than those offered to the general public. Passenger cars and light-duty trucks shall have a minimum warranty offered to the general public (not commercial trade). Minimum warranty shall be at least 3/36,000 bumper to bumper with a power train warranty of 5/60,000.

Bidder shall indicate the length (in years and miles) of the OEM new vehicle warranty on each of their responses to bids based on this specification. Vendor shall furnish a complete copy (detailing coverage and exclusions) of the new vehicle warranty to agencies with each vehicle delivered. Vendor shall also

provide an additional copy within 10 working days after request.

- 11.3 WARRANTIES, DEDUCTIBLES:** All warranty repairs shall be performed without assessing the ordering entity warranty deductibles. Awarded vendor(s) shall be responsible for any warranty deductibles required for warranty repairs.
- 11.4 WARRANTIES, DELAYED:** Delayed warranties must be available for all vehicles. Warranty start date shall be effective the day the completed unit is placed into service. Vendor shall furnish a delayed warranty card/document with each unit delivered, advising entity personnel of the procedures to be followed for obtaining delayed start of warranty coverage. Requests for delayed warranties will not exceed 6 months after delivery.
- NOTE:** If vendor fails to arrange for delayed warranty with OEM, vendor is responsible for all costs incurred to make appropriate repairs at any dealership in Texas, for up to 6 additional months.
- 11.5 WARRANTIES, DEALER INSTALLED ITEMS:** Awarded vendor (s) shall warrant all dealer installed items for quality and workmanship. Warranty shall include 100% coverage for all options, components and labor.
- 11.6 WARRANTIES, AFTERMARKET ALTERNATE FUEL CONVERSION:** Aftermarket fuel conversion means the conversion of an OEM engine to an alternative fuel such as LPG or CNG by a company licensed by the Railroad Commission (RRC), is certified by the Environmental Protection Agency (EPA), and has at least one ASE certified technician. With an after-market fuel conversion, the company completing the conversion shall be responsible for fuel control issues/problems. If the maintenance program is followed and maintenance is performed by an ASE certified technician, the conversion shall be warranted for 3 years/36,000 miles, whichever comes first.

The conversion shall not void any other warranty. The OEM warranty will remain intact unless it is determined that the failure of an OEM part is attributed to an aftermarket fuel conversion.

In case of warranty work on an engine converted to use LPG or CNG, it shall automatically become the vendor's responsibility. The vendor will arrange, with the permission of the owner, for the vehicle to be repaired by a duly licensed carburetion technician, at an OEM or other facility chosen by the owner, at no cost to the owner. The vendor may then negotiate with the OEM if the repair is covered by the OEM warranty or pay for the repairs. A copy of the conversion equipment manufacturer's warranty and the vendor's supplemental warranty shall be provided to the ordering entity at the time of vehicle delivery. Payment for the vehicle (s) cannot be processed until these documents are provided.

Major warranty repair work means major repair to the engine due to operation of the engine on LPG or CNG. When major warranty repairs are required, the owner will notify a representative of the vendor's dealer in Texas by telephone as designated by the bidder. All conversion components shall be covered. Diagnosis of the actual repairs required will be the responsibility of the vendor. The vehicle (s) will be made available at the location designated by the owner. The repair work may be performed by the vendor or his authorized representative. At the vendor's option, the unit may be taken by the vendor to a commercial repair facility. The vendor shall be responsible for the cost of the round trip transportation of **the vehicle (s).**

- 11.7 Service Contracts:** If the manufacturer offers a complimentary service contract with the purchase of a new vehicle, that service contract shall be included with all vehicles purchased under these contracts (071-072-A1).

SECTION B – ORDERING INFORMATION AND PURCHASE ORDERS:

NOTE: VAN AND PICKUP CAPACITIES ARE LISTED BY NOMINAL TON OR GROSS VEHICLE WEIGHT RATING. USE OF THE LIGHT AND MEDIUM DUTY TRUCK CLASSIFICATION IS USED TO DISTINGUISH BETWEEN PICKUPS AND THE NEXT LARGER CLASS OF TRUCK UNITS.

- 1. GENERAL:** Each category of vehicle regularly purchased by state agencies has been assigned a Series number. Truck models are specified to produce well-balanced units for each size shown. If an entity needs a vehicle not covered by one of the numbered Series, an Open Market Requisition is required and detailed specifications for the vehicle required must be shown on the requisition. If a requirement varies from the specification stated for a numbered Series, the Series number should be shown and then the desired change

listed.

2. **FREIGHT:** All units to be F.O.B. destination, freight prepaid and allowed. . Receiving entities do not pay delivery or destination charges or surcharges.
3. **PREPARATION OF THE REQUISITION:** When ordering automobiles and trucks to this specification, the requisition should be prepared in accordance with the “Example of Vehicle Purchase & Requisition Format” shown below and should include the following:
 - 3.1. The Series number(s) and quantity for each series.
 - 3.2. If ordering optional equipment, list the desired option equipment number in Section E. and a brief description of each option for each Series vehicle ordered.

FOR OPEN MARKET REQUISITIONS

EXAMPLE OF VEHICLE PURCHASE AND REQUISITION FORMAT:

Item #	Description and Specifications	Quantity	Unit
1.	Latest model Series 374C , 4-door, rear wheel drive, 8-cylinder full size Sedan, meeting the requirements of Texas Specification No. 070-AT-2006/2007, with the following options:	1	Each
	Option No. 111 – Spotlight, permanent mount		
Contact: Yancy Zimmerman, (555) 555-5551			Net Difference

4. **PURCHASE ORDERS AND CHANGES:** Awarded vendor(s) shall furnish only vehicles meeting the requirements of Texas Specification No. 071-072-AT-2014/2015, as designated in each CPA issued purchase order. Purchase orders may not be amended without prior written approval of the CPA.
5. **SERVICE MANUALS:** Shop manuals and other publications may be ordered from the following:

INFORMATION ORDERS:

Manufacturer	Address	Weblinks
Chevrolet Buick GMC	Helm, Inc. Service Publications P. O. Box 07130 Detroit, MI 48207 Phone: 1-800-551-4123	www.helminc.com www.gmfleet.com – On-line manuals Local GM Dealerships for FAN #'s
Chrysler Dodge Jeep	Chrysler Motors Publication (800-890-4038) Tech Authority,	www.techauthority.com
Ford	Helm, Inc. Services Publications P.O. Box 07150 Detroit, MI 48207 Phone: 1-800-782-4356	www.helminc.com www.fleet.ford.com/
Honda	Helm, Inc. Services Publications 14310 Hamilton Ave. Highland Park, MI 48203 Phone: 1-800-782-4356 Fax Order: 313-865-5927	www.helminc.com
International	c/o Publications 4201 Winfield Road	www.internationaltrucks.com/Trucks/Services/Maintenance

	Warrenville, IL 60555 Phone: 630-313-7507 Fax: 630-753-6589	
Freightliner	Freightliner LLC c/o Publications P.O. Box 3849 Portland, OR 97208	www.Freightlinertrucks.com/About-Us/Contact-Us www.accessfreightliner.com
Toyota	Toyota	www.helminc.com http://techinfo.toyota.com/public/banner/banner.html

6. NATIONAL FLEET CONTACT:

NOTE TO ORDERING ENTITIES: The selling dealer shall be the first contact to resolve problems on new deliveries. Contact a local dealer for service after the sale.

Manufacturer	Phone Number	E-Mail
Ford Motor Company (Greg Dugan)	800-343-5338 (972-632-8643)	gdugan@ford.com
General Motors (Robert Wheeler)	817-909-6457 or 1-800-Fleetop	Robert.e.wheeler@gm.com
Chrysler Group LLC (Jose Lerma)	361-215-6843 (800-999-3533)	jose.lerma@fcagroup.com
Nissan (Travis Duncan)	615-209-8097	travis.duncan@nissan-usa.com
Toyota (Tom Gardner)	713-580-3613	tgardner@gstoyota.com
Honda (Elizabeth Munger)	512-694-1004	emunger@earthlink.net
Freightliner (Tom Standard)	512-389-0000 (800-395-2005)	tstandard@ftl1.com
Freightliner – Mike Crockett)	210-277-4373	mike.crockett@doggett.com
International (Richard Woerndell)	512-389-7264 800-779-5631	rwoerndell@kyrishtrucks.com
Mack (MIKE KING)	210-666-7120	MKING@GRANDETRUCK.COM
EV Motors (Leo Hinojosa)	832-754-6194	fleet@evautostexas.com
WESTERN STAR (MIKE KING)	210-666-7120	MKING@GRANDETRUCK.COM
VOLVO (MIKE KING)	210-666-7120	MKING@GRANDETRUCK.COM

7. INSPECTION CHECKLISTS SAMPLES FOR NEW VEHICLES: Pre-acceptance sample checklist for new vehicles is available in Section J of this document.

SECTION C - AUTOMOBILE AND TRUCK REQUIREMENTS

C.1. GENERAL REQUIREMENTS:

- 1.1. **STANDARD MODELS:** The vehicles listed in the following sections are the chassis manufacturer's standard models for the latest model year available and shall be furnished complete with all standard equipment and factory-installed accessories listed in the manufacturer's printed literature for the respective unit, **unless listed in the options list of this specification and the option is not listed on the RFP** (See Section A.4.1). The items are minimum requirements for the models specified herein and shall be provided whether shown as optional or standard equipment by the manufacturer. * **Bids should be submitted for regular package vehicles, not special service packages (unless specifically requested).***
- 1.2. **ALTERNATIVE FUEL REQUIREMENTS:** Specifications for Alternative Fuel Vehicles are listed in Section D. (See Options 779-794 for availability)
- 1.3. **ADDITIONAL EQUIPMENT:** Additional equipment, in addition to standard equipment required for a particular application, is listed immediately below the "Minimum Requirements Tables" of each vehicle Series.
- 1.4. **OPTIONAL EQUIPMENT AND ACCESSORIES:** Optional equipment and accessories are listed in Section E. and shall be furnished **when so specified in the RFP**.
NOTE: Adding some options to vehicles may result in a change in vehicle model (within a particular series).
- 1.5. **STANDARD EQUIPMENT:** A list of standard equipment required on each approved model listed for a vehicle Series precedes the "**Minimum Requirements Tables**" in each section.
- 1.6. **TRUCK AND VAN BODY SPECIFICATIONS:** Dump, Stationary, Utility and Para-transit Body and related body equipment specifications are listed in Sections F, G, H and I.
- 1.7. **VEHICLE SERIES DESIGNATIONS:** The automobiles and trucks meeting the requirements of this specification have been classified and numbered into Series/Categories.
- 1.8. **ENGINE SUFFIXES:** Suffix letters indicate engine type as follows:

A = 4 cylinder B = 5/6 cylinder C = 6/8 cylinder D = diesel G = gasoline H = Hybrid ALT = Alternative Fuel
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C.2. GENERAL PURPOSE AUTOMOBILES: Unless specified, all units shall be furnished complete with standard equipment and factory-installed accessories as listed in the manufacturer's printed literature for the models specified herein (but See Section A.4.1 and Section C.1.1). The following items are minimum requirements for the models specified herein and shall be provided whether shown as optional or standard equipment by the manufacturer. The following are some of those standard features or additional features as listed for these models. Please note any additional requirements following the table for each Series number. These additional requirements listed below any table are in addition to, the following general requirements for General Purpose Automobiles:

2.1. Body:

- 2.1.1. Air Bags: Required.** Manufacturer's standard to include side curtain/impact airbags if available from manufacturer.
- 2.1.2. Air Conditioning: Required.** Manufacturer's standard.
- 2.1.3. AM/FM Radio:** Manufacturer's standard.
- 2.1.4. Covering, Luggage Compartment:** The luggage compartment floor shall be covered with a vinyl, rubber, or fiber type mat.
- 2.1.5. Heater and Defroster:** Integral, OEM Standard
- 2.1.6. Jack, Handle, and Lug Wrench**
- 2.1.7. Power Package:** Includes power windows, power locks, power mirrors, cruise control, and tilt steering wheel. (Option No. 87 to delete entire power package) (Option No.87 is not available from Nissan.)
- 2.1.8. Spare Wheel (Manufacturer's full-size spare wheel & tire, where available).**
- 2.1.9. Windshield Wipers:** Dual electric 2-speed type with intermittent feature windshield washers.
- 2.1.10. Upholstery:** Cloth standard (Select Option No. 258, for vinyl seat fabric). (Option No. 258 is not available from Nissan.)
- 2.1.11. Tires:** Radial type tubeless tires shall be OEM manufactured standard.
- 2.1.12. Tire Pressure Monitoring System (TPMS) if available**
- 2.1.13. Window Tint:** OEM Standard Tint. Tinting shall meet Texas DPS regulations. (see Option # 140)
- 2.1.14. Bluetooth Wireless Communication:** Manufacturer's standard, where available.

2.2. Chassis:

- 2.2.1. Power Steering:** Manufacturer's standard.
- 2.2.2. Automatic Transmission**
- 2.2.3. Power Brakes, ABS (Required):** Manufacturer's standard; front disc, 2- or 4-wheel (All Series).
- 2.2.4. Flex Fuel,** if available
- 2.2.5. Electronic Stability Control: Required** (per FMVSS 126 all light duty vehicles (under GVWR 10,000) to have ESC installed by model year 2012)

C.2. GENERAL PURPOSE AUTOMOBILES (continued): Refer to General Requirements, Preceding Each Group.

SERIES 330A
Sport Coupe
6-cyl. 2-Door

330A-SPORT COUPE 6-CYLINDER, 2-DOOR				
ITEM	TX Requirements (Min. unless specified)	Chevrolet Camaro	Dodge Challenger	Ford Mustang -2 Door
Body Trim Designation (Base Vehicle)	As shown	1AG37 1LT	LADH22	P8A
Wheelbase, inches	97.6	110.7	116	107.1
Length, inches	159	188.3	197.7	188.3
Width, inches	67.8	74.7	75.5	81.9
Displacement, liters (Base Vehicle)	As Shown	3.6L V6	3.6L V6	3.7L V6
Engine HP	As Shown	335	305	300
Torque	As shown	284	268	280
Tire Size & Load Range	As shown	P245/50R18	235/55R18	P235/55R17 A/S BSW
Transmission,	Automatic	8-speed Auto	8- speed Auto	6-speed Auto
Emissions Certification	As shown	Bin 4 ULEV2	Tier 2 Bin 4	Bin5 ULEV II
EPA Greenhouse Score	As shown	6	5	6
* Note: This denotes a FLEX FUEL VEHICLE (FFV) – E85 capable				

C.2. GENERAL PURPOSE AUTOMOBILES (continued): Refer to General Requirements, Preceding Each Group.

SERIES 350A
COMPACT HATCHBACK
4-CYLINDER, 5-DOOR

350A - COMPACT HATCHBACK 4-CYLINDER, 5-DOOR				
ITEM	TX Requirements (Min. unless specified)	Chevrolet Sonic	Ford Fiesta	Ford Focus* FFV
Body Trim Designation (Base Vehicle)	As shown	1JV48 1SD LT	P4E-SE	P3K - SE
Wheelbase, inches	97.6	99.4	98	104.3
Length, inches	159	159	159.7	178.5
Width, inches	67.8	68.3	67.8	71.8
Displacement, liters (Base Vehicle)	As Shown	1.8L	1.6L Ti-VCT	2.0L* FFV
Engine HP	As Shown	138	120	160
Torque	As shown	125	112	146
Tire Size & Load Range	As shown	P195/65R15	P185/60R15	P215/55R16
Transmission,	Automatic	6-speed Auto	6 Speed Auto	6 Speed Auto
Emissions Certification	As shown	Bin 4 ULEV2	Tier 2 Bin 4 ULEV II	Tier 2 Bin 5 ULEV II
EPA Greenhouse Score	As shown	6	8	8
* Note: This denotes a FLEX FUEL VEHICLE (FFV) – E85 capable				

C.2. GENERAL PURPOSE AUTOMOBILES (cont.): Refer to General Requirements, Preceding Each Group.

SERIES 351A

COMPACT SEDAN (5 PASSENGER) 4-CYLINDER, FRONT WHEEL DRIVE

351A - COMPACT SEDAN 4-CYLINDER, FWD, 5 PASSENGERS								
ITEM	TX Requirements (Min. unless specified)	Ford Fiesta	Dodge Dart	Ford Focus*F FFV	Chevrolet Cruze	Nissan Sentra	Nissan Versa	Toyota Corolla
Body Trim Designation (Base Vehicle)	As shown	P4B - SE	SE	P3F - SE	1BR69 1SB LS	SV	SV	1832 Base
Wheelbase, inches	98	98	106.4	104.3	106.3	106.3	102.4	102.4
Length, inches	173.6	173.5	183.9	178.5	183.7	182.1	175.4	178.7
Width, inches	66.7	67.8	72.0	71.8	70.5	69.3	66.7	69.3
Displacement, liters (Base Vehicle)	As shown	1.6L Ti-VCT	2.0L* FFV	2.0L* FFV	1.4l	1.8L	1.6L	1.8L
Engine HP	As shown	120	160	160	153		109	132
Torque	As shown	112	148	146	177		107	128
Tire Size & Load Range	As shown	P215/55R16	205/55R16 All-Season	P195/65 R15	P195/65R 16	P205/55 R16	P185/65 R15	P195/65R 15
Transmission, Automatic	Automatic	6 Speed Auto	6-speed Powertech Automatic	6 Speed Auto	6 Speed AutoOD	Xtronic CVT	Xtronic CVT	4 Speed Auto
Emissions Certification	As shown	Tier 2 Bin 4 ULEV II	Bin 4 ULEV II	Tier 2 Bin 5 ULEV II	Bin 4 ULEV II	Tier2- Bin5 (EPA) / LEV2- LEV (CARB)	Tier 2- Bin5 (EPA) / LEV2- ULEV Federal	Tier 2/Bin 5 ULEV II
EPA Greenhouse Score	As shown	8	7	8	7	TBD	7 (MY12)	TBD
Passenger Capacity	5	5	5	5	5	5	5	
* Note: This denotes a FLEX FUEL VEHICLE (FFV) E85 capable								

C.2. GENERAL PURPOSE AUTOMOBILES (continued): Refer to General Requirements, Preceding Each Group.

SERIES 357B

MIDSIZE HATCHBACK 6-CYLINDER, FRONT WHEELDRIVE, 5-DOOR (5-7 Passengers)

357B - MID SIZE HATCHBACK , 6 CYL, FWD, 5-DOOR**						
ITEM	Texas Requirements (Min. unless specified)	Dodge Journey*	Ford Edge	Chevrolet Equinox	Toyota Highlander	GMC Terrain*
Body Trim Designation (Base Vehicle)	As shown	SXT	K3G-SEL	1LK26 1LT	6946	TLK26 SLE-2
Wheelbase, inches	109.8	113.8	111.2	112.5	109.8	112.5
Length, inches	184.2	192.4	188.1	187.8	188.4	185.3
Width, inches	67.6	72.2	75.9	72.5	75.2	72.8
Displacement, liters (Base Vehicle)	As shown	3.6L * E85	3.5L	3.6L	3.5L	3.6L
Engine HP	270	283	280	301	270	301
Torque	248	260	250	272	248	272
Tire Size & Load Range	As shown	P225/65R17 BSW All-Season Touring	245/60R18	P225/65R17	P245/65R R17	P235/60R17
Transmission, Automatic	Automatic	6 Speed Auto	6 Speed Auto	6 Speed OD Auto	5 speed OD	6 Speed OD Auto
Emissions Certification	As shown	Bin 4+ULEV II	Tier 2 Bin 5 ULEV II	Bin 4 ULEV2	6 LEV2 Bin 5	Bin 4 ULEV2
EPA Greenhouse Score	As shown	5	5	5	4	TBD
Passenger Capacity	5	5 std 7 optional	5	5	5 std 7 optional	5
<p>* Note: This denotes a FLEX FUEL VEHICLE (FFV) – E85 capable</p> <p>**Note: See Section A3.3. of this specification for limited usage on this series.</p>						

C.2. GENERAL PURPOSE AUTOMOBILES (cont.): Refer to General Requirements, Preceding Each Group.

SERIES 358B

**FULLSIZE HATCHBACK
6-CYLINDER, FRONT WHEEL DRIVE, 5-DOOR (7 Passengers)**

358B - FULL SIZE HATCHBACK , 6 CYL, FWD, 5-DOOR**				
ITEM	Texas Requirements (Min. unless specified)	Chevrolet Traverse	Ford Flex	GMC Acadia
Body Trim Designation (Base Vehicle)	As Shown	CR14526 1LS	K5B - SE	TR14526 SLE1
Wheelbase, inches	117.9	118.9	117.9	118.9
Length, inches	200.7	203.7	201.8	200.7
Width, inches	75.9	78.5	75.9	78.2
Displacement, liters (Base Vehicle)	3.5L	3.6L	3.5L	3.6L
Engine HP	281	281	287	288
Torque	254	266	254	270
Tire Size & Load Range	P235/60R17	P245/70R17	P235/60R17	P255/65R18
Transmission, Automatic	Automatic	6 Speed OD Auto	6 Speed Auto	6 Speed OD Auto
Emissions Certification	Tier 2 Bin 5	Bin 4 ULEV 2	Tier 2 Bin 5 ULEV II	Bin 4 ULEV 2
EPA Greenhouse Score	As Shown	5	5	TBD
Passenger Capacity	7	8	7	8
* Note: This denotes a FLEX FUEL VEHICLE (FFV) – E85 capable				
** Note: See Section A3.3. of this specification for limited usage on this series.				

C.2. GENERAL PURPOSE AUTOMOBILES (cont.): Refer to General Requirements, Preceding Each Group.

**SERIES 359A
INTERMEDIATE SEDAN
4-CYLINDER, 4-DOOR**

359A - INTERMEDIATE SEDAN, 4-CYL, 4-DOOR						
ITEM	TX Requirements (Min. unless specified)	Chevrolet Malibu	Nissan Altima	Toyota Camry	Ford Fusion	Chrysler 200
Body Trim Designation (Base Vehicle)	As Shown	1CZ69 1FL	2.5S	LE 2532	P0G - S	LX
Wheelbase, inches	107.8	111.4	109.3	109.3	112.2	108.0
Length, inches	189.2	193.8	191.5	189.2	191.7	192.3
Width, inches	71.7	73.0	72	71.7	72.9	73.6
Displacement, liters (Base Vehicle)	As Shown	1.5L	2.5L	2.5L	2.5L I4	2.4L
Engine HP	169	160	182	169	175	184
Torque	166	184	180	167	175	173
Tire Size & Load Range	As Shown	P205/65R16	P215/60R16	P215/60R16	P215/60R16	215/55R17
Transmission, Automatic	As Shown	6 speed OD	Xtronic CVT	6 speed OD	6 Speed Auto	9-speed Automatic
Emissions Certification	As Shown	Bin4 ULEV2	LEV2-SULEV (CAL); Tier 2, Bin 5 (FED)	Tier 2 Bin 5 ULEV II	Tier 2 Bin 5 ULEV II	TBD
EPA Greenhouse Score	As Shown	7	TBD	TBD	7	TBD
Passenger Capacity	5	5	5	5	5	5
**Note: See Section A3.3. of this specification for limited usage on this series.						

**SERIES 360B
INTERMEDIATE SEDAN
6-CYLINDER, 4-DOOR**

360B - INTERMEDIATE SEDAN, 6-CYL, 4-DOOR						
ITEM	TX Requirements (Min. unless specified)	Ford Fusion	Nissan Altima	Toyota Camry	Chrysler 200	Chevrolet Malibu
Body Trim Designation (Base Vehicle)	As Shown	P0H - SE	S	LE 2552	UFCH41 26E	1ZD69 2LT
Wheelbase, inches	108.9	112.2	109.3	109.3	108.0	111.4
Length, inches	189.2	191.8	191.5	189.2	192.3	193.8
Width, inches	71.7	72.9	72	71.7	73.6	73.0
Displacement, liters (Base Vehicle)	As Shown	2.0L GTDI I4	3.5L V-6	3.5L-V6	3.6 L V6 * FFV	2.0L SIDI VVT
Engine HP	240	240	270	268	295	250
Torque	248	270	251	248	262	260
Tire Size & Load Range	As Shown	235/50R17	P235/45R18	P215/60R16	225/55R17 BSW All-Season Touring	P245/45R18
Transmission, Automatic	Automatic	6 Speed Auto	Xtronic CVT	6 speed OD	9-speed Automatic	8 speed Automatic
Emissions Certification	As Shown	Tier 2 Bin 5 ULEV II	LEV2-SULEV (CAL); Tier 2, Bin 5 (FED)	Tier 2 Bin 5 ULEV II	TBD	Bin 4 ULEV II
EPA Greenhouse Score	As Shown	6	TBD	6	TBD	TBD
Passenger Capacity	As Shown	5	5	5	5	5
<p>* Note: This denotes a FLEX FUEL VEHICLE (FFV) – E85 capable **Note: See Section A3.3. of this specification for limited usage on this series.</p>						

C.2. GENERAL PURPOSE AUTOMOBILES (continued): Refer to General Requirements, Preceding Each Group.

**SERIES 372B
FULL SIZE SEDAN
6-CYLINDER, 4-DOOR, FRONT WHEEL DRIVE**

372B FULL SIZE SEDAN, 6-CYL, 4-DOOR, FWD						
ITEM	TX Requirements (Min. unless specified)	Chevrolet Impala*	Buick LaCrosse*	Nissan Maxima	Ford Taurus* FFV	Toyota Avalon XLE
Body Trim Designation (Base Vehicle)	As Shown	1GY69 2LT	4GK69 1SB	S	P2D - SE	3544
Wheelbase, inches	109.3	111.7	111.7	109.3	112.9	111
Length, inches	190.6	201.3	196.9	190.6	202.9	195.3
Width, inches	72.9	73.0	73.1	73.2	76.2	72.2
Displacement, liters (Base Vehicle)	As Shown	3.6L V6	3.6L V-6 E85	3.5L V-6	3.5L* FFV	3.5L V6
Engine HP	288	305	303	290	288	268
Torque	252	264	264	252	254	248
Tire Size & Load Range	As Shown	P235/50R18	P255/55R17	P245/45R18 V	235/55R18	P215/55/R17
Transmission, Automatic	Automatic	6-Speed Auto OD	6-Speed Auto OD	Xtronic CVT	6 Speed Auto	6 Speed ECTI
Emissions Certification	As Shown	ULEV2 Bin 4	ULev2 Bin4	LEV2-ULEV/Tier 2, Bin 5	Tier 2 BIN5	ULEV2 Bin 4
EPA Greenhouse Score	As Shown	5	5	TBD	6	TBD
Passenger Capacity	As Shown	5	5	5		5
<p>* Note: This denotes a FLEX FUEL VEHICLE (FFV) – E85 capable **Note: See Section A3.3. of this specification for limited usage on this series.</p>						

**FULL SIZE SEDAN
6-CYLINDER, UNI BODY, 4-DOOR, REAR WHEEL OR ALL WHEEL DRIVE**

373B - FULL SIZE SEDAN, 6-CYLINDER, UNI BODY, 4-DOOR, RWD OR AWD				
ITEM	TX Requirements (Min. unless specified)	Dodge Charger REAR WHEEL DRIVE*	Dodge Charger All-Wheel Drive *	Ford Taurus All-Wheel Drive* FFV
Body Trim Designation (Base Vehicle)	As Shown	LDDM48-CHARGER SE RWD	LDDM48-CHARGER SE AWD	P2H - SEL
Wheelbase, inches	112.9	120.2	120.2	112.9
Length, inches	199.9	199.9	199.9	202.9
Width, inches	75	75	75	76.2
Displacement, liters (Base Vehicle)	3.5L	3.6 LV-6 FFV*	3.6 L V-6 FFV *	3.5L* FFV
Engine HP	288	292	292	288
Torque	254	260	260	254
Tire Size & Load Range	As Shown	P215/65R17 BSW All-Season Touring	P235/55R19 BSW All Season Tires	235/55R18
Transmission, Automatic	Automatic	8 speed Auto	8 Speed Auto	6 Speed Auto
Emissions Certification	As Shown	NAS BIN 4+ ULEV II	NAS BIN 4+ ULEV II	Tier 2 BIN5 ULEV II
EPA Greenhouse Score	As Shown	5	6	5
Passenger Capacity	As Shown	5	5	5
* Note: This denotes a FLEX FUEL VEHICLE (FFV) – E85 capable				
** Note: See Section A3.3. of this specification for limited usage on this series.				

C.2. GENERAL PURPOSE AUTOMOBILES (continued): Refer to General Requirements, Preceding Each Group.

**FULL SIZE SEDAN
6/8-CYLINDER, 4-DOOR, REAR WHEEL DRIVE**

374C - FULL SIZE SEDAN, 6/8-CYLINDER, 4-DOOR, RWD			
ITEM	TX Requirements (Min. unless specified)	Dodge Charger Rear-Wheel Drive LDDP48 29Npkg	SS
Body Trim Designation (Base Vehicle)	As Shown	R/T RWD	1EK69
Wheelbase, inches	120.2	120.2	114.8
Length, inches	199	199	195.5
Width, inches	75	75	74.7
Displacement, liters (Base Vehicle)	As Shown	5.7 L V-8	6.2L V8
Engine HP	370	370	415
Torque	395	395	415
Tire Size & Load Range	As Shown	P235/55R19 BSW ALL SEASON TIRES (TPS)	Front - P245/40R19 Rear - P275/35R19
Transmission, Automatic	Automatic	8-Spd Auto	6 speed automatic
Emissions Certification	As Shown	TBD	BIN4 ULEV
EPA Greenhouse Score	As Shown	TBD	4
Passenger Capacity	5	5	5
* Note: This denotes a FLEX FUEL VEHICLE (FFV) – E85 capable			
** Note: See Section A3.3. of this specification for limited usage on this series.			

C.3. SPECIAL PURPOSE AUTOMOBILES - LAW ENFORCEMENT (LE) PURSUIT OR SPECIAL SERVICE

VEHICLES: Unless otherwise specified, all units shall be furnished complete with standard equipment and factory-installed accessories as listed in the manufacturer's printed literature for the models specified herein (but See Section A.4.1. and Section C.1.1.). The following items are minimum requirements for the models specified herein, and shall be provided whether shown as optional or standard equipment by the manufacturer. The following are some of those standard features or additional features as listed for these models. Please note any additional requirements following the table for each series number. These additional requirements listed below and in any tables are in addition to, the following general requirements for Special Purpose Automobiles (Law Enforcement) Pursuit or Special Service Vehicles:

3.1. Body:

- 3.1.1. **Air Conditioning:** Manufacturer's standard.
- 3.1.2. **Air Bags:** Manufacturer's standard to include side curtain/impact airbags if available from manufacturer. Agency may select Option 5 to delete the side curtain airbag requirement. Please consider the **Safety** factor when selecting this option.

SIDE CURTAIN AIR BAGS NOTE: The installation of a prisoner transport cage in any vehicle equipped with side curtain (one-piece) airbags could severely impact the designed deployment of the bag. CPA recommends that purchasers consult with the vehicle and cage manufacturers to identify any interference issues prior to installing a prisoner transport cage.

- 3.1.3. **AM/FM Radio:** Manufacturer's standard.
- 3.1.4. **Bonding Strap Package:** Hood and rear deck lid shall have radio interference bonding straps to body, if available from manufacturer.
- 3.1.5. **Auxiliary Power Outlet:** Required
- 3.1.6. **Floor Covering, Carpet:** OEM installed. Floor shall be covered with manufacturers' standard carpet.). (See Option 399 for vinyl/rubber floor.)
- 3.1.7. **Luggage/Cargo Compartment Light:** Automatic.
- 3.1.8. **Instrumentation:** Manufacturer's full gauge package, if available.
- 3.1.9. **Spare Wheel, Mounted:** Tire shall be the same type as furnished on the vehicle series. (See Option 108 for space saver wheel and tire.)
- 3.1.10. **Seats:** bucket style front, minimum 5 passenger (including driver), manufacturer's standard cloth type. Interior upholstery shall be available in a minimum of 2 different colors if available.
- 3.1.11. **Power Package:** Includes power windows, power locks, power mirrors, cruise control, and tilt steering wheel. **(Select Option 87 to delete power package. For Ford vehicles: Only cruise control can be deleted.)**
- 3.1.12. **Bluetooth Wireless Communication:** Manufacturer's standard, where available..
- 3.1.13.

3.2. Chassis:

- 3.2.1. **Power Brakes, ABS (Required):** Manufacturer's standard; front disc, 2- or 4-wheel.
- 3.2.2. **Wheel Covers/Hub Caps:** Manufacturer's center caps or full size steel wheel covers unless vehicle is equipped with styled aluminum wheels as standard (plastic center caps are acceptable and full size plastic wheel covers are not acceptable).
- 3.2.3. **Automatic Transmission:** Heavy-duty type with external transmission oil cooler if available.
- 3.2.4. **Electronic Stability Control: Required** (per FMVSS 126 all light duty vehicles (under GVWR 10,000) to have ESC installed by model year 2012)

3.3. Engine:

- 3.3.1. **Cooling System:** Manufacturer's largest capacity/heavy-duty with external engine oil cooler if available.
- 3.3.2. **Flex Fuel,** if available

C.3. SPECIAL PURPOSE AUTOMOBILES - LAW ENFORCEMENT (LE) PURSUIT OR SPECIAL SERVICE VEHICLES (continued): Refer to General Requirements, Preceding Each Group.

**Special Service Package Pick-Up Truck
8-CYLINDER, 4-DOOR, 4-WHEEL DRIVE**

462CLE- PICK UP, 8-CYLINDER, 4-DOOR, 4-WHEEL DRIVE				
ITEM	TX Requirements (Min. unless specified)	RAM 1500 Crew Cab 4x4 SSV	F150 XL SSV (Special Service Vehicle)	Chevrolet Silverado SSV
Body Trim Designation (Base Vehicle)	As Shown	DS6T98	Super Crew XL	CK15543 1WT
Wheelbase, inches	140	140.5	144.5	143.5
Payload Allowance, pounds (Approximate)	1,270	1,270	1,900	1,820
Length (overall), inches	229.0	229.0	231.9	230.0
Maximum Length at Floor	67	67.4	67.0	69.3
GVWR, pounds	6,900	6,900	TBD	7,200
Displacement, liters (Base Vehicle)	As Shown	5.7L V8 Hemi	5.0L Ti-VCT V8 FFV	5.3L V8
Engine HP	355	395	360	355
Torque	380	410	380	383
Transmission	As Shown	6-speed OD	6-speed	6 spd.
Tire Size & Load Range	As Shown	P265/70R17 BSW All-Season	TBD	P255/70R17
Rim size,(dia), inches	As Shown	7	17x7	17x8
Emissions Certification	As Shown		Bin 4 ULEV II	Bin 4 ULEV2
EPA Greenhouse Score	As Shown		4	4

Additional Equipment: The following equipment is also required in addition to that required above:

- a. **Body:**
 - 1. **Floor Covering, Cargo Compartment:** Cargo compartment floor shall be covered with manufacturers' standard carpet or rubber floor covering. (Requirement will be indicated prior to ordering vehicle)
- b. **Chassis:**
 - 1. **Suspension:** Heavy-duty suspension and components.

C.3. SPECIAL PURPOSE AUTOMOBILES - LAW ENFORCEMENT (LE) PURSUIT OR SPECIAL SERVICE VEHICLES (continued): Refer to General Requirements, Preceding Each Group.

**Extended Length Carry-all
Special Service Package
6/8-CYLINDER, 4-DOOR, 2-WHEEL DRIVE**

464CLE - EXTENDED LENGTH, CARRY ALL, 6/8-CYL, 4-DOOR, 2WD, SPECIAL SERVICE PACKAGE			
ITEM	TX Requirements (Min. unless specified)	Chevrolet Suburban FFV E85*	Ford Expedition EL
Body Trim Designation (Base Vehicle)	As Shown	CC159061FL	K1F - SSVEL
Wheelbase, inches	130	130	131
Payload Allowance, pounds (Approximate)	1569	1796	1690
Length (overall), inches	221.3	224.0	220.8
Length (cargo), inches max	130.8	137.4	130.8
GVWR, pounds	7,200	7,300	7,540
Displacement, liters (Base Vehicle)	As Shown	5.3L E85 V-8*	3.5L Ecoboost V6
Engine HP	310	355	365
Torque	335	383	420
Transmission	As Shown	6-speed OD	6-speed Auto
Tire Size & Load Range	As Shown	P265/70R17	265/70R17
Rim size,(dia), inches	As Shown	8	7.5
Emissions Certification	As Shown	Bin 4 ULEV2	Tier 2 Bin 5
EPA Greenhouse Score	As Shown	4	4
<p>* Note: This denotes a FLEX FUEL VEHICLE (FFV) – E85 capable ** Note: "LE" designation for Law Enforcement Pursuit or Special Purpose Vehicles only. *** Note: Refer to restrictions in Section 2158.003, Government Code, "for criminal law enforcement..."</p>			

Additional Equipment: The following equipment is also required in addition to that required above:

c. Body:

- 2. Floor Covering, Cargo Compartment:** Cargo compartment floor shall be covered with manufacturers' standard carpet or rubber floor covering. **(Requirement will be indicated prior to ordering vehicle)**

b. Chassis:

- 2. Suspension:** Heavy-duty suspension and components.

NOTE: See Option 52 for 4-wheel drive.

C.3. SPECIAL PURPOSE AUTOMOBILES - LAW ENFORCEMENT (LE) PURSUIT OR SPECIAL SERVICE VEHICLES (continued): Refer to General Requirements, Preceding Each Group.

**FULL SIZE UTILITY VEHICLE **
SPECIAL SERVICE PACKAGE
6/8-CYLINDER, HEAVY-DUTY, 4-DOOR, 2/4-WHEEL DRIVE**

465CLE FULL SIZE UTILITY, 6/8-CYL, 4-DOOR,HEAVY-DUTY, 2/4WD, SPL SERVICE PKG				
ITEM	TX Requirements (Min. unless specified)	Ford Expedition	Dodge Durango SSV E85 *	Chevrolet Tahoe SSV FFV *E85 4WD
Body Trim Designation (Base Vehicle)	As Shown	U1F – SSVXL	WDEE75	CK15706 5W4**
Wheelbase, inches	119	119	119	116
Payload Allowance, pounds (Approximate)	1,500	1690	1500	1794
Length (overall), inches	199.8	206.0	199.8	204
Length (cargo), inches max.	81.4	82.5 in. - behind front seat.	84.5.	81.4
GVWR, pounds	7100	7,300	7100	7300
Displacement, liters (Base Vehicle)	As Shown	3.5L Ecoboost V6	5.7L HEMI® V8/or option 3.6L FFV *E85	5.3L V-8 * FFV *E85
Engine HP	310	365	360/290	355
Torque	335	420	390/260	383
Transmission	Automatic 6 Sp OD	6 Speed Auto	8-Spd Auto 845RE	6 Speed Auto
Tire Size & Load Range	As Shown	P265/70R17	P265/60R18 BSW	P265/70R17
Rim size,(dia), inches	As Shown	7.5	8	8
Emissions Certification	As Shown	Tier 2 Bin 5	NAS BIN 4+ ULEV II	Bin ULEV2
EPA Greenhouse Score	As Shown	4	3	4
<p>* Note: This denotes a FLEX FUEL VEHICLE (FFV) – E85 capable ** Note: "LE" designation for Law Enforcement Pursuit or Special Purpose Vehicles only. *** Note: Refer to restrictions in Section 2158.003, Government Code, "for criminal law enforcement."</p>				

Additional Equipment: The following equipment is also required in addition to that required above:

- a. **Body:**
 - 1. **Floor Covering, Cargo Compartment:** Cargo compartment floor shall be covered with manufacturers standard carpet or rubber floor covering. **(Requirement will be indicated prior to ordering vehicle)**

C.3. SPECIAL PURPOSE AUTOMOBILES - LAW ENFORCEMENT (LE) PURSUIT OR SPECIAL SERVICE VEHICLES (continued): Refer to General Requirements, Preceding Each Group.

FULL SIZE UTILITY VEHICLE PURSUIT
6-CYLINDER, HEAVY-DUTY, 4-DOOR, ALL WHEEL DRIVE**

466BLE-UTILITY, FULL SIZE 6-CYL, 4DOOR, AWD, HEAVY DUTY, PURSUIT RATED		
ITEM	TX Requirements (Min. unless specified)	Ford Utility Interceptor* FFV
Body Trim Designation (Base Vehicle)	As Shown	K8A
Wheelbase, inches	112.6	112.6
Payload Allowance, pounds (Approximate)	1610	1610
Length (overall), inches	196.8	197.1
Volume (Cargo Behind 2nd Row),cu-ft	59.3	48.1
Width, including mirrors inches	90.2	90.2
GVWR, pounds	6300	6300
Displacement, liters (Base Vehicle)	As Shown	3.7L V6 Ti-VCT* FFV
Engine HP @RPM	304@6500	304@6500
Torque, ft-lb @RPM	279 @ 4000	279 @ 4000
Transmission	Automatic	6-SPD AUTO
Tire Size & Load Range	As Shown	P245/55R18 A/S BSW
Rim size,(dia), inches	As Shown	8
Emissions Certification	As Shown	Tier 2 Bin 5
EPA Greenhouse Score	As Shown	4
EPA Combined MPG	As Shown	18
EPA Air Pollution Score	As Shown	TBD
<p>* Note: This denotes a FLEX FUEL VEHICLE (FFV) – E85 capable</p> <p>** Note: "LE" designation for Law Enforcement Pursuit or Special Purpose Vehicles only.</p> <p>*** Note: Refer to restrictions in Section 2158.003, Government Code, "for criminal law enforcement..."</p>		

Additional Equipment

Heavy Duty Equipment - Alternator, Battery, Cooling System with engine oil cooler and transmission oil cooler, Powertrain Mounts, Brakes

C.3. SPECIAL PURPOSE AUTOMOBILES - LAW ENFORCEMENT (LE) PURSUIT OR SPECIAL SERVICE VEHICLES (continued): Refer to General Requirements, Preceding Each Group.

FULL SIZE UTILITY VEHICLE PURSUIT *
8-CYLINDER, HEAVY-DUTY, 4-DOOR, 2-WHEEL DRIVE**

468CLE - FULL SIZE UTILITY, 8- CYL, 4-DOOR, 2WD, HEAVY DUTY, PURSUIT		
ITEM	TX Requirements (Min. unless specified)	Chevrolet Tahoe* PPV FFV E85
Body Trim Designation (Base Vehicle)	As Shown	CC15706 9C1
Wheelbase, inches	116	116
Payload Allowance, pounds (Approximate)	1,588	1,624
Length (overall), inches	202	204
Length (cargo), inches	81.4	81.4
GVWR, pounds	6,800	6,800
Displacement, liters (Base Vehicle)	5.3L V-8 * E85	5.3L V-8 * E85
Engine HP	320	355
Torque	335	383
Transmission	Automatic A4OD	6-Speed Auto
Tire Size & Load Range	As Shown	P265/60R17H
Rim size,(dia), inches	As Shown	8
Emissions Certification	As Shown	Bin ULEV2
EPA Greenhouse Score	As Shown	4
<p>* Note: This denotes a FLEX FUEL VEHICLE (FFV) – E85 capable ** Note: "LE" designation for Law Enforcement Pursuit or Special Purpose Vehicles only. *** Note: Refer to restrictions in Section 2158.003, Government Code, "for criminal law enforcement..."</p>		

Additional Equipment: The following equipment is also required in addition to that required above:

- a. Body:**
 - 1. Floor Covering, Cargo Compartment:** Cargo compartment floor shall be covered with manufacturers' standard **carpet or rubber floor covering**.
 - 2. Speedometer:** Certified, calibrated to within plus or minus 2 MPH accuracy.
- b. Chassis:**
 - 1. Heavy Duty, Locking Differential.**

C.3. SPECIAL PURPOSE AUTOMOBILES - LAW ENFORCEMENT (LE) PURSUIT OR SPECIAL SERVICE VEHICLES (continued): Refer to General Requirements, Preceding Each Group.

FULL SIZE PURSUIT SEDAN *
4-DOOR, FRONT WHEEL DRIVE, 6-CYLINDER**

471BLE - FULL SIZE PURSUIT SEDAN, 6-CYL,4-DOOR,FWD		
ITEM	TX Requirements (Min. unless specified)	Ford Police Interceptor *E85
Body Trim Designation (Base Vehicle)	As Shown	P2L
Wheelbase, inches	110.5	112.9
Length (overall), inches	200.4	202.9
Width, inches	72.9	76.2 (excluding mirrors)
Displacement, liters (Base Vehicle)	As Shown	3.5L TIVCT V6 E85*
Engine HP	288	288
Torque	254	254
Transmission	Automatic	6 Speed Automatic
Tire Size & Load Range	As Shown	245/55R18 A/S BSW
Rim size,(dia), inches	As Shown	8
Emissions Certification	As Shown	Tier 2 Bin 5
EPA Greenhouse Score	As Shown	5
<p>* Note: This denotes a FLEX FUEL VEHICLE (FFV) – E85 capable ** Note: "LE" designation for Law Enforcement Pursuit or Special Purpose Vehicles only. *** Note: Refer to restrictions in Section 2158.003, Government Code, "for criminal law enforcement..."</p>		

SPECIAL NOTE 1: General Motors may require pilot model inspection on special order two-tone paints

Additional Equipment: The following equipment is also required in addition to that required above:

a. Body:

- 1. Covering, Luggage Compartment:** Luggage compartment floor shall be covered with a rubber, or fiber type mat.
- 2. Speedometer:** Certified, calibrated to within plus or minus 2 MPH accuracy.
- 3. Trunk Release:** To be ignition fed, if offered by manufacturers.

b. Chassis:

Suspension: Police pursuit rated suspension & components.

C.3. SPECIAL PURPOSE AUTOMOBILES - LAW ENFORCEMENT (LE) PURSUIT OR SPECIAL SERVICE VEHICLES (continued): Refer to General Requirements, Preceding Each Group.

FULL SIZE SEDAN *
PURSUIT
4-DOOR, UNI BODY, REAR WHEEL DRIVE, 6-CYLINDER**

474BLE - FULL SIZE PURSUIT SEDAN, 6-CYL,4-DOOR, UINIBODY,RWD			
ITEM	TX Min. Requirements	Dodge Charger Police Package FFV E85**	Chevrolet Caprice PPV FFV E85*
Body Trim Designation (Base Vehicle)	As Shown	LDDE48-CHARGER POLICE RWD	1EW19
Wheelbase, inches	118.5	120.2	118.5
Length (overall), inches	199.9	199.9	204.2
Width, inches	74.75	75	74.75
Displacement, liters (Base Vehicle)	3.6L V6	3.6 V6 FFV *	3.6L V6
Engine HP	292	292	301
Torque	260	260	265
Transmission	As Shown	5-Speed Auto	6-Speed Auto
Tire Size & Load Range	As Shown	P225/60VR18 BSW V-rated	P235/50R18 W
Rim size,(dia), inches	As Shown	18X7.5 STEEL WHEELS	8
Emissions Certification	As Shown	NAS BIN 4+ ULEV II	Bin 4 ULEV2
EPA Greenhouse Score	As Shown	5	5
<p>* Note: This denotes a FLEX FUEL VEHICLE (FFV) – E85 is available as a no charger item please specify at time of order!</p> <p>** Note: "LE" designation for Law Enforcement Pursuit or Special Purpose Vehicles only.</p> <p>*** Note: Refer to restrictions in Section 2158.003, Government Code, "for criminal law enforcement..."</p>			

SPECIAL NOTE : The Dodge Charge is also available with 5.7L Hemi V8, 370hp and 398 torque. (See 476CLE Series).

Additional Equipment: The following equipment is also required in addition to that required above:

a. Body:

1. **Covering, Luggage Compartment:** Luggage compartment floor shall be covered with a rubber, or fiber type mat.
2. **Speedometer:** Certified, calibrated to within plus or minus 2 MPH accuracy.
3. **Trunk Release:** To be ignition fed.

b. Chassis:

1. **Suspension:** Police pursuit rated suspension & components.

Additional Options: (See Option listing shown under Series 476CLE table)

C.3. SPECIAL PURPOSE AUTOMOBILES - LAW ENFORCEMENT (LE) PURSUIT OR SPECIAL SERVICE VEHICLES (continued): Refer to General Requirements, Preceding Each Group.

FULL SIZE SEDAN PURSUIT *
4-DOOR, ALL WHEEL DRIVE, 6-CYLINDER**

475BLE-SEDAN, PURSUIT SEDAN,FULL SIZE 6 CYL,4DOOR,AWD		
ITEM	TX Requirements (Min. unless specified)	Ford Police Interceptor FFV E85 **
Body Trim Designation (Base Vehicle)	As Shown	P2M
Wheelbase, inches	112.9	112.9
Payload Allowance, pounds (Approximate)	1392	1392
Length (overall), inches	202.9	202.9
Width, including mirrors inches	85.7	85.7
GVWR, pounds	5700	5700
Displacement, liters (Base Vehicle)	As Shown	3.7L V6 Ti-VCT* FFV
Engine HP@RPM	288@6500	305@6500
Torque, ft-lb@RPM	254@4000	279@4000
Transmission	Automatic	6-Speed Auto
Tire Size & Load Range	As Shown	P245/55R18 A/S BSW
Rim size,(dia), inches	As Shown	8
Emissions Certification	As Shown	Tier 2 Bin 5
EPA Greenhouse Score	As Shown	5
EPA Combined MPG	As Shown	21
EPA Air Pollution Score	As Shown	TBD
<p>* Note: This denotes a FLEX FUEL VEHICLE (FFV) – E85 capable ** Note: "LE" designation for Law Enforcement Pursuit or Special Purpose Vehicles only. *** Note: Refer to restrictions in Section 2158.003, Government Code, "for criminal law enforcement..."</p>		

Additional Equipment

Heavy Duty Equipment - Alternator, Battery, Cooling System with engine oil cooler and transmission oil cooler, Powertrain Mounts, Brakes

C.3. SPECIAL PURPOSE AUTOMOBILES - LAW ENFORCEMENT (LE) PURSUIT OR SPECIAL SERVICE VEHICLES (continued): Refer to General Requirements, Preceding Each Group.

FULL SIZE PURSUIT SEDAN *
4-DOOR, REAR WHEEL DRIVE, 8-CYLINDER UNIBODY**

476CLE - FULL SIZE PURSUIT SEDAN, 8-CYL,4-DOOR,RWD,UNIBODY		
ITEM	TX Requirements (Min. unless specified)	Dodge Charger
Body Trim Designation (Base Vehicle)	As Shown	LDDE48-CHARGER POLICE RWD
Wheelbase, inches	120.2	120.2
Length (overall), inches	199.9	199.9
Width, inches	75	75
Displacement, liters (Base Vehicle)	5.7L V-8	5.7L V-8
Engine HP	370	370
Torque	395	395
Transmission	As Shown	5-Speed Auto
Tire Size & Load Range	As Shown	P225/60VR18 BSW V-rated
Rim size,(dia), inches	As Shown	18x7.5 STEEL WHEELS
Emissions Certification	As Shown	NAS BIN 4 + ULEV II +
EPA Greenhouse Score	As Shown	4
<p>* Note: This denotes a FLEX FUEL VEHICLE (FFV) – E85 capable ** Note: "LE" designation for Law Enforcement Pursuit or Special Purpose Vehicles only. *** Note: Refer to restrictions in Section 2158.003, Government Code, "for criminal law enforcement..."</p>		

Additional Equipment: The following equipment is also required in addition to that required above:

a. Body:

- 1. Covering, Luggage Compartment:** Luggage compartment floor shall be covered with rubber, or fiber type mat.
- 2. Speedometer:** Certified, calibrated to within plus or minus 2 MPH accuracy.
- 3. Trunk Release:** To be ignition fed.

b. Chassis:

- 1. Suspension:** Police pursuit rated suspension and components

C.3. SPECIAL PURPOSE AUTOMOBILES - LAW ENFORCEMENT (LE) PURSUIT OR SPECIAL SERVICE VEHICLES (continued): Refer to General Requirements, Preceding Each Group.

FULL SIZE PURSUIT SEDAN, 8-CYLINDER, 4-DOOR, INTEGRAL FRAME

477CLE - FULL SIZE PURSUIT SEDAN, 8-CYL,4-DOOR,RWD,INTEGRAL FRAME		
ITEM	TX Requirements (Min. unless specified)	Chevrolet Caprice PPV FFV E85*
Body Trim Designation (Base Vehicle)	As Shown	1EW19 E85 **
Wheelbase, inches	118.5	118.5
Length (overall), inches	204.2	204.2
Width, inches	74.75	74.75
Displacement, liters (Base Vehicle)	As Shown	6.0L V8 * E85
Engine HP	355	355
Torque	384	384
Transmission	Automatic	6-Speed Auto
Tire Size & Load Range	As Shown	P235/50R18 W
Rim size,(dia), inches	As Shown	8
Emissions Certification	As Shown	Bin 4 ULEV2
EPA Greenhouse Score	As Shown	4
<p>* Note: This denotes a FLEX FUEL VEHICLE (FFV) – E85 capable ** Note: "LE" designation for Law Enforcement Pursuit or Special Purpose Vehicles only. *** Note: Refer to restrictions in Section 2158.003, Government Code, "for criminal law enforcement..."</p>		

Additional Equipment: The following equipment is also required in addition to that required above:

a. Body:

- 1. Covering, Luggage Compartment:** Luggage compartment floor shall be covered with rubber, or fiber type mat.
- 2. Speedometer:** Certified, calibrated to within plus or minus 2 MPH accuracy.
- 3. Trunk Release:** To be ignition fed.

b. Chassis:

- 1. Suspension:** Police pursuit rated suspension and components

FULL SIZE PURSUIT SEDAN *
4-DOOR, ALL WHEEL DRIVE, 8-CYLINDER UNIBODY**

478CLE - FULL SIZE PURSUIT SEDAN, 8-CYL,4-DOOR,AWD,UNIBODY				
ITEM	TX Requirements (Min. unless specified)	Dodge Charger Police AWD		
Body Trim Designation (Base Vehicle)	As Shown	LDEE48		
Wheelbase, inches	120.2	120.2		
Length (overall), inches	199.9	199.9		
Width, inches	75	75		
Displacement, liters (Base Vehicle)	5.7L V-8	5.7L V-8		
Engine HP	370	370		
Torque	395	395		
Transmission	As Shown	5-Speed Auto		
Tire Size & Load Range	As Shown	P225/60VR18 BSW V-rated		
Rim size,(dia), inches	As Shown	18x7.5 STEEL WHEELS		
Emissions Certification	As Shown	NAS BIN 4 + ULEV II +		
EPA Greenhouse Score	As Shown	4		
<p>* Note: This denotes a FLEX FUEL VEHICLE (FFV) – E85 capable ** Note: "LE" designation for Law Enforcement Pursuit or Special Purpose Vehicles only. *** Note: Refer to restrictions in Section 2158.003, Government Code, "for criminal law enforcement..."</p>				

Additional Equipment: The following equipment is also required in addition to that required above:

a. Body:

- 1. Covering, Luggage Compartment:** Luggage compartment floor shall be covered with rubber, or fiber type mat.
- 2. Speedometer:** Certified, calibrated to within plus or minus 2 MPH accuracy.
- 3. Trunk Release:** To be ignition fed.

b. Chassis:

- 1. Suspension:** Police pursuit rated suspension and components

SECTION C.4

4. **UTILITY VEHICLES (CARRYALLS, 4-WHEEL DRIVE UTILITY, AND CARGO VANS)**: Unless otherwise specified, all units shall be furnished complete with standard equipment and factory- installed accessories as listed in the manufacturer's printed literature for the models specified herein (but See Section A.4.1. and Section C.1.1.). The following items are minimum requirements for the models specified herein, and shall be provided whether shown as optional or standard equipment by the manufacturer. The following are some of those standard features or additional features as listed for these models. Please note any additional requirements following the table for each series number. These additional requirements listed below any table are in addition to, the following general requirements for Utility Vehicles:

4.1. Body:

- 4.1.1. **Air Bags:** Manufacturer's standard to include side curtain/impact airbags if available from manufacturer.
- 4.1.2. **Air Conditioning:** Manufacturer's standard.
- 4.1.3. **Arm Rests:** Left door only. Both right and left arm rests are required if right front seat is provided.
- 4.1.4. **AM/FM Radio:** Manufacturer's standard.
- 4.1.5. **Auxiliary Power Outlet:** 12 volt.
- 4.1.6. **Heater and Defroster:** See Accessory Specifications.
- 4.1.7. **Power Package:** Includes power windows, power locks, power mirrors, cruise control, and tilt steering wheel. (Select Option 87 to delete power package.)
- 4.1.8. **Seat, Cloth:** Front seats split bench 40/60, 40/20/40, or buckets. (Bench not acceptable) **(Option No. 258 is for vinyl seats.)**
- 4.1.9. **Sun Visor:** Driver's side only. Dual sun visors are required if right front seat is provided.
- 4.1.10. **Windshield Wipers:** Dual electric 2-speed type with intermittent feature windshield washers.
- 4.1.11. **Window Tint:** OEM Standard Tint. Tinting shall meet Texas DPS regulations. (see Option # 140)
- 4.1.12. **Bluetooth Wireless Communication:** Manufacturer's standard, where available.

4.2. Chassis:

- 4.2.1. **Power Brakes, ABS, required:** Manufacturer's standard; front disc, 2- or 4-wheel.
- 4.2.2. **Automatic Transmission**
- 4.2.3. **Bumpers:** Manufacturer's standard front and rear bumper.
- 4.2.4. **Ground Ratings:** As required for the GVWR certified.
- 4.2.5. **Jack, Handle, and Lug Wrench**
- 4.2.6. **Shock Absorbers:** Front and rear. Manufacturer's heaviest duty shocks without increase in vehicle trim level.
- 4.2.7. **Spare Wheel and Tire (mounted on carrier):** Manufacturer's standard. Must be OEM BRAND NAME, TYPE AND SIZE OF TIRE to those on the vehicle, where available.
- 4.2.8. **Tires (including spare):** Steel belted radial type tubeless tires.
- 4.2.9. **Electronic Stability Control: Required** (per FMVSS 126 all light duty vehicles (under GVWR 10,000) to have ESC installed by model year 2012)
- 4.2.10. **Power Steering:** Manufacturer's standard
- 4.2.11. **Flex Fuel,** if available

4.3. Cargo Weight:

- 4.3.1. **Approximate Payload Allowance: (See definition in Section A.2)**

C.4. UTILITY VEHICLES (CARRYALLS, 4-WHEEL DRIVE UTILITY, AND CARGO VANS) (continued): Refer to General Requirements, Preceding Each Group.

CARRYALL GASOLINE, 1/2 TON, 2 WHEEL DRIVE

650C** - CARRYALL GASOLINE, 1/2 TON, 2 WHEEL DRIVE				
ITEM	TX Requirements (Min. unless specified)	FORD Expedition	Chevrolet Suburban* FFV E85	GMC Yukon XL FFV *E85
Body Trim Designation (Base Vehicle)	As Shown	K1F - EL	CC15906 1FL	TC15906 3SA
Wheelbase, inches	130	131	130	130
Payload Allowance, max pounds (Approximate)	1538	1690	1796	1633
Length (overall), inches	220.8	220.8	224	224
GVWR, pounds	7200	7,540	7300	7300
Displacement, liters (Base Vehicle)	5.3L V-8	3.5L V6 Ecoboost	5.3L V-8* E85	5.3L V-8* E85
Engine HP	320	365	355	355
Torque	335	420	383	383
Transmission	Automatic	6 Speed Auto	6 speed Auto	6 speed Auto
Tire Size & Load Range	P265/70R17	265/70R17	P265/70R17	P265/65R18
Rim size,(dia), inches	7	7.5	7	7
Emissions Certification	As Shown	Tier 2 Bin 4	Bin 4 ULEV2	Bin 4 ULEV2
EPA Greenhouse Score	As Shown	3	4	4
* Note: This denotes a FLEX FUEL VEHICLE (FFV) – E85 capable				
** Note: See Section A.3.3 of this specification for the limited use of this vehicle.				

Additional Equipment: The following equipment is also required in addition to that required above:

a. Body:

1. **Seating Capacity:** Minimum 5, including the driver. See Option No. 99 to increase seating capacity.
2. **Headliner:** Full length, factory installed where available.
3. **Side Panels, Interior:** Option of rigid material with a durable finish (such as plastic) or carpet installed on all walls, wheel wells, and doors, factory installed, where available.
4. **Cab and Cargo Area Insulation:** Factory installed, where available.
5. **Floor Covering, Cargo Compartment:** Cargo compartment floor shall be covered with manufacturers' standard carpet or rubber floor covering. **(Requirement will be indicated prior to ordering vehicle)**

NOTE: Unless Option No. 99 is requested, this vehicle will be provided with a front and middle seat only.

C.4. UTILITY VEHICLES (CARRYALLS, 4-WHEEL DRIVE UTILITY, AND CARGO VANS) (continued): Refer to General Requirements, Preceding Each Group.

Cargo Van, 4 cylinder, Front wheel Driver 4 Door

658A – Cargo Van, 4 cylinder, Front wheel Driver 4 Door					
ITEM	TX Requirements (Min. unless specified)	Ford Transit Connect	Nissan NV200	Ram ProMaster City	Chevrolet City Express
Body Trim Designation (Base Vehicle)	As Shown	S7E - Cargo Van	Cargo Van SV	VMDL51 Cargo VAN	15S60 1LS
Wheelbase, inches	114.6	120.6	115.2	122-	115.2
Payload Allowance, max pounds (Approximate)	1500	1620	1,500 (est)	1883	1500
Length (overall), inches	176	189.7	186.3	187.5"	186.3
Length(Cargo), inches	As Shown	87.3	122.7	87.2	82.8
GVWR, pounds	4718	5270	4718	5380	4,751
Displacement, liters (Base Vehicle)	2.0L	2.5L	2.0L	2.4-LITER 24-VALVE DOHC I-4	2.0
Engine HP	131	169	140	178	131
Torque	128	171	147	174	139
Transmission	Automatic	6 Speed Auto	Xtronic CVT	9 speed auto	variable automatic
Tire Size & Load Range	As Shown	215/55R16	185/60R15	215/55R16	185/60R15
Rim size,(dia), inches	As Shown	6.5"	5.5"	6.5	5.5"
Emissions Certification	As Shown	Tier 2 Bin 4 ULEV II	50S: LEV2-LEV (Cal), Tier2(B5) (Fed); CAL: PZEV		50S: LEV2-LEV (Cal), Tier2(B5) (Fed); CAL: PZEV
EPA Greenhouse Score	As Shown	6	TBD		6
* Note: This denotes a FLEX FUEL VEHICLE (FFV) – E85 capable					
** Note: See Section A.3.3 of this specification for the limited use of this vehicle.					

C.4. UTILITY VEHICLES (CARRYALLS, 4-WHEEL DRIVE UTILITY, AND CARGO VANS) (continued):
Refer to General Requirements, Preceding Each Group.

**659A-UTILITY VEHICLE, COMPACT
4-CYL, 4-DOOR, LIGHT DUTY, FWD**

659A – Utility Vehicle, Compact 4-CYL, 4-Door, Light Duty, FWD						
ITEM	TX Requirements (Min. unless specified)	Nissan Rogue	Ford Escape	Chevrolet Equinox	Jeep Patriot	Toyota Rav4
Body Trim Designation (Base Vehicle)	As Shown	S	U0F - S	1LF26 1LS	SPORT FWD	4430
Wheelbase, inches	103.7	105.9	105.9	112.5	103.7	104.7
Length (overall), inches	173.6	183.3/1,047	178.1	187.8	173.6	179.9
Length (Cargo), inches	As Shown	70.9	Behind 1 st row – 67.8 cu ft 2 nd row – 34.3 cu ft	56.4	62.7	73.4 2 nd row – 38.4
GVWR, pounds	3515	4339	3515 curb weight	4960	4575	4485
Displacement, liters (Base Vehicle)	2.0L	2.5L I-4	2.5L I-4	2.4L I-4	2.0 L	2.5L DOHC
Engine HP	158	175	168 @ 6000	182	158 @ 6000	176
Torque	141	170	170 @ 4500	172	141 @ 4500	172
Transmission	Automatic	CVT	6-speed auto	6 Speed Auto OD	6-speed auto	6 speed ECTI
Tire Size & Load Range	As Shown	P215/70R16	P235/55R17	P225/65R17	P215/60R17	P225/65R17
Rim size,(dia), inches	As Shown	6.5	6	7	6	
Emissions Certification	As Shown	Tier 2, Bin 5	TBD	Bin 4 ULEV2	Bin 4 ULEV2	ULEV II
EPA Greenhouse Score	As Shown	TBD	6	6	6	

C.4. UTILITY VEHICLES (CARRYALLS, 4-WHEEL DRIVE UTILITY, AND CARGO VANS) (cont.):
Refer to General Requirements, Preceding Each Group.

**UTILITY VEHICLE, SMALL SIZE
6-CYLINDER, LIGHT-DUTY, 4-DOOR, 2-4 WHEEL DRIVE**

661B - UTILITY VEHICLE, SMALL SIZE, 6-CYL, 4-DOOR, LIGHT-DUTY, RWD				
ITEM	TX Requirements (Min. unless specified)	Nissan Xterra	Jeep Wrangler	Jeep® Cherokee
Body Trim Designation (Base Vehicle)	As Shown	X	Unlimited Sport (4 x 4)	Sport
Wheelbase, inches	106.3	106.3	116	106.3
Payload Allowance, max lbs (Approximate)	1,000	4x2-1058 4x4 – 1045 Est.	1099	1000
Length (overall), inches	178.7	178.7	184.8	182
Length(Cargo), inches	65.7	65.7	31.5 70.6 Rear seat folded	54.9.7
GVWR, pounds	5201	5201 (4x2)	5400	5500 (4x4)
Displacement, liters (Base Vehicle)	As Shown	4.0L V6	3.6L V6	3.2L V6
Engine HP	261	261	285	271
Torque	260	281	260	239
Transmission	Automatic	Auto 5-Speed	Five-speed Automatic	9-speed Automatic
Tire Size & Load Range	As Shown	P265/70R16	P225/75R16 On/Off-Road	225/65R17 BSW All
Rim size,(dia), inches	As Shown	7	7.0	7
Emissions Certification	As Shown	50 State ULEV	NAS BIN 4+ ULEV II +	TBD
EPA Greenhouse Score	As Shown	TBD	4	TBD
* Note: This denotes a FLEX FUEL VEHICLE (FFV) – E85 capable				

Additional Equipment: The following equipment is also required in addition to that required above:

a. Body:

- 1. Seating Capacity:** 4 passengers including driver (minimum).

C.4. UTILITY VEHICLES (CARRYALLS, AND CARGO VANS) (continued): Refer to General Requirements, Preceding Each Group.

**UTILITY VEHICLE, MID SIZE
REAR WHEEL DRIVE, 4-DOOR, 2-WHEEL DRIVE
6-CYLINDER, LIGHT-DUTY**

662B** - UTILITY VEHICLE, MID SIZE, 6-CYL, 4-DOOR, LIGHT DUTY, RWD					
ITEM	TX Requirements (Min. unless specified)	Grand Cherokee	Nissan Pathfinder	Toyota 4 Runner	Explorer Model K7B
Body Trim Designation (Base Vehicle)	As Shown	Laredo	S	8642	K7B
Wheelbase, inches	109.8	114.8	114.2	109.8	112.8
Payload Allowance, max pounds (Approximate)	1500	2030	1,500 (est)	1625	TBD
Length (overall), inches	189.2	189.9	197.2	189.2	198.3
Length(Cargo), inches	68.7	68.7	79.8	89.7	TBD
GVWR, pounds	5912.7	6500	5912.7	6300	TBD
Displacement, liters (Base Vehicle)	As Shown	V-6 *FFV /5.7L V8 Hemi Option also available with a 3.0L EcoDiesel engine	3.5L V-6	4.0L V6	3.5L TiVCT V6
Engine HP	260	290V6/360 V8/240V6 EcoDiesel	260	270	290
Torque	240	260V6/390 V8/420V6 EcoDiesel	240	278	255
Transmission	Automatic	8 speed auto	CVT	5 speed Auto	6 speed Auto
Tire Size & Load Range	As Shown	P245/70R17 BSW On/Off Road Tires	P235/55R20	P265/70R/17	P245/60R18
Rim size,(dia), inches	As Shown	8	7.5	7	TBD
Emissions Certification	As Shown	NAA/BIN 5	LEV2-ULEV/ Tier2-Bin5	ULEV 2 Bin 5	Tier 2 ULEV Bin 5
EPA Greenhouse Score	As Shown	V6 5 V8 4	TBD	3	TBD
<p>* Note: This denotes a FLEX FUEL VEHICLE (FFV) – E85 capable ** Note: See Section A.3.3 of this specification for the limited use of this vehicle. *** Note: Cargo length behind 2nd row of seats</p>					

Additional Equipment: The following equipment is also required in addition to that required above:

a. Body:

- 1. Seating Capacity:** Minimum 5 passengers including driver.

C.4. UTILITY VEHICLES (CARRYALLS AND CARGO VANS) (continued): Refer to General Requirements, Preceding Each Group

**UTILITY VEHICLE, MID SIZE
FRONT WHEEL DRIVE, 4-DOOR, 2-WHEEL DRIVE
6-CYLINDER, LIGHT-DUTY**

663B - UTILITY VEHICLE, MID SIZE, 6-CYL, 4-DOOR, FWD, LIGHT-DUTY						
ITEM	TX Requirements (Min. unless specified)	Dodge Journey	Ford Explorer	Toyota Highlander	Chevrolet Traverse	GMC Terrain SLE
Body Trim Designation (Base Vehicle)	As Shown	SXT	K7B	6946	CR14526 1LS	SLE (TLK26)
Wheelbase, inches	112.5	113.8	112.8	109.8	118.9	112.5
Payload Allowance, max pounds (Approximate)	1,151	1203	TBD	1,821	1,151	1,151
Length (overall), inches	188.4	192.4	198.3	188.4	203.7	187.8
Length(Cargo), inches	As Shown	67.6	TBD	67.95	TBD	63.7 cu. ft
GVWR, pounds	5100	5100	TBD	5500	6459	5,202
Displacement, liters (Base Vehicle)	As Shown	3.6 *L V6 * FFV E85	3.5L TiVCT V6	3.5L V6	3.6L V6	3.6L V6
Engine HP	270	283	290	270	281	301
Torque	248	260	255	248	266	272
Transmission	Automatic	6-Speed Auto	6 speed auto	5-speed Auto OD	6-Speed Auto OD	6-Speed Auto OD
Tire Size & Load Range	As Shown	P225/65R17 BSW All-Season Touring	P245/60R18	P245/65R17	P245/70R17	P235/60R17
Rim size,(dia), inches	As Shown	17x6.5 ALUMINUM WHEELS	TBD	7.5	7.5	7.5
Emissions Certification	As Shown	NAS BIN 4+ ULEV II +	Tier 2 ULEV Bin 5	ULEV 2 Bin 5	Bin 4 UVLEV 2	ULEV2 Bin 4
EPA Greenhouse Score	As Shown	5	TBD	4	5	5
<p>* Note: This denotes a FLEX FUEL VEHICLE (FFV) – E85 capable ** Note: See Section A.3.3 of this specification for the limited use of this vehicle. *** Note: Cargo length behind 2nd row of seats</p>						

**** Cargo Length:** As measured behind the second (2) row seat.

Additional Equipment: The following equipment is also required in addition to that required above:

6. Seating Capacity: Minimum 5 passengers including driver.

C.4. UTILITY VEHICLES (CARRYALLS AND CARGO VANS) (continued): Refer to General Requirements, Preceding Each Group

**UTILITY VEHICLE, FULL SIZE
6/8-CYLINDER, REAR WHEEL DRIVE, 4-DOOR, 2-WHEEL DRIVE**

665C - UTILITY VEHICLE, FULL SIZE, 6/8-CYL, 4-DOOR, RWD							
ITEM	TX Requirements (Min. unless specified)	Chevrolet Tahoe* FFV E85	Ford Expedition	Dodge Durango	Nissan Armada	GMC Yukon* FFV E85	Toyota Sequoia
Body Trim Designation (Base Vehicle)	As Shown	CC15706 1FL	U1F - XL	WDDE75	SV	TC15706 1SA	7917
Wheelbase, inches	116	116	119	119.8	123.2	116	122
Payload Allowance, max pounds (Approximate)	1500	1752	1630	1500	1,680	1752	1700
Length (overall), inches	199.8	204	206.5	199.8	207.7	204	205.7
Length(Cargo) inches**	As Shown	49.4	44.4	52.6	61.4	49.4	
GVWR, pounds	7,100	7,100	7,300	7100	7,100	7,100	7,100
Displacement, liters	As Shown	5.3L V-8 * E85	3.5L V6 Ecoboost	5.7L V8 HEMI MDS VVT/optional 3.6L V6 24V VVT Engine	5.6L V-8 FFV E85*	5.3L V-8 * E85	5.7L V-8
Engine HP	310	355	365	360/290	317	355	381
Torque	335	383	420	390/260	385	383	401
Transmission	Automatic	6 Speed Auto	6 Speed Auto	8-Spd Auto 845RE	5 speed Auto OD	6 Speed Auto	6 speed ECTI
Tire Size & Load Range	As Shown	P265/70R17	P265/70R17	P265/60R18 BSW On/Off Road Tires	P275/60R20	P265/70R17	P215/55R17
Rim size, dia. in.	As Shown	8	7.5	8	8	8	8
Emissions Certification	As Shown	Bin 4 ULEV2	Tier 2 Bin 8	NAS BIN 4+ ULEV II +	50 state: LEV2-LEV (Cal), Tier2(B5) (Fed)	Bin 4 ULEV2	ULEV II
EPA Greenhouse Score	As Shown	4	3	3	TBD	4	TBD
<p>* Note: This denotes a FLEX FUEL VEHICLE (FFV) – E85 capable ** Note: See Section A.3.3 of this specification for the limited use of this vehicle.</p>							

**** Cargo Length:** As measured behind the second (2) row seat.

Additional Equipment: The following equipment is also required in addition to that required above:

- a. **Body:**
 - 1. **Seating Capacity:** 4 passenger, including driver.
 - 2. **Air Conditioning:** Front and Rear.

C.4. UTILITY VEHICLES (CARRYALLS AND CARGO VANS) (continued): Refer to General Requirements, Preceding Each Group.

**MINI-CARGO VAN 2 WHEEL / FRONT WHEEL DRIVE
6-CYLINDER / MINI Wheelchair Ramp equipped 8-CYL, RWD**

668B – MINI-CARGO VAN 2 WHEEL, 8-CYL, FWD				
ITEM	TX Requirements (Min. unless specified)	Ram ProMaster	VPG MV-1 Accessible Van	Ford Transit Connect ADA
Body Trim Designation (Base Vehicle)	As Shown	VF1L11	DX	E9E
Wheelbase, inches	118	118	122	120.6
Payload Allowance, max pounds (Approximate)	1500	3,980	1500	1620
Length (overall), inches	202.5	195.4	205	189.7
Length(Cargo), inches	99	105	115	169
GVWR, pounds	8,550	8550	6600	5380
Displacement, liters (Base Vehicle)	As Shown	3.6L V6	4.6L V8	2.5L
Engine HP	283	280	248	169
Torque	260	260	294	171
Transmission	Automatic	6-Speed Auto	4-Speed with O/D	6 Speed Auto
Tire Size & Load Range	As Shown	LT225/75R16E BSW ALL SEASON TIRES	P235/65/R17XL ALL SEASON TIRES	215/55R16
Rim size,(dia), inches	As Shown	16x6.0 Steel Wheels	17x6.5 STEEL WHEELS	6.5
Emissions Certification	As Shown		Tier 2, Bin 4	Tier 2 Bin 4 ULEVII
EPA Greenhouse Score	As Shown		TBD	6

Additional Equipment: The following equipment is also required in addition to that required above:

a. Body:

1. **Cargo Door:** Manufacturer's standard configuration.
2. **Seating Capacity:** Driver's and Front passenger
3. **Full Length Headliner,** if available

C.4. UTILITY VEHICLES (CARRYALLS AND CARGO VANS) (continued): Refer to General Requirements, Preceding Each Group.

**1/2 TON, FULL SIZE CARGO VAN
6-CYLINDER, 2-WHEEL, RWD/FWD**

670B - FULL SIZE CARGO VAN,1/2 TON,6-CYL, RWD/FWD			
ITEM	TX Requirements (Min. unless specified)	RAM ProMaster	FORD TRANSIT 150
Body Trim Designation (Base Vehicle)	As Shown	1500 CARGO VAN LOW ROOF VF1L12	E1Y
Wheelbase, inches	130	136	130
Payload Allowance, max pounds (Approximate)	2,360	3852	3675
Length (overall), inches	213	213	219.9
Length(Cargo), inches	123	123	126
GVWR, pounds	7,300	8,550	8600
Displacement, liters (Base Vehicle)	As Shown	V6/ Optional 3.0L EcoDiesel I4	3.7L V6 FFV
Engine HP	195	280 /174	275
Torque	250	260 /295	260
Transmission	Automatic	6 speed Auto/Manual 6- speed clutchless	6 speed Auto
Tire Size & Load Range	As Shown	225/75R16C BSW ALL SEASON TIRES (TU4)	235/65/16
Rim size,(dia), inches	As Shown	16x6.0 STEEL WHEELS (WCS)	16x6.0 STEEL WHEELS (WCS)
Emissions Certification	As Shown	N/A	N/A
EPA Greenhouse Score	As Shown	TBD	TBD
* Note: This denotes a FLEX FUEL VEHICLE (FFV) – E85 capable			

Additional Equipment: The following equipment is also required in addition to that required above:

- a. Body:**
 - 1. Cargo Door:**
 - a. Right side, Swing-Out Panel (See Option No. 201 for Sliding Side Door or Option No. 202 for Swing-Out Doors on driver's side).
 - b. Left Side, with RH Swing-Out Doors (See Option No. 203)
 - 2. Full Length Headliner,** if available.
 - 3. Seating Capacity:** Driver's and Front passenger

C.4. UTILITY VEHICLES (CARRYALLS AND CARGO VANS) (continued): Refer to General Requirements, Preceding Each Group.

**1/2 TON FULL SIZE CARGO VAN
STANDARD GLASS: WINDSHIELD, LEFT AND RIGHT FRONT DOORS
6/8-CYLINDER**

670C - 1/2 TON FULL SIZE CARGO VAN, 6/8-CYL,LEFT AND RIGHT FRONT DOORS			
ITEM	TX Requirements (Min. unless specified)	Ford Transit 150 *FFV E85	Ram ProMaster FWD
Body Trim Designation (Base Vehicle)	As Shown	E1Z	1500 CARGO VAN LOW ROOF VF1L12
Wheelbase, inches	130	130	136
Payload Allowance, max pounds (Approx.)	2,342	3600	3,852
Length (overall), in.	213	219.9	213.0
Length(Cargo), in.	121.4	126	123.0
GVWR, pounds	7,300	8600	8,550
Displacement, liters (Base Vehicle)	As Shown	3.7L V6 *FFV	3.6 L V6
Engine HP	225	270	280/174
Torque	260	260	260/295
Transmission	Automatic	6 speed auto	6 speed Auto6 speed/Manual 6-speed clutchless
Tire Size & Load Range	As Shown	235/65R16	225/75R16C BSW ALL SEASON TIRES
Rim size,(dia), in	As Shown	16	16X6.0 STEEL WHEELS (WCS)
Emissions Certification	As Shown	TBD	N/A
EPA Greenhouse Score	As Shown	TBD	TBD
* Note: This denotes a FLEX FUEL VEHICLE (FFV) – E85 capable			

Additional Equipment: The following equipment is also required in addition to that required above:

b. Body:

- 1. Cargo Door:** Right side, Swing-Out Panel (See Option No. 201 for Sliding Side Door)
- 2. Full Length Headliner,** if available
- 3. Seating Capacity:** Driver's and Front passenger

C.4. UTILITY VEHICLES (CARRYALLS AND CARGO VANS) (continued): Refer to General Requirements, Preceding Each Group.

**3/4 TON FULL SIZE CARGO VAN
STANDARD GLASS: WINDSHIELD, LEFT AND RIGHT FRONT DOORS
6/ 8-CYLINDER**

680C - 3/4 TON FULL SIZE CARGO VAN, 6/8-CYL, LEFT AND RIGHT FRONT DOORS					
ITEM	TX Requirements (Min. unless specified)	Chevrolet CG23405/ GMC TG23405	Transit 250 *FFV E85	Nissan NV2500	RAM PROMASTER CARGO VAN
Body Trim Designation (Base Vehicle)	As Shown	1WT	R1Z	S	VF2L13 High Roof
Wheelbase, inches	130	135	130	146.1	136
Payload Allowance, max pounds (Approximate)	3,287	3,287	4,000	3086.5	4,113
Length (overall), inches	216.7	224.1	219.9	240.6	213
Length(Cargo), inches	122.4	124.6	126	234.1	123
GVWR, pounds	8,600	8,600	9,000	9100	8,900
Displacement, liters (Base Vehicle)	As Shown	4.8L V-8	3.5L V6 *FFV E85	5.6L	3.6 L V6/ Optional 3.0L EcoDiesel I4
Engine HP	225	280	270	317	280/174
Torque	250	295	260	385	260/295
Transmission	Automatic	6 speed auto	6 speed auto	5 speed AUTO	6 speed Auto/Manual 6-speed clutchless Auto
Tire Size & Load Range	As Shown	LT245/75R16E	235/65R16	LT245/70/R17	225/75R16C BSW ALL SEASON TIRES (TU4)
Rim size,(dia), inches	As Shown	16 X 6.5	16	7.5	16X6.0
Emissions Certification	As Shown	Bin 8 MDV ULEV	TBD	HDV1(Fed)/LEVII-ULEV MDV6(Cal)	N/A
EPA Greenhouse Score	As Shown	1	TBD	TBD	TBD
* Note: This denotes a FLEX FUEL VEHICLE (FFV) – E85 capable					

Additional Equipment: The following equipment is also required in addition to that required above:

a. Body:

Cargo Door: Right side, Swing-Out Panel (See Option 201 for Sliding Side Door).

Rearview Mirror: Low mount, below eye level, left and right sides. Mirror shall be manufacturer's largest standard.

Full Length Headliner, if available

Seating Capacity: Driver's and Front passenger

C.4. UTILITY VEHICLES (CARRYALLS AND CARGO VANS) (continued): Refer to General Requirements, Preceding Each Group.

**3/4 TON FULL SIZE EXTENDED CARGO VAN
STANDARD GLASS: WINDSHIELD, LEFT AND RIGHT FRONT DOORS 6/8 CYL**

GASOLINE					DIESEL,		
685C - 3/4 TON FULL SIZE EXTENDED CARGO VAN , 6/8-CYL, LEFT AND RIGHT FRONT DOORS					685D - 3/4 TON FULL SIZE EXTENDED CARGO VAN, LEFT AND RIGHT FRONT DOORS		
ITEM	TX Requirements (Min. unless specified)	FORD TRANSIT 250	Chevrolet Express	RAM PROMASTER CARGO VAN	TX Requirements (Min. unless specified)	Chevrolet Express/ GMC Savana	FORD TRANSIT 250
Body Trim Designation (Base Vehicle)	As Shown	R2Z	CG23705 1WT	VF2L13 High Roof	As Shown	CG23705 1SD/ TG23705 1SD	R2Z
Wheelbase, inches	138	148	155	159	138	155	148
Payload Allowance, max pounds (Approximate)	3,073	4075	3,073	3,998	3,073	3,073	4075
Length (overall), inches	236	237.6	244.1	236	244.1	244.1	237.6
Length(Cargo), inches	141.4	143.7	146.2	146	146.2	146.2	143.7
GVWR, pounds	8,600	9000	8,600	8,900	8600	8,600	9000
Displacement, liters (Base Vehicle)	As Shown	3.7L V6 FFV E85	4.8L V-8	3.6 L V6/ Optional 3.0L EcoDiesel I4	As Shown	2.8L Diesel	3.2L I-5 DIESEL
Engine HP	225	275	280	280/174	260	181	185
Torque	250	260	295	260/295	525	369	350
Transmission	Automatic	6 SPD AUTO TRANS	6 Spd Auto	6 speed Auto/Manual 6-speed clutchless Auto	Automatic	6 SPD Auto	6 SPD AUTO TRANS
Tire Size & Load Range	As Shown	235/65/16	LT245/75R16E	225/75R16C BSW ALL SEASON TIRES (TU4)	As Shown	LT245/75R16E	235/65/16
Rim size,(dia), inches	16 x 6.5	16	16 X 6.5	16X6.0 STEEL WHEELS (WCS)	16 x 6.5	16 X 6.5	16
Emissions Certification	As Shown	TBD	Bin 8 MDV ULEV	N/A	As Shown	Bin 5/ULEV125	TBD
EPA Greenhouse Score	As Shown	TBD	1	TBD	As Shown	TBD	TBD
* Note: This denotes a FLEX FUEL VEHICLE (FFV) E85 capable					* Note: This denotes a FLEX FUEL VEHICLE (FFV) – E85 capable		

Additional Equipment: The following equipment is also required in addition to that required above:

a. Body:

1. Cargo Door: Right side, Swing-Out Panel (See Option No. 201 for Sliding Side Door).
2. Full Length Headliner, if available
3. Seating Capacity: Driver's front passenger (See Option No. 97 for Passenger Seat).

1. C.4. UTILITY VEHICLES (CARRYALLS AND CARGO VANS) (continued): Refer to General Requirements, Preceding Each Group.

**686C 1 TON FULL SIZE EXTENDED CARGO VAN , 6/8-CYL
STANDARD GLASS: WINDSHIELD, LEFT AND RIGHT FRONT DOORS**

686C – 1 Ton Full Size Extended Cargo Van, 6/8-CYL Standard Glass: Windshield, Left and Right Front Doors						
ITEM	Minimum Requirements	RAM PROMASTER CARGO VAN VF3L16	Freightliner Sprinter 3500	FORD TRANSIT 350	Chevrolet Express CG33705	GMC Savana TG33705
Wheelbase, inches	138	159	144	148	155	155
Apprx. Payload Allowance lbs	3470	4,417	4364	4575	4120	4120
Overall Length, inches	232.5	236	232.5	266.1	244.1	244.1
Length, Cargo, inches	128.5	146	128.5	172.2	146.2	146.2
GVWR, pounds	9000	9350	9990	9500	9600	9600
Engine, Displacement, liters	As Shown	3.6 L V6/ Optional 3.0L EcoDiesel I4		3.7L V6 FFV* E85	4.8L V8	4.8L V8
Engine, HP	255	280/175		275	280	280
Engine, Torque	260	260/295		260	295	295
Transmission, Automatic	Automatic	6 speed Auto/Manual 6-speed clutchless Auto transmission		6 SPD AUTO	6-Spd Auto	6-Spd Auto
Tire Size & Load Range	As Shown	225/75R16C BSW ALL SEASON TIRES (TU4)		235/65/16	P245/75R16E	P245/75R16E
Rim Size, inches	6.5	16X6.0 STEEL WHEELS (WCS)		7	6.5	6.5
Emissions Certification	As Shown	TBD		TBD	Bin 8 MDV ULEV	Bin 8 MDV ULEV

Additional Equipment: The following equipment is also required in addition to that required above:

a. Body:

1. **Cargo Door:** Right side, Swing-Out Panel (See Option No. 201 for Sliding Side Door).
2. **Seating Capacity:** Driver's front passenger (See Option No. 97 for Passenger Seat).
3. Full Length Headliner, if available

C.5. PASSENGER VANS, LIGHT-DUTY: Unless otherwise specified, all units shall be furnished complete with standard equipment and factory-installed accessories as listed in the manufacturer's printed literature for the models specified herein (but See Section A.4.1. and Section C.1.1.). The below items are minimum requirements for the models specified herein, and shall be provided whether shown as optional or standard equipment by the manufacturer. The following are some of those standard features or additional features as listed for these models. Please note any additional requirements following the table for each series number. These additional requirements listed below any table are in addition to, the following general requirements for Light-Duty Passenger Vans:

a. Body:

1. **Air Bags: Required.** Manufacturer's standard to include side curtain/impact airbags if available from manufacturer.
2. **Air Conditioning:** Manufacturer's Front and Rear required.
3. **Arm Rests, Door-Mounted:** Both right and left arm rests are required.
4. **AM/FM Radio:** Manufacturer's standard.
5. **Auxiliary Power Outlet:** 12 volt.
6. **Headliner:** Required. Full length, if available.
7. **Heater and Defroster: Required**
8. **Power Package:** Includes power windows, power locks, power mirrors, cruise control, and tilt steering wheel. (Select Option 87 to delete entire power package, not available from Nissan.)
9. **Seat, Cloth:** Front buckets, 2nd, 3rd, & 4th row bench seats, where applicable (Option 258 for vinyl seats.)
10. **Side Panels, Interior:** Rigid material with a durable finish such as plastic shall be installed on all walls and doors.
11. **Sun Visor:** Dual.
12. **Windows, Passenger:** Required (factory installed, if available) for each row of seats (Option 153).
13. **Windshield Wipers:** Dual electric 2-speed type with intermittent feature windshield washers.
14. **Window Tint:** OEM Standard Tint. Tinting shall meet Texas DPS regulations. (see Option # 140)
15. **Bluetooth Wireless Communication:** Manufacturer's standard, where available.

b. Chassis:

1. **Automatic Transmission**
2. **Brakes, ABS, required,** Manufacturer's standard, front disc, 2- or 4-wheel.
3. **Traction Assistance and Vehicle stability enhancement system.**
4. **Bumpers:** Manufacturer's standard front and rear.
5. **Ground Ratings:** As required for the GVWR certified.
6. **Spare Wheel and Tire:** Manufacturer's standard, mounted (Conventional Tire) – full-size spare wheel and tire shall be A BRAND NAME, TYPE, AND SIZE OF TIRE to those on the vehicle, where available. (See Option 108 for space saver wheel and tire).
7. **Tires, Including Spare, If Conventional Type:** Steel-belted radial-type tubeless tires (all tires shall be identical).
8. **Electronic Stability Control: Required** (per FMVSS 126 all light duty vehicles (under GVWR 10,000) to have ESC installed by model year 2012)

C.5. PASSENGER VANS, LIGHT-DUTY (cont.): Refer to General Requirements, Preceding Each Group.

**COMMERCIAL MINI VAN (5-PASSENGER)
4-CYLINDER, FRONT WHEEL DRIVE**

741A - COMMERCIAL MINI VAN (5-PASSENGER), 4-CYLINDER, FWD			
Item	Minimum Requirements	Ford Transit Connect *	Ram ProMaster City Passenger van
Body Trim Designation (Base Vehicle)	As Shown	S9E (XL)	Passenger van
Wheelbase, inches	114.6	120.6	122
Length, Overall, inches	180.7	189.7	187.5
GVWR, pounds	4,965	5280	5,380
Engine, Displacement, liters	As shown	2.5L	2.4L
Engine, HP	136	169	178
Engine, TORQUE	128	171	174
Transmission, Automatic	Automatic	Automatic (6-speed)	9 speed auto
Tire Size & Load Range	As Shown	215/55R16	215/55R16XL BWS ALL SEASON TIRES
Rim Size, inches	As Shown	6.5"	6.5
Emissions Certification	As Shown	Tier 2 Bin 4 ULEV II	TBD
EPA Greenhouse Score	As Shown	6	TBD
* Note: This denotes a FLEX FUEL VEHICLE (FFV) – E85 capable at no extra cost			

Additional Equipment: The following equipment is also required in addition to that required above:

1. Sliding Doors:

2. Seats - The minimum seating arrangement shall be as follows:

Rows Seat Capacity

- 1 One (driver) & One (passenger, front)
- 2 Three (per seat)
- 3 no seats

5328C.5. PASSENGER VANS, LIGHT-DUTY(cont.): Refer to General Requirements Preceding Each Group.

1/2 TON MINI VAN 6-CYLINDER, 7 -PASSENGER

741B - 1/2 TON MINI VAN 6-CYLINDER, 7 -PASSENGER				
Item	Minimum Requirements	Dodge Grand Caravan	Nissan Quest	Toyota Sienna
Body Trim (Base Vehicle)	As Shown	SE	3.5 SV	5328
Wheelbase, inches	118.1	121.2	118.1	119.3
Length, Overall, inches	200.2	202.5	200.8	200.2
GVWR, pounds	5818	6100	5818	5995
Engine, Displacement, liters	3.5L	3.6L V-6 FFV *	3.5L V6	3.5L V6
Engine, HP	260	283	260	266
Engine, TORQUE	240	260	240	245
Transmission, Automatic	Automatic	6 speed	CVT	6 speed auto
Tire Size & Load Range	As Shown	225/65R16 BSW All-Season	P265/60R18	P235/60R17
Rim Size, inches	As Shown	16X6.5 STEEL WHEELS	7	6.5
Emissions Certification	As Shown	NAS BIN 4+ ULEV II+	LEV2-ULEV / Tier 2, Bin 5 / Tier 2, Bin 5 (Non-50 State/Federal Emissions)	ULEV 2 Bin 5
EPA Greenhouse Score	As Shown	5	TBD	4
* Note: This denotes a FLEX FUEL VEHICLE (FFV) – E85 capable at no extra cost.				

Additional Equipment: The following equipment is also required in addition to that required above:

a. Body:

- 1. Sliding Doors**, right and left side.
- 2. Seats** - The minimum seating arrangement shall be as follows:

Rows Seat Capacity

- | | |
|---|---------------------------------------|
| 1 | One (driver) & One (passenger, front) |
| 2 | Three (per seat) |

C.5. PASSENGER VANS, LIGHT-DUTY (cont.): Refer to General Requirements, Preceding Each Group.

**1/2 TON FULL SIZE PASSENGER VAN
6/8-CYLINDER, 8-PASSENGER**

750C - 1/2 TON FULL SIZE PASSENGER VAN 6/8-CYL, 8 -PASSENGER		
Item	Minimum Requirements	Ford Transit 150 *FFV E85
Body Trim Designation (Base Vehicle)	As Shown	K1Y
Wheelbase, inches	130	130
Approximate Payload Allowance	1779	2,980
Length, Overall, inches	216.7	219.9
GVWR, pounds	7300	8,550
Engine, Displacement, liters	As Shown	3.7L V6 FFV
Engine, HP	225	270
Engine, TORQUE	250	260
Transmission, Automatic	Automatic	6-speed auto
Tire Size & Load Range	As Shown	235/65R16 BSW
Rim Size, inches	7	16
Emissions Certification	As Shown	TBD
EPA Greenhouse Score	As Shown	TBD
* Note: This denotes a FLEX FUEL VEHICLE (FFV) – E85 capable at no extra cost.		

Note: For cutaway chassis with Para-transit bodies see Series 883CPT,885CPT

Additional Equipment: The following equipment is also required in addition to that required above:

a. Body:

- 1. Swing out Side Door(s):** Sliding (See Option No. 202 for Swing-Out Side Door).
- 2. Seats -** The minimum seating arrangement shall be as follows:

Rows Seat Capacity

- | | |
|---|---------------------------------------|
| 1 | One (driver) & One (passenger, front) |
| 2 | Three (per seat) |
| 3 | Three (per seat) |

C.5. PASSENGER VANS, LIGHT-DUTY (cont.): Refer to General Requirements, Preceding Each Group.

**1 TON FULL SIZE PASSENGER VAN
6/8-CYLINDER, 12-PASSENGER**

GASOLINE				DIESEL			
755C - 1 TON FULL SIZE PASSENGER VAN 6/8-CYL, 12-PASSENGER				755D - 1 TON FULL SIZE PASSENGER VAN 8-CYL,12-PASSENGER			
Item	Minimum Requirements	FORD TRANSIT 350	Chevrolet Express CG33406/ GMC SAVANA TG33406	Item	Minimum Requirements	Chevrolet Express CG33406/ GMC SAVANA TG33406	FORD TRANSIT 350
Body Trim Designation (Base Vehicle)	As Shown	X2Z	1LS	Body Trim Designation (Base Vehicle)	As Shown	2LS	X2Z
Wheelbase, inches	135	148	135	Wheelbase, inches	135	135	148
Approximate Payload Allowance	2,756	4575	3491	Approximate Payload Allowance	3491	3491	4575
Length, Overall, inches	216.7	237	224.1	Length, Overall, inches	224.1	224.1	237
GVWR, pounds	8,550	8550	9,600	GVWR, pounds	9,600	9,600	8550
Engine, Displacement, liters	As Shown	3.7L V6 FFV *E85	4.8L V-8	Engine, Displacement, liters	As Shown	2.8L Diesel	3.2L I-5 DIESEL ENGINE
Engine, HP	255	275	280	Engine, HP	180	181	180
Engine, TORQUE	260	260	295	Engine, TORQUE	350	369	350
Transmission, Automatic	Automatic	6 SPD AUTO TRANS	6- Speed Auto	Transmission, Automatic	Automatic	6- Speed Automatic	6 SPD AUTO TRANS
Tire Size & Load Range	As Shown	235/65/16	LT245/75R16E	Tire Size & Load Range	As Shown	LT245/75R16E	235/65/16
Rim Size, inches	As Shown	16	6.5	Rim Size, inches	As Shown	6.5	16
Emissions Certification	As Shown	TBD	Bin 8 MDV ULEV	Emissions Certification	As Shown	Bin 5/ULEV125	TBD
EPA Greenhouse Score	As Shown	TBD	1	EPA Greenhouse Score	As Shown	TBD	TBD
* Note: This denotes a FLEX FUEL VEHICLE (FFV) – E85 capable at no extra cost.				* Note: This denotes a FLEX FUEL VEHICLE (FFV) – E85 capable at no extra cost.			

Note: For cutaway chassis with Para-transit bodies see Series 883CPT,885CPT

Additional Equipment: The following equipment is also required in addition to that required above:

- a. Body:**
 - 1. Sliding (See Option No. 200 for Swing-Out Side Door).
- b. Chassis**

NOTE: If not standard manufacturer's

C.5. PASSENGER VANS, LIGHT-DUTY(cont.):Refer to General Requirements, Preceding Each Group.
1 TON FULL SIZE EXTENDED PASSENGER VAN
6/8-CYLINDER,15-PASSENGER

GASOLINE			
760C -1 TON FULL SIZE EXTENDED PASSENGER VAN,6/8-CYLINDER,15-PASSENGER			
Item	Minimum Requirements	FORD TRANSIT 350	Chevrolet CG33706/ GMC SAVANA TG33706
Body Trim Designation (Base Vehicle)	As Shown	X2Z	1LS
Wheelbase, inches	138	148	155
Approximate Payload Allowance	2,668	4575	3,171
Length, Overall, inches	236.7	237	244.1
GVWR, pounds	9,100	8550	9,600
Engine, Displacement, liters	5.4L	3.7L V6 FFV	4.8LV-8
Engine, HP	255	275	280
Engine, TORQUE	350	260	295
Transmission, Automatic	Automatic	6 SPD AUTO TRANSMISSION	6-speed Automatic
Tire Size & Load Range	As Shown	235/65/16	LT245/75R16E
Rim Size, inches	6.5		6.5
Emissions Certification	As Shown	TBD	Bin 8 MDV ULEV
EPA Greenhouse Score	As Shown	TBD	1
* Note: This denotes a FLEX FUEL VEHICLE (FFV) – E85 capable at no extra cost.			

DIESEL			
760D -1 TON FULL SIZE EXTENDED PASSENGER VAN,6/8-CYLINDER,15-PASSENGER			
Item	Minimum Requirements	Chevrolet CG33706 GMC SAVA NA TG33706	FORD TRANSIT 350
Body Trim Designation (Base Vehicle)	As Shown	1SD	X2Z
Wheelbase, inches	148	155	148
Approximate Payload Allowance	3,171	3,171	4275
Length, Overall, inches	237	244.1	237.6
GVWR, pounds	9,600	9,600	8550
Engine, Displacement, liters	6.6	2.8L Diesel	3.2L I-5 DIESEL ENGINE
Engine, HP	260	181	180
Engine, TORQUE	525	369	350
Transmission, Automatic	Automatic	6- Speed Automatic	6 SPD AUTO TRANS
Tire Size & Load Range	As Shown	LT245/75R16E	235/65/16
Rim Size, inches	6.5	6.5	
Emissions Certification	As Shown	Bin 5/ULEV125	TBD
EPA Greenhouse Score	As Shown	TBD	TBD
* Note: This denotes a FLEX FUEL VEHICLE (FFV) – E85 capable at no extra cost.			

Note: For cutaway chassis with Para-transit bodies see Series 883CPT,885CPT

Additional Equipment: The following equipment is also required in addition to that required above:

a. Body:

1. **Cargo Door:** Right side, Swing-Out Panel (See Option No. 201 for Sliding Side Door).
NOTE: If not standard manufacturer's
2. **Color:** Limited number of standard colors available.

C.5. PASSENGER VANS, LIGHT-DUTY (continued): Refer to General Requirements, Preceding Each Group.

**EXTENDED HEIGHT 15 PASSENGER VAN
GASOLINE**

Series 771G - EXTENDED HEIGHT 14 PASSENGER VAN ,		
ITEM	Minimum Requirements	Lift Equipped Ford Transit 350 *FFV E85
Body Trim Designation (Base Vehicle)	As Shown	X2X
Interior Height	75.5	77.0
Wheelbase, inches	138	148
Approximate Payload Allowance, pounds	2652	2,810
Overall Length, inches	231	236.7
Length, Cargo, inches	129	TBD
GVWR, pounds	9,000	9,000
Engine, Displacement, liters	5.4LV8	3.7L V6
Engine, HP	255	270
Engine, TORQUE	350	250
Transmission, Automatic	Automatic	6-speed auto
Tire Size & Load Range	As Shown	235/65R16 BSW
Rim Size, inches	6	16
Emissions Certification	As Shown	TBD
EPA Greenhouse Score	As Shown	TBD

- a. Chassis: Stability Traction Control:** Vehicle must include rollover stability control.
Electronic Stability Control: (per FMVSS 126 all light duty vehicles (under GVWR 10,000) to have ESC installed by model year 2012)

Note: For cutaway chassis with Para-transit bodies see Series 883CPT, 885CPT. The para-transit vehicles shall satisfy the specifications listed in Section I: Special Equipment: Para-transit Vehicles or Section I(a): Special Equipment-Para-transit Low Floor Body & Wheelchair Ramp. Para-transit up-fit may affect passenger capacity. Please check with the awarded vendor for the specific configuration available for this series.

Following options may be available for conversion to para-transit vehicle.

Option 137: Wheelchair Lift securement for one wheelchair position.

Option 138: Wheelchair Lift: securement for two wheelchair positions.

Option 141: Para-transit Body: securement for two wheelchair positions with 8 ambulatory passengers.

Option 144: Wheelchair Vehicle Fixed Route Options-Destination Signs, Public Information System and Stop Request Chime.

C.6 LIGHT-DUTY TRUCKS: Unless otherwise specified, all units shall be furnished complete with standard equipment and factory-installed accessories as listed in the manufacturer's printed literature for the models specified herein (but See Section A.4.1. and Section C.1.1.). The following items are minimum requirements for the models specified herein, and shall be provided whether shown as optional or standard equipment by the manufacturer. The following are some of those standard features or additional features as listed for these models. Please note any additional requirements following the table for each series number. These additional requirements listed below any table are in addition to, the following general requirements for Light-duty Trucks:

a) Body: Pickup or Cab and Chassis.

1. **Pickup Bodies:** Straight / fleet side with steel cargo floors.

b) Cab: Conventional, Extended, or Crew.

1. **Air Bags: Required.** Manufacturer's standard to include side curtain/impact airbags if available from manufacturer [Exception: Units with 8,600 lb. GVWR and up.]
2. **Air Conditioning:** Required. Manufacturer's standard.
3. **AM/FM Radio:** Manufacturer's standard.
4. **Auxiliary Power Outlet: One(1)** 12 volt.
5. **Seat, Cloth:** Front seats split bench 40/60, 40/20/40, or buckets. (Bench not acceptable) **(Option No. 258 is for vinyl seats.)**
6. **Jack, Handle, and Lug Wrench.**
7. **Power Package:** Includes power windows, power locks, power mirrors, cruise control, and tilt steering wheel. (Option No. 87 to delete entire power package, not available from Nissan.
8. **Mirrors:** Rearview Mirrors shall be the largest factory installed available.
9. **Sun Visors:** Dual.
10. **Window Tint:** OEM Standard Tint. Tinting shall meet Texas DPS regulations. (see Option # 140)
11. **Bluetooth Wireless Communication:** Manufacturer's standard, where available.

c) Chassis:

1. **Automatic Transmission: Required**
2. **Brakes, ABS, required,** Manufacturer's standard; front disc, 2- or 4- wheel.
3. **Bumper (Full Width of Truck):** Installed front and rear-step bumper shall be manufacturer's standard (except cab and chassis units - See Sections F., G., and H. for body specifications).
4. **Spare Wheel and Tire:** OEM full-size, major Brand name. (See Option No. 116 for All Terrain Tires).
5. **Tires (including Spare):** Steel belted radial, all position, tubeless highway tread. Tires with raised white lettering are acceptable, if mounted with the black lettering facing away from vehicle.
6. **Electronic Stability Control: Required** (per FMVSS 126 all light duty vehicles (under GVWR 10,000) to have ESC installed by model year 2012)

d) Cargo Weight:

1. **Cargo Weight:** Deduct the cargo body weight from the body and payload allowance shown. The remainder is the cargo weight limit for the standard, base truck.
2. **Payload Allowance:** Weight of cargo that may be carried by the standard, base vehicle. (See definition of Payload Allowance in Section A.2.1 – Abbreviations and Definitions)

C.6. LIGHT-DUTY TRUCKS(continued): Refer to General Requirements, Preceding Each Group.

**MID-SIZE CREW CAB PICKUP TRUCK
SINGLE REAR WHEEL
5/6-CYLINDER, SHORT BED 1/2 TON 4 Full Door**

843B - MID-SIZE CREW CAB PICKUP TRUCK, SINGLE REAR WHEEL,5/6-CYLINDER, SHORT BED 1/2 TON 4 FULL DOORS					
ITEM	Minimum Requirements	Nissan Frontier SV	Toyota Tacoma	Chevrolet Colorado	GMC Canyon
Body Trim Designation (Base Vehicle)	As Shown	4x2	7188 PreRunner	12M43	T2M43
Wheelbase, inches	125.9	125.9	127.4	128.3	128.3
Approximate Payload Allowance, pounds	1,422	1,422	1430	1590	1590
Length, Overall, inches	As Shown	205.5	208.1	212.6	212.6
Length, Cargo, inches	59.5	59.5	60.3	62	62
GVWR, pounds	4900	5,730	4900	6000	6000
Engines, Displacement, liters	As Shown	4.0L V-6	4.0L V-6	3.6L V6	3.6L V6
Engines, Net HP	As Shown	261	236	302	302
Engines, TORQUE	266	281	266	270	270
Transmission	Automatic	5 speed auto	5 speed	6 speed auto	6 speed auto
Tire Size & Load Range	As Shown	P265/70R16	P245/75R16	P265/70R16	P265/70R16
Rim Size, inches	As Shown	7	16X7.0	7	7
Emissions Certification	As Shown	Tier2Bin5 (FED) / LEVII LEV (California)	LEV2 Bin 5	BIN 4 /ULEV2	BIN4 /ULEV2
EPA Greenhouse Score	As Shown	TBD	3	5	5

Additional Equipment: The following equipment is also required in addition to that required above:

a. Body:

1. **Seats:** Seating shall be provided for a minimum for 4 persons, including driver (See Option No. 98 for Rear Seat Delete Option * Note: Not available from GM or Nissan).
2. **Front Seat:** 40/60 Split bench front seat. Nissan and Ford front seats are only bucket.
3. **Rearview Mirrors:** Shall be installed on left and right sides.

C.6. LIGHT-DUTY TRUCKS (continued): Refer to General Requirements, Preceding Each Group.

**MID-SIZE EXTENDED CAB PICKUP TRUCK
SINGLE REAR WHEEL
SHORT BED**

844B - MID-SIZE EXTENDED CAB PICKUP TRUCK, SINGLE REAR WHEEL,5/6-CYLINDER, SHORT BED					
ITEM	Minimum Requirements	Toyota Tacoma Access Cab	Nissan Frontier	Chevrolet Colorado	GMC Canyon
Body Trim Designation (Base Vehicle)	As Shown	7164 PreRunner	KC SV 4 x 2	12M53	T2M
Wheelbase, inches	127.4	127.4	125.9	128.3	128.3
Approximate Payload Allowance, pounds	1415	1415	1,447	1590	1590
Length, Overall, inches	205.5	208.1	205.5	212.7	212.7
Length, Cargo, inches	73.3	73.5	73.3	74	74
GVWR, pounds	5250	5250	5,589	6000	6000
Engines, Displacement, liters	As Shown	4.0L V-6	4.0L V-6	3.6L V6	3.6L V6
Engines, Net HP	236	236	261	302	302
Engines, TORQUE	266	266	281	270	270
Transmission	Automatic	5 speed Auto.	5 speed auto	6 speed auto	6 speed auto
Tire Size & Load Range	As Shown	P245/R7516	P265/70R16	P265/70R16	P265/70R16
Rim Size, inches	As Shown	16X7.0	7	7	7
Emissions Certification	As Shown	LEV 2 Bin 5	Tier2Bin5 (FED) / LEVII LEV (California)	BIN 4 /ULEV2	BIN 4 /ULEV2
EPA Greenhouse Score	As Shown	3	TBD	5	5

Additional Equipment: The following equipment is also required in addition to that required above:

a. Body:

1. **Seats:** Seating shall be provided for a minimum for 4 persons, including driver (See Option No. 98 for Rear Seat Delete Option* Note: Not available from GM and Nissan).
2. **Front Seat:** Bucket or split bench.
Rearview Mirrors: Shall be installed on left and right sides.

C.6. LIGHT-DUTY TRUCKS (continued): Refer to General Requirements, Preceding Each Group.

**FULL SIZE 1/2 TON REGULAR CAB PICKUP TRUCK
SINGLE REAR WHEEL 5/6-CYLINDER, SHORT BED**

855B - FULL SIZE 1/2 TON REGULAR CAB PICKUP TRUCK, SINGLE REAR WHEEL,5/6-CYLINDER, SHORT BED					
ITEM	Minimum Requirements	RAM 1500	Ford F 150* FFV	Chevrolet Silverado *	GMC Sierra *
Body Trim Designation (Base Vehicle)	As Shown	DS1L61 TRADESMAN	F1C - XL	CC15703 1WT	TC15703 1SA
Wheelbase, inches	119	120.5	122.5	119	119
Approximate Payload Allowance, pounds	1430	1430	1,610	1950	1950
Length, Overall, inches	205.6	209	TBD	205.6	205.6
Length, Cargo, inches	76.3	76.3	78	78.9	78.9
GVWR, pounds	6,010	6,010	6,050	6,500	6,500
Engines, Displacement, liters	As Shown	3.6L V6*FFV	3.5L V6 *FFV E85	4.3L V6*E85 FFV	4.3L V6*E85 FFV
Engines, Net HP	195	305	TBD	285	285
Engines, TORQUE	250	269	TBD	302	302
Transmission	Automatic	8HP45 8-speed Automatic	6 speed auto	6-SPEED OD	6-SPEED OD
Tire Size & Load Range	As Shown	P265/70R17 BSW All-Season	245/70R17	P255/70R17	P255/70R17
Rim Size, inches	As Shown	17X7.0 STEEL	17x~7	17 X 8	17 X 8
Emissions Certification	As Shown	BIN 4 + ULEV II +	TBD	Bin 4 ULEV2	Bin 4 ULEVS
EPA Greenhouse Score	As Shown	5	TBD	5	5
* Note: This denotes a FLEX FUEL VEHICLE (FFV) – E85 capable at no extra cost.					

Rearview Mirrors: Shall be installed on left and right sides.

**FULL SIZE 1/2 TON REGULAR CAB PICKUP TRUCK
SINGLE REAR WHEEL
6/8-CYLINDER, SHORT BED**

855C - FULL SIZE 1/2 TON REGULAR CAB PICKUP TRUCK , SINGLE REAR WHEEL,6/8-CYL., SHORT BED					
ITEM	Minimum Requirements	RAM 1500	Ford F150* FFV	Chevrolet Silverado	GMC Sierra
Body Trim Designation (Base Vehicle)	As Shown	DS1L61 TRADESMAN	F1C - XL	CC15703 1WT	TC15703 1SA
Wheelbase, inches	119	120.5	122.5	119	119
Approximate Payload Allowance, pounds	1,690	1690	1,760	1950	1950
Length, Overall, inches	205.6	209	TBD	205.6	205.6
Length, Cargo, inches	76.3	76.3	78	78.9	78.9
GVWR, pounds	6,400	6,600	6,400	6,600	6,600
Engines, Displacement, liters	V-8	5.7 L V8	5.0L V8 *E85 FFV	5.3L V-8 *E85 FFV	5.3L V-8 *E85 FFV
Engines, Net HP	302	395	360	355	355
Engines, TORQUE	305	407	380	383	383
Transmission	Automatic	6-speed Automatic	6 speed auto	6-SPEED OD	6-SPEED OD
Tire Size & Load Range	As Shown	P265/70R17 BSW All Season Tires	245/70R17	P255/70R17	P255/70R17
Rim Size, inches	As Shown	17X7	17x7	17 X 8	17 X 8
Emissions Certification	As Shown	BIN 4 ULEV II	Bin 4 ULEV II	Bin 4 ULEV2	Bin 4 ULEV2
EPA Greenhouse Score	As Shown	3	4	4	4
* Note: This denotes a FLEX FUEL VEHICLE (FFV) – E85 capable at no extra cost.					

C.6. LIGHT-DUTY TRUCKS (continued): Refer to General Requirements, Preceding Each Group.

**FULL SIZE 1/2 TON, REGULAR CAB PICKUP TRUCK
SINGLE REAR WHEEL
6-CYLINDER, LONG BED**

861B - FULL SIZE 1/2 TON, REGULAR CAB PICKUP TRUCK, SINGLE REAR WHEEL, 5/6-CYLINDER, LONG BED						
ITEM	Minimum Requirements	Ford F150* FFV	Chevrolet Silverado/	Ram 1500	Toyota Tundra	GMC Sierra
Body Trim Designation (Base Vehicle)	As Shown	F1C - XL	CC15903* 1WT	DS1L62 TRADESMAN	8204	TC15903* 1SA
Wheelbase, inches	133	141	133	140.5	145.7	133
Approximate Payload Allowance, pounds	1590	2,360	1980	1,890	1,715	1980
Length, Overall, inches	213.1	227.9	224.4	231.0	228.7	224.4
Length, Cargo, inches	78	96	97.8	98.4	97.6	97.8
GVWR, pounds	6,100	6,100	6,700	6,600	7,000	6,700
Engines, Displacement, liters	As Shown	3.5L V6 *E85 FFV	4.3L V6*E85 FFV	3.6L V6 *FFV E85	4.0L V6	4.3L V6*E85 FFV
Engines, Net HP	195	385	285	305	236	285
Engines, TORQUE	260	387	302	269	266	302
Transmission	Automatic	6 speed auto	6 SPEED OD	8HP45 8-speed Auto	5 Speed Auto	6 SPEED OD
Tire Size & Load Range	As Shown	245/70R17	P255/70R17	P265/70R17 BSW All Season Tires	P255/70R18	P255/70R017
Rim Size, inches	As Shown	7	8	7.0	18 X 8.0	8
Emissions Certification	As Shown	TBD	Bin 4 ULEV2	BIN 4+ULEV II+	ULEV 2	Bin 4 ULEV2
EPA Greenhouse Score	As Shown	TBD	4	5	3	4
* Note: This denotes a FLEX FUEL VEHICLE (FFV) – E85 capable at no extra cost.						

**FULL SIZE 1/2 TON, REGULAR CAB PICKUP TRUCK
SINGLE REAR WHEEL
6/8-CYLINDER, LONG BED**

861C - FULL SIZE 1/2 TON, REGULAR CAB PICKUP TRUCK, SINGLE REAR WHEEL, 6/8-CYLINDER, LONG BED						
ITEM	Minimum Requirements	Ford F150* FFV	Chevrolet Silverado	Ram 1500	Toyota Tundra	GMC Sierra
Body Trim Designation (Base Vehicle)	As Shown	F1C - XL	CC15903 1WT	DS1L62 TRADESMAN	8228 Base	CC15903 1SA
Wheelbase, inches	133	141	133	140.5	145.7	133
Approximate Payload Allowance, pounds	1,804	2,200	1980	1,690	2090	1980
Length, Overall, inches	224.5	TBD	224.4	231.0	228.7	224.4
Length, Cargo, inches	97.6	96	97.8	98.3	97.6	97.8
GVWR, pounds	6,400	6,950	6700	6,600	7000	6700
Engines, Displacement, liters	As Shown	5.0L V8 *E85 FFV	5.3L V8 *E85	5.7 L V8	5.7L V8	5.3L V8 E85
Engines, Net HP	302	360	355	395	380	355
Engines, TORQUE	305	380	383	407	401	383
Transmission	Automatic	6 speed auto	6 SPEED OD	65RFE 6-speed Auto	6-speed Auto OD	6 SPEED OD
Tire Size & Load Range	As Shown	245/70R17	P255/70R17	P265/70R17 BSW	P255/70R18	P255/70R017
Rim Size, inches	As Shown	17x~7	17 X 8	17X7.0	18 X 8.0	17 X 8
Emissions Certification	As Shown	Bin 4 ULEV II	Bin 4 ULEV2	NAA BIN 8	ULEV 2	Bin 4 ULEV2
EPA Greenhouse Score	As Shown	4	4	3	1	4
* Note: This denotes a FLEX FUEL VEHICLE (FFV) – E85 capable at no extra cost.						

C.6. LIGHT-DUTY TRUCKS (continued): Refer to General Requirements, Preceding Each Group.

**FULL SIZE 1/2 TON EXTENDED CAB PICKUP TRUCK
SINGLE REAR WHEEL 5 PASSENGER SHORT BED**

862B - FULL SIZE 1/2 TON, EXTENDED CAB PICKUP TRUCK, SINGLE REAR WHEEL, 6-CYL, 5-PASSENGER, SHORT BED						
ITEM	Minimum Requirements	Chevrolet Silverado*	Ford F 150* FFV	Toyota Tundra Double Cab	GMC Sierra*	Ram
Body Trim Designation (Base Vehicle)	As Shown	CC15753 1WT	X1C - XL	8215 Base	TC157 53 1SA	DS1L41 TRADESMAN
Wheelbase, inches	140.5	143.5	145	145.7	143.5	140.5
Approximate Payload Allowance, pounds	1,450	1870	1,680	1,450	1870	1,800
Length, Overall, inches	228.7	230.0	231.9	228.7	230.0	229.0
Length, Cargo, inches	73.9	78.9	78	78.7	78.9	73.9
GVWR, pounds	6,300	6,900	6,100	6400	6,900	6,700
Engines, Displacement, liters	As Shown	4.3L V6 *E85 FFV	3.5L V6 *E85 FFV	4.0L V6	4.3L V6*E85 FFV	3.6L V6 *FFV E85
Engines, Net HP	195	285	282	236	285	305
Engines, TORQUE	250	302	253	266	302	269
Transmission	Automatic	6-SPEED Auto OD	6 speed auto	5-Speed Auto	6-SPEED Auto OD	65RFE 6-speed Automatic
Tire Size & Load Range	As Shown	P255/70R17	245/70R17	P255/70R18	P255/70 R17	P265/70R17 BSW All Season Tires
Rim Size, inches	As Shown	8	7	8	8	7.0
Emissions Certification	As Shown	Bin 4 ULEV2	TBD	18V8.0	Bin 4 ULEV2	NAS BIN 4+ ULEV II+
EPA Greenhouse Score	As Shown	4	TBD	3	4	5
* Note: This denotes a FLEX FUEL VEHICLE (FFV) – E85 capable at no extra cost.						

Additional Equipment: The following equipment is also required in addition to that required above:

a. Body:

- 1. Seats:** Seating shall be provided for a minimum of 5 persons, including driver (See Option No. 98 for Rear Seat Delete Option. This option is not available from Nissan).

Rearview Mirrors: Shall be installed on left and right sides.

**FULL SIZE 1/2 TON EXTENDED CAB PICKUP TRUCK
SINGLE REAR WHEEL 5 PASSENGER SHORT BED**

862C - FULL SIZE 1/2 TON, EXTENDED CAB PICKUP TRUCK, SINGLE REAR WHEEL, 6/8-CYL, 5-PASSENGER, SHORT BED							
ITEM	Minimum Req.	Chevrolet Silverado	Ram 1500	Ford F150* FFV	Nissan Titan	Toyota Tundra Double Cab	GMC Sierra
Body Trim Designation (Base Vehicle)	As Shown	CC15753 1WT	DS1L41 TRADESMAN	X1C - XL	KC SV 4x2	8239 Base	TC15753 1SA
Wheelbase, inches	139.8	143.5	140.5	145	139.8	145.7	143.5
Approximate Payload Allowance, pounds	1,610	1870	1,610	2,330	2,112	1615	1870
Length, Overall, inches	229	230.0	229	231.9	224.6	228.7	230.0
Length, Cargo, inches	73.9	78.9	73.9	78	79.1	78.7	78.9
GVWR, pounds	6,400	6900	6,700	6,900	7,000	6900	6900
Engines, Displacement, liters	As Shown	5.3L V8	5.7L V8	5.0L V8 *E85 FFV	5.6L FFV E85*	4.6L V8	5.3L V8
Engines, Net HP	302	355	395	385	317	310	355
Engines, TORQUE	305	383	407	387	385	327	383
Transmission	Auto	6-SPEED Auto OD	65RFE 6-speed Auto	6 speed auto	5 speed OD	6 speed Auto OD	6-SPEED Auto OD
Tire Size & Load Range	As Shown	P255/70R17	P265/70R17 BSW All Season Tires	245/70R17	P265/70R18	P255/70R18	P255/70R17
Rim Size, inches	As Shown	17 X 8	7	17x7	8	8	17x 8
Emissions Certification	As Shown	Bin 4 ULEV2	NAA BIN 8	Tier 2 Bin 4 ULEV II	Tier2Bin5 (FED) / LEVII LEV (California)	ULEV 2 Bin 5	BIN 4+ ULEV II+
EPA Greenhouse Score	As Shown	4	3	4	TBD	2	4
* Note: This denotes a FLEX FUEL VEHICLE (FFV) – E85 capable at no extra cost.							

Additional Equipment: The following equipment is also required in addition to that required above:

b. Body:

2. **Seats:** Seating shall be provided for a minimum of 5 persons, including driver (See Option No. 98 for Rear Seat Delete Option. This option is not available from Nissan).

C.6. LIGHT-DUTY TRUCKS (continued): Refer to General Requirements, Preceding Each Group.

**FULL SIZE 1/2 TON EXTENDED CAB PICKUP TRUCK
5 PASSENGER, LONG BED
SINGLE REAR WHEEL**

863C - FULL SIZE 1/2 TON, EXTENDED CAB PICKUP TRUCK, SINGLE REAR WHEEL,6/8-CYL, 5-PASSENGER, LONG BED			
ITEM	Minimum Requirements	Ford F150* FFV	Toyota Tundra
Body Trim Designation (Base Vehicle)	As Shown	X1C - XL	8245
Wheelbase, inches	145.7	163	145.7
Approximate Payload Allowance, pounds	1641	2,330	1645
Length, Overall, inches	247.6	250.5	247.6
Length, Cargo, inches	97.4	96	97.6
GVWR, pounds	7000	7,000	7,000
Engines, Displacement, liters	As shown	5.0L V8 *E85 FFV	5.7L V8
Engines, Net HP	315	385	381
Engines, TORQUE	335	387	401
Transmission	As shown	6 speed auto	6-speed Auto OD
Tire Size & Load Range	As shown	245/70R17	P255/70R18
Rim Size, inches	As Shown	7.	18 X 8.0
Emissions Certification	As shown	Tier 2 Bin 4 ULEV II	ULEV II
EPA Greenhouse Score	As Shown	4	1
* Note: This denotes a FLEX FUEL VEHICLE (FFV) – E85 capable at no extra cost.			

Additional Equipment: The following equipment is required in addition to that required above:

a. Body:

1. **Seats:** Seating shall be provided for a minimum of 5 persons, including driver. (See Option 98 for Rear Seat Delete option)
2. **Rearview Mirrors:** Shall be installed on left and right sides.

C.6. LIGHT-DUTY TRUCKS (continued): Refer to General Requirements, Preceding Each Group.

**FULL SIZE 1/2 TON, CREW CAB PICKUP TRUCK
6 PASSENGERS, SHORT BED
SINGLE REAR WHEEL**

864C - FULL SIZE 1/2 TON, CREW CAB PICKUP TRUCK, SINGLE REAR WHEEL,6/8 CYL, 6-PASSENGER,SHORT BED							
ITEM	Minimum Requirements	Ram 1500 Crew Cab	Chevrolet Silverado	Ford F150* FFV	Nissan Titan SV	Toyota Tundra Crew Max	GMC Sierra
Body Trim Designation (Base Vehicle)	As Shown	DS1L98 Tradesman	CC15543 1WT	W1C - XL	Crew Cab 4x2	8259	TC15543 1SA
Wheelbase, inches	139.8	140.5	143.5	145	139.8	145.7	143.5
Approximate Payload Allowance, pounds	1550	1620	1840	2,130	2015	1550	1840
Length, Overall, inches	224.6	229.0	230.0	231.9	224.6	228.7	230.0
Length, Cargo, inches	66.7	67.4	69.3	66	67.3	66.7	69.3
GVWR, pounds	6,800	6,800	6900	6,800	7,101	6800	6900
Engines, Displacement, liters	As Shown	5.7L V-8	5.3L V8	5.0L V8 *E85 FFV	5.6L FFV E85*	4.6L V8	5.3L V8
Engines, Net HP	302	395	355	385	317	310	355
Engines, TORQUE	305	407	383	387	385	327	383
Transmission	Automatic	65RFE 6-speed Automatic	6-speed Auto OD	6 speed auto	5-speed OD	6 speed OD	6-speed Auto OD
Tire Size & Load Range	Single Rear	P265/70R17 7 BSW All Season Tires	P255/70R17	245/70R17	P265/70R18	P255/70R18	P255/70R17
Rim Size, inches	As Shown	7	17 X 8	17x~7	8	18X8.0	17 X 8
Emissions Certification	As Shown	NAA BIN 8	Bin 4 ULEV2	Tier 2 Bin 4 ULEV II	Tier2Bin5 (FED) / LEVII LEV (California)	ULEV 2	Bin 4 ULEV2
EPA Greenhouse Score	As Shown	3	4	4	TBD	2	4
* Note: This denotes a FLEX FUEL VEHICLE (FFV) – E85 capable at no extra cost.							

Additional Equipment: The following equipment is required in addition to that required above:

a. Body:

- Seats:** Seating shall be provided for a minimum of 6 persons, including driver (See Option No. 98 for rear seat Delete Option. This option is not available from Nissan).

Rearview Mirrors: Shall be installed on left and right sides.

C.6. LIGHT-DUTY TRUCKS (continued): Refer to General Requirements, Preceding Each Group.

**FULL SIZE 3/4-TON, CREW CAB PICKUP TRUCK
6 PASSENGERS, GASOLINE, SHORT BED
SINGLE REAR WHEEL**

866C - FULL SIZE 3/4-TON, CREW CAB PICKUP TRUCK, SINGLE REAR WHEEL,6/8-CYL, 6-PASSENGER,SHORT BED					
ITEM	Minimum Requirements	Ram 2500 Crew Cab	Chevrolet Silverado (GT5) 4.10 Rear Axle Ratio	Ford F 250SD* FFV	GMC Sierra (GT5) 4.10 Rear Axle Ratio
Body Trim Designation (Base Vehicle)	As Shown	DJ2L91 TRADESMAN	CC25743 1WT	XL	TC25743 1SA
Wheelbase, inches	149.5	149.5	153.70	TBD	153.70
Approximate Payload Allowance, pounds	2,900	2,930	3443	TBD	3443
Length, Overall, inches	237.4	237.4	239.5	TBD	239.5
Length, Cargo, inches	76.3	76.3	78.8	TBD	78.8
GVWR, pounds	8800	8,800	9,500	TBD	9,500
Engines, Displacement, liters	As Shown	5.7L V8/option 6.4L V8	6.0L V-8 E85*	6.2L V8 FFV E85 *	6.0L V-8 E85*
Engines, Net HP	360	383/410	360	TBD	360
Engines, TORQUE	380	400/429	380	TBD	380
Transmission	Automatic	6 Speed OD	6-speed OD	TBD	6-speed OD
Tire Size & Load Range	Single Rear	LT245/70R17E BSW	LT245/75R17	TBD	LT245/75R17
Rim Size, inches	17 X 7.5	17X7.5	17 X 7.5	TBD	17 X 7.5
Emissions Certification	As Shown	NAS HDV1,MDV1,ULEV II	HDV/LEV395	TBD	HDV/LEV395
EPA Greenhouse Score	As Shown	TBD	TBD	TBD	TBD
* Note: This denotes a FLEX FUEL VEHICLE (FFV) – E85 capable at no extra cost.					

Additional Equipment: The following equipment is also required in addition to that required above:

a. Cab:

1. **Seats:** Seating shall be provided for a minimum of 5 persons, including driver (See Option No. 98 for Rear Seat Delete Option).
2. **Rearview Mirrors, Exterior, Trailer Tow/Camper Type, Both Sides:** Each mirror shall be approximately 6 inch by 9 inch and equipped with extension arms.

**FULL SIZE 3/4-TON, CREW CAB PICKUP TRUCK
6 PASSENGERS, GASOLINE AND DIESEL, SHORT BED
SINGLE REAR WHEEL**

866D - FULL SIZE 3/4-TON, CREW CAB PICKUP TRUCK, SINGLE REAR WHEEL, 6/8-CYL, DIESEL, 6-PASSENGER, SHORT BED

ITEM	Minimum Requirements	Ram 2500 Crew Cab	Chevrolet Silverado	Ford F 250	GMC Sierra
Body Trim Designation (Base Vehicle)	As Shown	DJ2L91 TRADESMAN	CC25743 1WT	XL	TC25743 1SA
Wheelbase, inches	149.5	149.5	153.70	TBD	153.70
Approximate Payload Allowance, pounds	2,650	3120	3442	TBD	3443
Length, Overall, inches	237.4	237.4	239.5	TBD	239.5
Length, Cargo, inches	76.3	76.3	78.8	TBD	78.8
GVWR, pounds	9000	10000	9,500	TBD	9,500
Engines, Displacement, liters	AS Shown	6.7L I-6 DIESEL B20	6.6L V-8 Diesel B20	6.7 V-8 DIESEL B20	6.6L V-8 Diesel B20
Engines, Net HP	350	370	397	TBD	397
Engines, TORQUE	650	800	765	TBD	765
Transmission	Automatic	6 Speed OD	6-speed OD	TBD	6-speed OD
Tire Size & Load Range	Single Rear	LT245/70R17E BSW	LT245/75R17	TBD	LT245/75R17
Rim Size, inches	As Shown	17X7.5	17 X 7.5	TBD	17 X 7.5
Emissions Certification	As Shown	HDV1,MDV1,ULEV II	HDV/ULEV2	TBD	HDV/ULEV2
EPA Greenhouse Score	As Shown	TBD	TBD	TBD	TBD
* Note: This denotes a FLEX FUEL VEHICLE (FFV) – E85 capable at no extra cost.					

Additional Equipment: The following equipment is required in addition to that required above:

a. Cab:

1. **Seats:** Seating shall be provided for a minimum of 5 persons, including driver (See Option No. 98 for Rear Seat Delete Option---- Note: GM does not have this delete option).
2. **Rearview Mirrors, Exterior, Trailer Tow/Camper Type, Both Sides:** Each mirror shall be approximately 6 inch by 9 inch and equipped with extension arms.

C.6. LIGHT-DUTY TRUCKS (continued): Refer to General Requirements, Preceding Each Group.

**FULL SIZE 3/4 TON EXTENDED CAB PICKUP TRUCK
5 PASSENGERS, GASOLINE,
LONG BED SINGLE REAR WHEEL**

868C -FULL SIZE 3/4 TON EXTENDED CAB PICKUP TRUCK, SINGLE REAR WHEEL,6/8-CYL, 5-PASSENGER, LONG BED				
ITEM	Minimum Requirements	Chevrolet* (GT5) 4.10 Rear Axle Ratio	Ford F250 * FFV	GMC* (GT5) 4.10 Rear Axle Ratio
Body Trim Designation (Base Vehicle)	As Shown	CC25953 1WT	XL	TC25953 1SA
Wheelbase, inches	158	158.2	TBD	158.2
Approximate Payload Allowance, pounds	3,060	3534	TBD	3534
Length, Overall, inches	248.6	248.9	TBD	248.9
Length, Cargo, inches	97.8	97.8	TBD	97.8
GVWR, pounds	9,400	9,500	TBD	9,500
Engines, Displacement, liters	As Shown	6.0L V-8 E85*	6.2L V-8 FFV E85*	6.0L V-8 E85*
Engines, Net HP	360	360	TBD	360
Engines, TORQUE	380	380	TBD	380
Transmission	Automatic	6-speed OD	TBD	6-speed OD
Tire Size & Load Range	Single Rear	LT245/75R17	TBD	LT245/75R17
Rim Size, inches	As Shown	17 X 7.5	TBD	17 X 7.5
Emissions Certification	As Shown	HDV/LEV395	TBD	HDV/LEV395
EPA Greenhouse Score	As Shown	TBD	TBD	TBD
* Note: This denotes a FLEX FUEL VEHICLE (FFV) – E85 capable at no extra cost.				

Additional Equipment: The following equipment is required in addition to that required above:

a. Cab:

- 1. Seats:** Seating shall be provided for a minimum of 5 persons, including driver (See Option No. 98 for Rear Seat Delete Option---- Note: GM does not have this delete option).
- 2. Rearview Mirrors, Exterior, Trailer Tow/Camper Type, Both Sides:** Each mirror shall be approximately 6 inch by 9 inch and equipped with extension arms.

**FULL SIZE 3/4 TON EXTENDED CAB PICKUP TRUCK
5 PASSENGERS,DIESEL,
LONG BED SINGLE REAR WHEEL**

868D -FULL SIZE 3/4 TON EXTENDED CAB PICKUP TRUCK, SINGLE REAR WHEEL,8-CYL,DIESEL 5-PASSENGER, LONG BED				
ITEM	Minimum Requirements	Chevrolet	Ford F250	GMC
Body Trim Designation (Base Vehicle)	As Shown	CC25953 1WT	XL	TC25953 1SA
Wheelbase, inches	158	158.2	TBD	158.2
Approximate Payload Allowance, pounds	2,910	3534	TBD	3534
Length, Overall, inches	248.6	248.9	TBD	248.9
Length, Cargo, inches	97.8	97.8	TBD	97.8
GVWR, pounds	10,000	10,000	TBD	10,000
Engines, Displacement, liters	As Shown	6.6L V-8Diesel B20	6.7L V-8 DIESEL B20	6.6L V-8Diesel B20
Engines, Net HP	397	397	TBD	397
Engines, TORQUE	765	765	TBD	765
Transmission	Automatic	6-speed OD	TBD	6-speed OD
Tire Size & Load Range	Single Rear	LT245/75R17	TBD	LT245/75R17
Rim Size, inches	As Shown	17 X 7.5	TBD	17 X 7.5
Emissions Certification	As Shown	HDV/ULEV2	TBD	HDV/ULEV2
EPA Greenhouse Score	As Shown	TBD	TBD	TBD
* Note: This denotes a FLEX FUEL VEHICLE (FFV) – E85 capable at no extra cost.				

Additional Equipment: The following equipment is required in addition to that required above:

a. Cab:

- 1. Seats:** Seating shall be provided for a minimum of 5 persons, including driver (See Option No. 98 for Rear Seat Delete Option---- Note: GM does not have this delete option).
- 2. Rearview Mirrors, Exterior, Trailer Tow/Camper Type, Both Sides:** Each mirror shall be approximately 6 inch by 9 inch and equipped with extension arms.

C.6. LIGHT-DUTY TRUCKS (continued): Refer to General Requirements, Preceding Each Group.

**FULL SIZE 3/4 TON EXTENDED CAB PICKUP TRUCK
5 PASSENGERS, SHORT BED, SINGLE REAR WHEEL
GASOLINE**

869C -FULL SIZE 3/4 TON EXTENDED CAB PICKUP TRUCK, SINGLE REAR WHEEL,6/8-CYL, 5-PASSENGER,SHORT BED				
ITEM	Minimum Requirements	Chevrolet Silverado * (GT5) 4.10 Rear Axle Ratio	Ford F250 * FFV	GMC Sierra* (GT5) 4.10 Rear Axle Ratio
Body Trim Designation (Base Vehicle)	As Shown	CC25753 1WT	XL	TC25753 1SA
Wheelbase, inches	141.8	144.2	TBD	144.2
Approximate Payload Allowance, pounds	3,020	3641	TBD	3641
Length, Overall, inches	230	230	TBD	230
Length, Cargo, inches	78.8	78.8	TBD	78.8
GVWR, pounds	9,400	9,500	TBD	9,500
Engines, Displacement, liters	As Shown	6.0L V-8 E85	6.2L V-8 FFV E85*	6.0L V-8 E85
Engines, Net HP	360	360	TBD	360
Engines, TORQUE	380	380	TBD	380
Transmission	Automatic	6-speed OD	TBD	6-speed OD
Tire Size & Load Range	Single Rear	LT245/75R17	TBD	LT245/75R17
Rim Size, inches	As Shown	7.5	TBD	7.5
Emissions Certification	As Shown	HDV/LEV395	TBD	HDV/LE395
EPA Greenhouse Score	As Shown	TBD	TBD	TBD
* Note: This denotes a FLEX FUEL VEHICLE (FFV) – E85 capable at no extra cost.				

Additional Equipment: The following equipment is also required in addition to that required above:

a. Cab:

- 1. Seats:** Seating shall be provided for a minimum of 5 persons, including driver (See Option No. 98 for rear seat Delete Option).
- 2. Rearview Mirrors, Exterior, Trailer Tow/Camper Type, Both Sides:** Each mirror shall be approximately 6 inch by 9 inch and equipped with extension arms.

**FULL SIZE 3/4 TON EXTENDED CAB PICKUP TRUCK
5 PASSENGERS, SHORT BED, SINGLE REAR WHEEL
DIESEL**

869D -FULL SIZE 3/4 TON EXTENDED CAB PICKUP TRUCK, SINGLE REAR WHEEL,8-CYL,DIESEL 5-PASSENGER,SHORT BED				
ITEM	Minimum Requirements	Chevrolet Silverado	Ford F 250SD	GMC Sierra
Body Trim Designation (Base Vehicle)	As Shown	CC25753 1WT	XL	TC25753 1SA
Wheelbase, inches	141.8	144.2	TBD	144.2
Approximate Payload Allowance, pounds	2,850	3641	TBD	3641
Length, Overall, inches	230.6	230	TBD	230
Length, Cargo, inches	78.7	78.8	TBD	78.8
GVWR, pounds	9,800	10,000	TBD	10,000
Engines, Displacement, liters	As Shown	6.6L V-8 Diesel B20	6.7L V-8 DIESEL B20	6.6L V-8 Diesel B20
Engines, Net HP	397	397	TBD	397
Engines, TORQUE	765	765	TBD	765
Transmission	Automatic	6-speed OD	TBD	6-speed OD
Tire Size & Load Range	Single Rear	LT245/75R17	TBD	LT245/75R17
Rim Size, inches	As Shown	17 X 7.5	TBD	17 X 7.5
Emissions Certification	As Shown	HDV/ULEV2	TBD	HDV/ULEV2
EPA Greenhouse Score	As Shown	TBD	TBD	TBD
* Note: This denotes a FLEX FUEL VEHICLE (FFV) – E85 capable at no extra cost.				

Additional Equipment: The following equipment is also required in addition to that required above:

b. Cab:

1. **Seats:** Seating shall be provided for a minimum of 5 persons, including driver (See Option No. 98 for rear seat Delete Option).
2. **Rearview Mirrors, Exterior, Trailer Tow/Camper Type, Both Sides:** Each mirror shall be approximately 6 inch by 9 inch and equipped with extension arms.

C.6. LIGHT-DUTY TRUCKS (continued): Refer to General Requirements, Preceding Each Group.

**FULL SIZE 3/4 TON, REGULAR CAB AND CHASSIS *
SINGLE REAR WHEEL
GASOLINE**

870C -FULL SIZE 3/4 TON, REGULAR CAB AND CHASSIS **, SINGLE REAR WHEEL,6/8-CYL,					
ITEM	Minimum Requirements	Chevrolet Silverado (GT5) 4.10 Rear Axle Ratio	Ram 2500	Ford F250 *FFV	GMC Sierra (GT5) 4.10 Rear Axle Ratio
Body Trim Designation (Base Vehicle)	As Shown	CC25903 1WT BOX DELETE	DJ2L62 BOX DELETE TRADESMAN	XL	TC25903 1SA BOX DELETE
Wheelbase, inches	133	133.6	140.5	TBD	133.6
Effective Cab-to-Axle, inches	55.2	55.2	56	TBD	55.2
Approximate Payload Allowance, pounds	3120	3736	3170	TBD	3736
GVWR, pounds	8650	9,300	8650	TBD	9,300
Engines, Displacement, liters	As Shown	6.0L V-8	6.4L V8 HEMI®	6.2L V-8 FFV E85*	6.0L V-8
Engines, Net HP	360	360	410	TBD	360
Engines, TORQUE	380	380	429	TBD	380
Transmission	Automatic	6-speed OD	6 -speed OD	TBD	6-speed OD
Tire Size & Load Range	Single Rear	LT245/75R17	LT245/70R17E BSW All-Season	TBD	LT245/75R17
Rim Size, inches	As Shown	7.5	7.5	TBD	7.5
Emissions Certification	As Shown	FEL/ULEV	NAS HDV1,MDV1,U LEV II	TBD	FEL/ULEV
EPA Greenhouse Score	As Shown	TBD	TBD	TBD	TBD
* Note: This denotes a FLEX FUEL VEHICLE (FFV) – E85 capable at no extra cost.					
**NOTE: See Section E, F, G for Optional Truck Bodies.					

Additional Equipment: The following equipment is also required in addition to that required above:

a. Cab:

- 1. Rearview Mirrors, Exterior, Trailer Tow/Camper Type, Both Sides:** Each mirror shall be approximately 6 inch by 9 inch and equipped with extension arms.

**FULL SIZE 3/4 TON, REGULAR CAB AND CHASSIS *
SINGLE REAR WHEEL
DIESEL**

870D -FULL SIZE 3/4 TON, REGULAR CAB AND CHASSIS **, SINGLE REAR WHEEL,8-CYL, DIESEL					
ITEM	Minimum Requirements	Chevrolet Silverado	Ford F250	Ram 2500	GMC Sierra
Body Trim Designation (Base Vehicle)	As Shown	CC25903 BOX DELETE 1WT	XL	DJ2L62 BOX DELETE TRADESMAN	TC25903 BOX DELETE 1SA
Wheelbase, inches	133	133.7	TBD	140.5	133.7
Effective Cab-to-Axle, inches	56	55.2	TBD	56	55.2
Approximate Payload Allowance, pounds	3,395	3736	TBD	3170	3736
GVWR, pounds	9,300	9,300	TBD	8650	9,300
Engines, Displacement, liters	AS Shown	6.6L V8Diesel B20	6.7L V8 DIESEL B20	6.7L I 6 Diesel B20	6.6L V8 Diesel B20
Engines, Net HP	335	397	TBD	370	397
Engines, TORQUE	685	765	TBD	800	765
Transmission	Automatic	6-speed OD	TBD	6 -speed OD	6-speed OD
Tire Size & Load Range	Single Rear	LT245/75R17	TBD	LT245/70R17 E BSW All-Season	LT245/75R17
Rim Size, inches	As Shown	17 X 7.5	TBD	7.5	17 X 7.5
Emissions Certification	As Shown	FEL/ULEV	TBD	HDV1,MDV1, ULEV II	FEL/ULEV
EPA Greenhouse Score	As Shown	TBD	TBD	TBD	TBD
* Note: This denotes a FLEX FUEL VEHICLE (FFV) – E85 capable at no extra cost. **NOTE: See Section E, F, G for Optional Truck Bodies.					

Additional Equipment: The following equipment is also required in addition to that required above:

a. Cab:

- 1. Rearview Mirrors, Exterior, Trailer Tow/Camper Type, Both Sides:** Each mirror shall be approximately 6 inch by 9 inch and equipped with extension arms.

C.6. LIGHT-DUTY TRUCKS (continued): Refer to General Requirements, Preceding Each Group.

**FULL SIZE 3/4 TON REGULAR CAB PICKUP TRUCK
LONG BED SINGLE REAR WHEEL
GASOLINE**

872C -FULL SIZE 3/4 TON REGULAR CAB PICKUP TRUCK , LONG BED SINGLE REAR WHEEL					
ITEM	Minimum Requirements	Chevrolet Silverado * (GT5) 4.10 Rear Axle Ratio	Dodge 2500	Ford F250 *FFV	GMC Sierra * (GT5) 4.10 Rear Axle Ratio
Body Trim Designation (Base Vehicle)	As Shown	CC25903 1WT	DJ2L62 TRADESMAN	XL	TC25903 1SA
Wheelbase, inches	133.7	133.7	140.5	TBD	133.7
Approximate Payload Allowance, pounds	3030	3736	3170	TBD	3736
Length, Overall, inches	225	224.4	231	TBD	224.4
Length, Cargo, inches	97.8	97.8	98.3	TBD	97.8
GVWR, pounds	8,650	9300	8650	TBD	9300
Engines, Displacement, liters	As Shown	6.0L V-8 E85*	5.7L V-8 option 6.4L V8	6.2L V-8 FFV E85*	6.0L V-8 E85*
Engines, Net HP	360	360	383/410	TBD	360
Engines, TORQUE	380	380	400/429	TBD	380
Transmission	Automatic	6-speed OD	6 -speed OD	TBD	6-speed OD
Tire Size & Load Range	Single Rear	LT245/75R17	LT245/70R17 E	TBD	LT245/75R17
Rim Size, inches	As Shown	17 X 7.5	17X7.5	TBD	17 X 7.5
Emissions Certification	As Shown	HDV/LEV395	HDV1,MDV1, ULEV II	TBD	HDV/LEV395
EPA Greenhouse Score	As Shown	TBD	TBD	TBD	TBD
* Note: This denotes a FLEX FUEL VEHICLE (FFV) – E85 capable at no extra cost.					

- 1. Rearview Mirrors, Exterior, Trailer Tow/Camper Type, Both Sides:** Each mirror shall be approximately 6 inch by 9 inch and equipped with extension arms.

**FULL SIZE 3/4 TON REGULAR CAB PICKUP TRUCK
LONG BED SINGLE REAR WHEEL
DIESEL**

872D -FULL SIZE 3/4 TON REGULAR CAB PICKUP TRUCK , LONG BED SINGLE REAR WHEEL					
ITEM	Minimum Requirements	Chevrolet Silverado	Ram 2500	Ford F250	GMC Sierra
Body Trim Designation (Base Vehicle)	As Shown	CC25903 1WT	DJ2L62 TRADESMAN	XL	TC25903 1SA
Wheelbase, inches	133.7	133.7	140.5	TBD	133.7
Approximate Payload Allowance, pounds	2420	3736	2420	TBD	3736
Length, Overall, inches	224.4	224.4	231	TBD	224.4
Length, Cargo, inches	97	97.8	97	TBD	97.8
GVWR, pounds	9000	9300	9000	TBD	9300
Engines, Displacement, liters	As Shown	6.6L V-8 Diesel B20	6.7L I-6 DIESEL B20	6.7L V-8 DIESEL B20	6.6L V-8 Diesel B20
Engines, Net HP	397	397	370	TBD	397
Engines, TORQUE	365	765	800	TBD	365
Transmission	Automatic	6-speed OD	6-speed Auto	TBD	6-speed OD
Tire Size & Load Range	Single Rear	LT245/75R17	LT245/70R17E BSW All-Season	TBD	LT245/75R17
Rim Size, inches	As Shown	17 X 7.5	7.5	TBD	17 X 7.5
Emissions Certification	As Shown	HDV/ULEV2	HDV1,MDV1,UL EV II	TBD	HDV/ULEV2
EPA Greenhouse Score	As Shown	TBD	TBD	TBD	TBD

- Rearview Mirrors, Exterior, Trailer Tow/Camper Type, Both Sides:** Each mirror shall be approximately 6 inch by 9 inch and equipped with extension arms.

C.6. LIGHT-DUTY TRUCKS (continued): Refer to General Requirements, Preceding Each Group.

**FULL SIZE 1 TON REGULAR CAB AND CHASSIS *
DUAL REAR WHEEL
GASOLINE**

875C -FULL SIZE 1 TON REGULAR CAB AND CHASSIS **, DUAL REAR WHEEL,6/8-CYL,					
ITEM	Minimum Requirements	RAM 3500 REGULAR CAB CHASSIS	Chevrolet Silverado (GT5) 4.10 Rear Axle Ratio	Ford F 350* FFV	GMC Sierra (GT5) 4.10 Rear Axle Ratio
Body Trim Designation (Base Vehicle)	As Shown	DD3L63	CC36003 1WT	XL	TC36003 1SA
Wheelbase, inches	137.5	143.4	137.5	TBD	137.5
Effective Cab-to-Axle, inches	59.6	60	59.6	TBD	59.6
Approximate Payload Allowance, pounds	6520	6730	7312	TBD	7312
GVWR, pounds	13000	14000	13,200	TBD	13,200
Engines, Displacement, liters	As Shown	6.4L V8 Heavy Duty HEMI	6.0L V-8	6.2L V-8 FFV E85*	6.0L V-8
Engines, Net HP	316	370	322	TBD	322
Engines, TORQUE	380	429	380	TBD	380
Transmission	Automatic	6 -Speed auto	6-speed OD	TBD	6-speed OD
Tire Size & Load Range	Dual Rear	LT235/80R17E BSW	LT235/80R17e	TBD	LT235/80R17e
Rim Size, inches	As Shown	17X6.0	6.5	TBD	6.5
Emissions Certification	As Shown	HDV2,MDV2,LEV 2	HDV/LEV630	TBD	HDV/LEV630
EPA Greenhouse Score	As Shown	TBD	TBD	TBD	TBD
* Note: This denotes a FLEX FUEL VEHICLE (FFV) – E85 capable at no extra cost.					
**NOTE: See Sections E,F,G & H for Optional Truck Bodies.					

Additional Equipment: The following equipment is also required in addition to that required above:

a. Cab:

1. **Rearview Mirrors, Exterior, Trailer Tow/Camper Type, Both Sides:** Each mirror shall be approximately 6 inch by 9 inch and equipped with extension arms.

**FULL SIZE 1 TON REGULAR CAB AND CHASSIS *
DUAL REAR WHEEL DIESEL**

875D -FULL SIZE 1 TON REGULAR CAB AND CHASSIS **, DUAL REAR WHEEL,6/8-CYL DIESEL					
ITEM	Minimum Requirements	RAM 3500 REGULAR CAB CHASSIS	Chevrolet Silverado	Ford F 350	GMC Sierra
Body Trim Designation (Base Vehicle)	As Shown	DD3L63	CC36003 1WT	XL	TC36003 1SA
Wheelbase, inches	137.5	143.4	137.5	TBD	137.5
Effective Cab-to-Axle, inches	59.6	60	59.6	TBD	596
Approximate Payload Allowance, pounds	6248	6730	6540	TBD	6540
GVWR, pounds	13000	14000	13,200	TBD	13,200
Engines, Displacement, liters	As Shown	6.7L I 6 DIESEL B20	6.6L V-8 Diesel B20	6.7L V-8 DIESEL B20	6.6L V-8 Diesel B20
Engines, Net HP	300	370	397	TBD	397
Engines, TORQUE	650	800	765	TBD	765
Transmission	Automatic	6-Speed auto	6-speed OD	TBD	6-speed OD
Tire Size & Load Range	Dual Rear	LT235/80R17E BSW	LT235/80R17E	TBD	LT235/80R17E
Rim Size, inches	As Shown	17X6.0	6.5	TBD	6.5
Emissions Certification	As Shown	NAS HDV1, MDV1 ULEV II	HDV/ULEV2	TBD	HDV/ULEV2
EPA Greenhouse Score	As Shown	TBD	TBD	TBD	TBD
* Note: This denotes a FLEX FUEL VEHICLE (FFV) – E85 capable at no extra cost. **NOTE: See Sections E,F,G & H for Optional Truck Bodies.					

Additional Equipment: The following equipment is also required in addition to that required above:

a. Cab:

1. **Rearview Mirrors, Exterior, Trailer Tow/Camper Type, Both Sides:** Each mirror shall be approximately 6 inch by 9 inch and equipped with extension arms.

C.6. LIGHT-DUTY TRUCKS (continued): Refer to General Requirements, Preceding Each Group.

**FULL SIZE 1 TON REGULAR CAB PICKUP TRUCK
LONG BED DUAL REAR WHEEL
GASOLINE**

876C -FULL SIZE 1TON REGULAR CAB PICKUP TRUCK, DUAL REAR WHEEL,6/8-CYL, LONG BED					
ITEM	Minimum Requirements	Ford F 350* FFV	Chevrolet * (GT5) 4.10 Rear Axle Ratio	GMC * (GT5) 4.10 Rear Axle Ratio	RAM 3500 REGULAR CAB 4X2
Body Trim Designation (Base Vehicle)	As Shown	XL	CC35903 1WT	TC35903 1SA	D23L62 Tradesman
Wheelbase, inches	133.7	TBD	133.6	133.6	140.5
Approximate Payload Allowance, pounds	5,530	TBD	7,347	7,347	6690
Length, Overall, inches	225	TBD	244.4	244.4	231.0
Length, Cargo, inches	97.8	TBD	97.8	97.8	98.3
GVWR, pounds	12,800	TBD	13,500	13,500	12000
Engines, Displacement, liters	As Shown	6.2L V-8 FFV E85*	6.0L V-8 E85*	6.0L V-8 E85*	5.7L V8 HEMI VVT/6.4L V8 Mid Duty HEMI MDS
Engines, Net HP	316	TBD	322	322	383/410
Engines, TORQUE	380	TBD	380	380	400/429
Transmission	Automatic	TBD	6 speed OD	6 speed OD	6 speed OD
Tire Size & Load Range	Dual Rear	TBD	LT235/80R17E	LT235/80R17E	LT235/80R17E
Rim Size, inches	As Shown	TBD	6.5	6.5	6.5
Emissions Certification	As Shown	TBD	HDV/LEV630	HDV/LEV630	NAS HDV1, MDV1 ULEV II
EPA Greenhouse Score	As Shown	TBD	TBD	TBD	TBD

C.6. LIGHT-DUTY TRUCKS (continued): Refer to General Requirements, Preceding Each Group.

**FULL SIZE 1 TON REGULAR CAB PICKUP TRUCK
LONG BED DUAL REAR WHEEL
DIESEL**

876D -FULL SIZE 1TON REGULAR CAB PICKUP TRUCK, DUAL REAR WHEEL,8-CYL,DIESEL LONG BED					
ITEM	Minimum Requirements	Chevrolet Silverado (2-Door)	GMC SIERRA (2-Door)	Ford F350	RAM 3500 REGULAR CAB 4X2
Body Trim Designation (Base Vehicle)	As Shown	CC35903	CC35903	XL	D23L62 Tradesman
Wheelbase, inches	133.6	133.6	133.6	TBD	140.5
Approximate Payload Allowance, pounds	6520	6729	6729	TBD	6530
Length, Overall, inches	224.4	224.4	224.4	TBD	231.0
Length, Cargo, inches	97.8	97.8	97.8	TBD	98.3
GVWR, pounds	12600	13025	13025	TBD	14000
Engines, Displacement, liters	As Shown	6.6L V8 DIESEL B20	6.6L V8 DIESEL B20	6.7L V-8 DIESEL B20	6.7L I6 CUMMINS TURBO DIESEL
Engines, Net HP	397	397	397	TBD	370
Engines, TORQUE	765	765	765	TBD	800
Transmission	Automatic	6-speed OD	6-speed OD	TBD	6 speed OD
Tire Size & Load Range	Dual Rear	LT235/80R17E	LT235/80R17E	TBD	LT275/70R18E BSW ALL SEASON TIRES
Rim Size, inches	As Shown	6.5	6.5	TBD	18X8.0
Emissions Certification	As Shown	HDV/ULEV2	HDV/ULEV2	TBD	NAS HDV1, MDV1 ULEV II
EPA Greenhouse Score	As Shown	TBD	TBD	TBD	TBD
* Note: This denotes a FLEX FUEL VEHICLE (FFV) – E85 capable at no extra cost.					

C.6. LIGHT-DUTY TRUCKS (continued): Refer to General Requirements, Preceding Each Group.

**FULL SIZE 1 TON CREW CAB PICKUP TRUCK,
6-PASSENGER, LONG BED, SINGLE REAR WHEEL
GASOLINE**

881C -FULL SIZE 1 TON CREW CAB PICKUP TRUCK , LONG BED, SINGLE REAR WHEEL, 6-PASSENGERS					
ITEM	Minimum Requirement	Chevrolet Silverado * (GT5) 4.10 Rear Axle Ratio	Ford F350 * FFV	GMC Sierra * (GT5) 4.10 Rear Axle Ratio	Ram 3500
Body Trim Designation (Base Vehicle)	As Shown	CC35943 1WT	XL	TC35943 1SA	D23L92
Wheelbase, inches	167.7	167.7	TBD	167.7	169.5
Approximate Payload Allowance, pounds	3,820	4,412	TBD	4,412	4500
Length, Overall, inches	258.4	258.4	TBD	258.4	259.4
Length, Cargo, inches	97.8	97.8	TBD	97.8	98.3
GVWR, pounds	10500	10,700	TBD	10,700	11000
Engines, Displacement, liters	As Shown	6.0L V-8 E85*	6.2L V-8 FFV E85*	6.0L V-8 E85*	5.7L V8 HEMI VVT/6.4L V8 Mid Duty HEMI MDS
Engines, Net HP	316	322	TBD	322	383/410
Engines, TORQUE	380	380	TBD	380	400/429
Transmission	Automatic	6-speed OD	6 Speed Auto w/ Tow/Haul mode	6-speed OD	6-speed OD
Tire Size & Load Range	Single Rear	LT265/70R18E	TBD	LT265/70R18E	LT265/70R17E BSW All-Season
Rim Size, inches	As Shown	8.0	TBD	8.0	18X8.0
Emissions Certification	As Shown	HDV/LEV630	TBD	HDV/LEV630	NAS HDV1, MDV1 ULEV II
EPA Greenhouse Score	As Shown	TBD	TBD	TBD	TBD
* Note: This denotes a FLEX FUEL VEHICLE (FFV) – E85 capable at no extra cost.					

C.6. LIGHT-DUTY TRUCKS (continued): Refer to General Requirements, Preceding Each Group.

**FULL SIZE 1 TON CREW CAB PICKUP TRUCK,
6-PASSENGER, LONG BED, SINGLE REAR WHEEL
DIESEL**

881D -FULL SIZE 1 TON CREW CAB PICKUP TRUCK ,DIESEL, LONG BED, SINGLE REAR WHEEL, 6-PASSENGERS					
ITEM	Minimum Requirement	Chevrolet Silverado	Ford F350	GMC Sierra C30943	Ram 3500
Body Trim Designation (Base Vehicle)	As Shown	CC35943 1WT	XL	TC35943 1SA	D23L92
Wheelbase, inches	167.7	167.7	TBD	167.7	169.5
Approximate Payload Allowance, pounds	3,720	4,329	TBD	4,329	4500
Length, Overall, inches	258.4	258.4	TBD	258.4	259.4
Length, Cargo, inches	97.8	97.8	TBD	97.8	98.3
GVWR, pounds	11,400	11,400	TBD	11,400	11000
Engines, Displacement, liters	As Shown	6.6L V-8 Diesel B20	6.7L V-8 DIESEL B20	6.6L V-8 Diesel B20	6.7L I6 Cummins Turbo Diesel
Engines, Net HP	397	397	TBD	397	370
Engines, TORQUE	765	765	TBD	765	800
Transmission	Automatic	6-speed OD	TBD	6-speed OD	6-speed OD
Tire Size & Load Range	Single Rear	LT265/70R18E	TBD	LT265/70R18E	LT265/70R17E BSW All-Season
Rim Size, inches	As Shown	8.0	TBD	8.0	18X8.0
Emissions Certification	As Shown	HDV/ULEV 2	TBD	HDV/ULEV2	NAS HDV1, MDV1 ULEV II
EPA Greenhouse Score	As Shown	TBD	TBD	TBD	TBD
* Note: This denotes a FLEX FUEL VEHICLE (FFV) – E85 capable at no extra cost.					

C.6. LIGHT-DUTY TRUCKS (continued): Refer to General Requirements, Preceding Each Group.

**FULL SIZE 1 TON EXTENDED CAB PICKUP TRUCK,
5-PASSENGERS, LONG BED, SINGLE REAR WHEEL
GASOLINE**

882C -FULL SIZE 1 TON EXTENDED CAB PICKUP TRUCK , LONG BED, SINGLE REAR WHEEL, 5-PASSENGERS				
ITEM	Minimum Requirement	Chevrolet Silverado * (GT5) 4.10 Rear Axle Ratio	Ford F350 * FFV	GMC Sierra * (GT5) 4.10 Rear Axle Ratio
Body Trim Designation (Base Vehicle)	As Shown	CC35953 1WT	XL	TC35953 1SA
Wheelbase, inches	158	158.1	TBD	158.1
Approximate Payload Allowance, pounds	3,830	4,594	TBD	4,594
Length, Overall, inches	248.6	248.9	TBD	248.9
Length, Cargo, inches	97.8	97.8	TBD	97.8
GVWR, pounds	10,200	10,700	TBD	10,700
Engines, Displacement, liters	As Shown	6.0L V-8 E85*	6.2L V-8 FFV E85*	6.0L V-8 E85*
Engines, Net HP	316	322	TBD	322
Engines, TORQUE	380	380	TBD	380
Transmission	Automatic	6-speed OD	TBD	6-speed OD
Tire Size & Load Range	Single Rear	LT265/70R18E	TBD	LT265/70R18E
Rim Size, inches	As Shown	8.0	TBD	8.0
Emissions Certification	As Shown	HDV/LEV630	TBD	HDV/LEV630
EPA Greenhouse Score	As Shown	TBD	TBD	TBD
* Note: This denotes a FLEX FUEL VEHICLE (FFV) – E85 capable at no extra cost.				

C.6. LIGHT-DUTY TRUCKS (continued): Refer to General Requirements, Preceding Each Group.

**FULL SIZE 1 TON EXTENDED CAB PICKUP TRUCK,
5-PASSENGERS, LONG BED, SINGLE REAR WHEEL
DIESEL**

882D -FULL SIZE 1 TON EXTENDED CAB PICKUP TRUCK , DIESEL, LONG BED, SINGLE REAR WHEEL, 5-PASSENGERS				
ITEM	Minimum Requirement	Chevrolet Silverado	Ford F350	GMC Sierra
Body Trim Designation (Base Vehicle)		CC35953 1WT	XL	TC35953 1SA
Wheelbase, inches	158	158.1	TBD	158.1
Approximate Payload Allowance, pounds	3,680	4,328	TBD	4,328
Length, Overall, inches	248.6	248.9	TBD	248.9
Length, Cargo, inches	97.8	97.8	TBD	97.8
GVWR, pounds	10,800	11,200	TBD	11,200
Engines, Displacement, liters	As Shown	6.6L V-8 Diesel B20	6.7L V-8 DIESEL B20	6.6L V-8 Diesel B20
Engines, Net HP	397	397	TBD	397
Engines, TORQUE	765	765	TBD	765
Transmission	Automatic	6-speed OD	TBD	6-speed OD
Tire Size & Load Range	Single Rear	LT265/70R18E	TBD	LT265/70R18E
Rim Size, inches	As Shown	8.0	TBD	8.0
Emissions Certification	As Shown	HDV/ULEV2	TBD	HDV/ULEV2
EPA Greenhouse Score	As Shown	TBD	TBD	TBD
* Note: This denotes a FLEX FUEL VEHICLE (FFV) – E85 capable at no extra cost.				

C.6. LIGHT-DUTY TRUCKS (continued): Refer to General Requirements, Preceding Each Group.

**FULL SIZE CREW CAB 1 TON PICKUP TRUCK
6-PASSENGER, LONG BED, DUAL REAR WHEEL
DIESEL**

886D -FULL SIZE 1 TON CREW CAB PICKUP TRUCK ,DIESEL, LONG BED, DUAL REAR WHEEL, 6-PASSENGERS					
ITEM	Minimum Requirements	Chevrolet Silverado	Ford F350	GMC Sierra	RAM Crew Cab 3500
Body Trim Designation (Base Vehicle)	As Shown	CC35943 1WT	XL	TC35943 1SA	D23L92 Tradesman
Wheelbase, inches	167.7	167.7	TBD	167.7	169.5
Approximate Payload Allowance, pounds	4,280	5,546	TBD	5,546	6190
Length, Overall, inches	248.9	248.9	TBD	248.9	259.4
Length, Cargo, inches	97.8	97.8	TBD	97.8	98.3
GVWR, pounds	11,500	13,025	TBD	13,025	14000
Engines, Displacement, liters	As Shown	6.6L V-8 Diesel B20	6.7L V-8 DIESEL B20	6.6L V-8 Diesel B20	6.7 L I 6 Cummins Diesel
Engines, Net HP	350	397	TBD	397	370
Engines, TORQUE	650	765	TBD	765	800
Transmission	Automatic	6-speed OD	TBD	6-speed OD	6 speed auto
Tire Size & Load Range	Dual Rear	LT235/80R17E	TBD	LT235/80R17E	LT235/80R17E
Rim Size, inches	As Shown	6.5	TBD	6.5	6.0
Emissions Certification	As Shown	HDV/ULEV2	TBD	HDV/ULEV2	HDV2,MDV2,LEV 2
EPA Greenhouse Score	As Shown	TBD	TBD	TBD	TBD
* Note: This denotes a FLEX FUEL VEHICLE (FFV) – E85 capable at no extra cost.					

C.6. LIGHT-DUTY TRUCKS (continued): Refer to General Requirements, Preceding Each Group.

**FULL SIZE EXTENDED CAB 1 TON PICKUP TRUCK
5-PASSENGERS, LONG BED, DUAL REAR WHEEL
DIESEL**

887D -FULL SIZE 1 TON EXTENDED CAB PICKUP TRUCK , DIESEL, LONG BED, DUAL REAR WHEEL, 5-PASSENGERS				
ITEM	Minimum Requirement	Chevrolet Silverado	Ford F350	GMC Sierra
Body Trim Designation (Base Vehicle)		CC35953 1WT	XL	TC35953 1SA
Wheelbase, inches	158	158.2	TBD	158.2
Approximate Payload Allowance, pounds	4,860	5,662	TBD	5,662
Length, Overall, inches	248.6	248.9	TBD	248.9
Length, Cargo, inches	97.8	97.8	TBD	97.8
GVWR, pounds	13,000	13,025	TBD	13,025
Engines, Displacement, liters	As Shown	6.6L V-8 B20	6.7L V-8	6.6L V-8 B20
Engines, Net HP	397	397	TBD	397
Engines, TORQUE	765	765	TBD	765
Transmission	Automatic	6-speed OD	TBD	6-speed OD
Tire Size & Load Range	Single Rear	LT235/80R17E	TBD	LT235/80R17E
Rim Size, inches	As Shown	6.8	TBD	6.8
Emissions Certification	As Shown	HDV/ULEV2	TBD	HDV/ULEV2
EPA Greenhouse Score	As Shown	TBD	TBD	TBD
* Note: This denotes a FLEX FUEL VEHICLE (FFV) – E85 capable at no extra cost.				

C.6. LIGHT-DUTY TRUCKS (continued): Refer to General Requirements, Preceding Each Group.

**FULL SIZE 1 TON CREW CAB AND CHASSIS
6-PASSENGER, DUAL REAR WHEEL
GASOLINE**

888C -FULL SIZE 1 TON CREW CAB AND CHASSIS **, DUAL REAR WHEEL,6/8-CYL, 6-PASSENGER					
ITEM	Minimum Requirements	RAM 3500 CREW CAB CHASSIS 4X2	Chevrolet Silverado (GT5) 4.10 Rear Axle Ratio	Ford F 350 * FFV	GMC Sierra (GT5) 4.10 Rear Axle Ratio
Body Trim Designation (Base Vehicle)	As Shown	DD3L93 TRADESMAN	CC36043 1WT	XL	TC36043 1SA
Wheelbase, inches	171.5	172.4	171.5	TBD	171.5
Effective Cab-to-Axle, inches	59.1	60	59.1	TBD	59.1
Approximate Payload Allowance, pounds	6020	6119	6,605	TBD	6,605
GVWR, pounds	13,000	12500	13,200	TBD	13,200
Engines, Displacement, liters	As Shown	6.4L V8 Heavy Duty HEMI	6.0L V-8	6.2L V-8 FFV E85*	6.0L V-8
Engines, Net HP	316	370	322	TBD	322
Engines, TORQUE	380	429	380	TBD	380
Transmission	Automatic	6 -Speed auto	6-speed OD	TBD	6-speed OD
Tire Size & Load Range	Dual Rear	LT235/80R17E BSW ALL SEASON TIRES	LT235/80R17e	TBD	LT235/80R17e
Rim Size, inches	As Shown	17X6.0	6.5	TBD	6.5
Emissions Certification	As Shown	HDV2,MDV2,LEV 2	HDV/LEV630	TBD	HDV/LEV630
EPA Greenhouse Score	As Shown	TBD	TBD	TBD	TBD
* Note: This denotes a FLEX FUEL VEHICLE (FFV) – E85 capable at no extra cost. **NOTE: See Sections F,G,H for Optional Truck Bodies.					

Additional Equipment: The following equipment is also required in addition to that required above:

Cab:

- 1. Rearview Mirrors, Exterior, Trailer Tow/Camper Type, Both Sides:** Each mirror shall be approximately 6 inch by 9 inch and equipped with extension arms.

C.6. LIGHT-DUTY TRUCKS (continued): Refer to General Requirements, Preceding Each Group.

**FULL SIZE 1 TON CREW CAB AND CHASSIS
6-PASSENGER, DUAL REAR WHEEL, DIESEL**

888D -FULL SIZE 1 TON CREW CAB AND CHASSIS **, DUAL REAR WHEEL, 6/8-CYL, 6-PASSENGER, DIESEL					
ITEM	Minimum Requirements	RAM 3500 CREW CAB CHASSIS 4X2	Chevrolet Silverado	Ford F 350	GMC Sierra
Body Trim Designation (Base Vehicle)	As Shown	DD3L93 TRADESMAN	CC36043 1WT	XL	TC36043 1SA
Wheelbase, inches	171	172.4	171.5	TBD	171.5
Effective Cab-to-Axle, inches	59.1	60	59.1	TBD	59.1
Approximate Payload Allowance, pounds	5,410	5,432	5,854	TBD	5,854
GVWR, pounds	13,000	13,000	13,200	TBD	13,200
Engines, Displacement, liters	As Shown	6.7L I 6 DIESEL B20	6.6L V-8 Diesel B20	6.7L V-8 DIESEL B20	6.6L V-8 Diesel B20
Engines, Net HP	300	325	397	TBD	397
Engines, TORQUE	660	750	765	TBD	765
Transmission	Automatic	6-Speed auto	6-speed OD	TBD	6-speed OD
Tire Size & Load Range	Dual Rear	LT235/80R17E BSW	LT235/80R17E	TBD	LT235/80R17E
Rim Size, inches	As Shown	17X6.0	6.5	TBD	6.5
Emissions Certification	As Shown	HDV2,MDV2,LEV 2	HDV/ULEV2	TBD	HDV/ULEV2
EPA Greenhouse Score	As Shown	TBD	TBD	TBD	TBD
* Note: This denotes a FLEX FUEL VEHICLE (FFV) – E85 capable at no extra cost.					
**NOTE: See Sections F,G,H for Optional Truck Bodies.					

Additional Equipment: The following equipment is also required in addition to that required above:

Cab:

- 1. Rearview Mirrors, Exterior, Trailer Tow/Camper Type, Both Sides:** Each mirror shall be approximately 6 inch by 9 inch and equipped with extension arms.

C.7. CUTAWAYS: Unless otherwise specified, all units shall be furnished complete with standard equipment and factory-installed accessories as listed in the manufacturer's printed literature for the models specified herein (but See Section A.4.1. and Section C.1.1.). The following items are minimum requirements for the models specified herein, and shall be provided whether shown as optional or standard equipment by the manufacturer. The following are some of those standard features or additional features as listed for these models. Please note any additional requirements following the table for each series number. These additional requirements listed below any table are in addition to, the standard.

a. Body:

1. **Bumpers:** Manufacturer's standard front and under-ride rear bumper.

b. Chassis:

1. **Air Bags: Required.** Manufacturer's standard to include side curtain/impact airbags if available from manufacturer.
2. **Air Conditioning:** Required manufacturer's standard.
3. **Arm Rests, Door-Mounted:** Both right and left arm rests are required.
4. **AM/FM Radio:** Manufacturer's standard.
5. **Auxiliary Power Outlet:** One(1) 12 volt.
6. **Automatic Transmission:** Manufacturer's standard
7. **Brakes: ABS, required,** Manufacturer's standard; front disc, 2- or 4 wheel.
8. **Ground Ratings:** As required for the GVWR certified.
9. **Heater and Defroster:** Manufacturer's standard
10. **Jack, Handle, and Lug wrench**
11. **Power Steering:** Manufacturer's standard
12. **Seat, Cloth**
13. **Shock Absorbers:** Front and rear. Manufacturer's heaviest duty shocks without increase in vehicle trim level.
14. **Sun Visor:** Dual.
15. **Tinted Glass:** Manufacturer's standard
16. **Spare Wheel:** OEM full-size.
17. **Windshield Wipers:** Manufacturer's standard
18. **Bluetooth Wireless Communication:** Manufacturer's standard, where available.

C.7. CUTAWAYS (continued): Refer to General Requirements, Preceding Each Group.

**1 TON CUTAWAY CHASSIS
6/8-CYLINDER, 138 WHEELBASE, DUAL REAL WHEELS FOR VAN BODY
GASOLINE**

883C/883CPT - CUTAWAY CHASSIS, 1 TON, 6/8-CYL, DUAL REAR WHEELS FOR VAN BODY				
ITEM	Minimum Requirements	Ford E-350 * FFV	Chevrolet	GMC
Body Trim Designation (Base Vehicle)	As Shown	E3F	CG33503 1WT	TG33503 1WT
Wheelbase inches	138	138	139	139
Overall Length	241.1	241.1	246.7	246.7
Overall Width	75.4	75.4	79.1	79.1
GVWR, pounds	10000	10,000	10,050	10,050
Engine Displacement, liters	As Shown	5.4L V8 FFV E85 *	4.8L V8	4.8L V8
Engine HP	255	255	280	280
Engine Torque lbs -ft	295	350	295	295
Transmission	Automatic	5 speed automatic	6 speed automatic	6 speed automatic
Tire size and load range, 6 ea	As Shown	LT225/75Rx16E BSW	LT 215/85Rx16E	LT 215/85Rx16E
Rim size, inches	6.5	7	6.5	6.5
Emissions certification	As Shown	LEV	FEL/ULEV	FEL/ULEV
EPA Greenhouse Score	As Shown	TBD	TBD	TBD
* Note: This denotes a FLEX FUEL VEHICLE (FFV) – E85 capable at no extra cost.				

DIESEL

883D/883DPT - CUTAWAY CHASIS, 1 TON, 8-CYL, DUAL REAR WHEELS FOR VAN BODY			
ITEM	Minimum Requirements		
Body Trim Designation (Base Vehicle)	As Shown	n/a	n/a
Wheelbase inches	139	139	139
Overall Length	246.7	246.7	246.7
Overall Width	79.1	79.1	79.1
GVWR, pounds	10,050	10,050	10,050
Engine Displacement, liters	As Shown	6.6L Diesel B20	6.6L Diesel B20
Engine HP	260	260	260
Engine Torque lbs -ft	525	525	525
Transmission	Automatic	6 speed automatic	6 speed automatic
Tire size and load range, 6 ea	As Shown	LT 245/ 75Rx16E	LT 245/ 75Rx16E
Rim size, inches	6.5	6.5	6.5
Emissions certification	As Shown	FEL/ULEV	FEL/ULEV
EPA Greenhouse Score	As Shown	TBD	TBD
* Note: This denotes a FLEX FUEL VEHICLE (FFV) – E85 capable at no extra cost.			

Additional Equipment: The following equipment is also required in addition to that required above:

- a. Body: Aluminum body or agency approved equal
- b. Airbags: Driver and passenger side
- c. Air Conditioning: Adequate air conditioning front and rear part of the body.
- d. Floor covering: Front vinyl
- e. Logistic Track: Inlaid, 12-gauge steel, painted. E-Track or agency approved equal
- f. Side Mirrors: trailer towing
- g. Cab-access: sliding door in cargo
- h. Interior Lights: 12-volt dome light with rear switch
- i. Floor: Flat, 2 X 6 Dense Pine shiplapped, formed X-member-16 O.C., 3" X 1-1/2" single lip X-member, 4" I beam longills, undercoating
- j. Lining: 3/4" Full height plywood lining
- k. Interior Lights: Dome light with rear switch, hot wired
- l. Bulkhead: 6" setback with or without access
- m. Front End: 6-14" radius composite corner wind deflector extruded aluminum front corners with def. rad. 050, smooth
- n. Undercoating: Required
- o. Mud Flaps: standard

NOTE: For Para-transit Vehicles and Shuttle Bus Bodies, see Options 136 thru 144, Options 270 thru 279, and Options 795 thru 797. Please check with the awarded vendors for the specific configurations available for this vehicle series. Additional requirements for Para-transit Vehicles are listed in Section I: Special Equipment Body

C.7. CUTAWAYS (continued): Refer to General Requirements, Preceding Each Group.

**1 TON CUTAWAY CHASSIS
6/8-CYLINDER, 158 WHEELBASE, DUAL REAL WHEELS FOR VAN BODY
GASOLINE**

884C - CUTAWAY CHASSIS, 1 TON, 6/8-CYL, DUAL REAR WHEELS FOR VAN BODY				
ITEM	Minimum Requirements	Ford E-350 * FFV	Chevrolet	GMC
Body Trim Designation (Base Vehicle)	As Shown	E3F	CG33803 1WT	TG33803 1WT
Wheelbase inches	158	158	159	159
Overall Length	261.1	261.1	266.7	266.7
Overall Width	75.4	75.4	79.1	79.1
GVWR, pounds	11500	11,500	12300	12300
Engine Displacement, liters	As Shown	5.4L V8 FFV E85 *	6.0L	6.0L
Engine HP	255	255	324	324
Engine Torque lbs -ft	350	350	373	373
Transmission	Automatic	5 speed automatic	6 speed automatic	6 speed automatic
Tire size and load range, 6 ea	As Shown	LT225/75Rx16E BSW	LT 215/85Rx16E	LT 215/85Rx16E
Rim size, inches	6.5	7	6.5	6.5
Emissions certification	As Shown	LEV	FEL/ULEV	FEL/ULEV
EPA Greenhouse Score	As Shown	TBD	TBD	TBD
* Note: This denotes a FLEX FUEL VEHICLE (FFV) – E85 capable at no extra cost.				

DIESEL

884D - CUTAWAY CHASSIS, 1 TON, 8-CYL, DUAL REAR WHEELS FOR VAN BODY			
ITEM	Minimum Requirements		
Body Trim Designation	As Shown	n/a	n/a
Wheelbase inches	159	159	159
Overall Length	266.7	266.7	266.7
Overall Width	79.1	79.1	79.1
GVWR, pounds	12,300	12,300	12,300
Engine Displacement, liters	As Shown	6.6L Diesel B20	6.6L Diesel B20
Engine HP	260	260	260
Engine Torque lbs/ft	525	525	525
Transmission	Automatic	6 speed automatic	6 speed automatic
Tire size and load range, 6 ea	As Shown	LT 215/85Rx16E	LT 215/85Rx16E
Rim size, inches	6.5	6.5	6.5
Emissions certification	As Shown	FEL/ULEV	FEL/ULEV
EPA Greenhouse Score	As Shown	TBD	TBD
* Note: This denotes a FLEX FUEL VEHICLE (FFV) – E85 capable at no extra cost.			

Additional Equipment: The following equipment is also required in addition to that required above:

Note: Additional requirements for Para-transit Vehicles are listed in Section I: Special Equipment

Body

- a. Body: Aluminum body or agency approved equal
- b. Airbags: Driver and passenger side
- c. Air Conditioning: Adequate air conditioning front and rear part of the body.
- d. Floor covering: Front vinyl
- e. Logistic Track: Inlaid, 12-gauge steel, painted. E-Track or agency approved equal
- f. Side Mirrors: trailer towing
- g. Cab-access: sliding door in cargo
- h. Interior Lights: 12-volt dome light with rear switch
- i. Floor: Flat, 2 X 6 Dense Pine ship lapped, formed X-member-16 O.C., 3" X 1-1/2" single lip X-member, 4" I beam long sills, undercoating
- j. Lining: 3/4" Full height plywood lining
- k. Interior Lights: Dome light with rear switch, hot wired
- l. Bulkhead: 6" setback with or without access
- m. Front End: 6-14" radius composite corner wind deflector extruded aluminum front corners with def. rad. 050, smooth
- n. Undercoating: Required
- o. Mud Flaps: standard

C.7. CUTAWAYS(continued): Refer to General Requirements, Preceding Each Group.

**1 TON CUTAWAY CHASSIS
6/8-CYLINDER, 159 WHEELBASE DUAL REAL WHEELS FOR VAN BODY
GASOLINE**

885C/885CPT - CUTAWAY CHASSIS, 1 TON, 6/8-CYL, DUAL REAR WHEELS FOR VAN BODY			
ITEM	Minimum Req.	Ford E-450	Chevrolet G4500
Body Trim Designation (Base Vehicle)	As Shown	E4F	CG33803 2WT
Wheelbase inches	159	159	159
Overall Length	261.2	261.2	266.7
Overall Width	77.7	77.7	79.1
GVWR, pounds	14,200	14,500	14200
Engine Displacement, liters	As Shown	6.8L	6.0L V8
Engine HP	305	305	324
Engine Torque lbs -ft	373	420	373
Transmission	Automatic	5 speed automatic	6 speed auto
Tire size and load range, 6 ea	As Shown	LT225/75R16 BSW	LT225/75R16E
Rim size, inches	6.5	7	6.5
Emissions certification	As Shown	LEV	FEL/ULEV
EPA Greenhouse Score	As Shown	TBD	
* Note: This denotes a FLEX FUEL VEHICLE (FFV) – E85 capable at no extra cost.			
**Diesel not available in long wheelbase			

Additional Equipment: The following equipment is also required in addition to that required above:

Note: Additional requirements for Para-transit Vehicles are listed in Section I: Special Equipment Body

- p. Body: Aluminum body or agency approved equal
- q. Airbags: Driver and passenger side
- r. Air Conditioning: Adequate air conditioning front and rear part of the body.
- s. Floor covering: Front vinyl
- t. Logistic Track: Inlaid, 12-gauge steel, painted. E-Track or agency approved equal
- u. Side Mirrors: trailer towing
- v. Cab-access: sliding door in cargo
- w. Interior Lights: 12-volt dome light with rear switch
- x. Floor: Flat, 2 X 6 Dense Pine shiplapped, formed X-member-16 O.C., 3" X 1-1/2" single lip X-member, 4" I beam longsills, undercoating
- y. Lining: 3/4" Full height plywood lining
- z. Interior Lights: Dome light with rear switch, hot wired
- aa. Bulkhead: 6" setback with or without access
- bb. Front End: 6-14" radius composite corner wind deflector extruded aluminum front corners with def. rad. 050, smooth
- cc. Undercoating: Required
- dd. Mud Flaps: standard

****NOTE: For Para-transit Vehicles and Shuttle Bus Bodies, see Options 136 thru 144, Options 270 thru 279, and Options 795 thru 797. Please check with the awarded vendors for the specific configurations available for this vehicle series. Additional requirements for Para-transit Vehicles are listed in Section I: Special Equipment Body**

C.8. MEDIUM-DUTY TRUCKS: Unless otherwise specified, all units shall be furnished complete with standard equipment and factory-installed accessories as listed in the manufacturer's printed literature for the models specified herein (See Section A.4.1, and Section C.1.1). The following items are minimum requirements for the models specified herein, and shall be provided whether shown as optional or standard equipment by the manufacturer. The following are some of those standard features or additional features as listed for these models. Certain minimum requirements listed below are not available for Series 929 through 950. Please note any additional requirements following the table for each series number. These additional requirements listed below are in addition to the following general requirements for Medium Duty Trucks:

a. Body:

1. **Clearance Lights, Directional, Signals and Reflectors:** Shall meet or exceed the requirements of FMVSS No. 108. Armored-type clearance, turn signal lamps, and reflectors are required on cargo bodies.
2. **Rear End Protective Device(s):** Medium-duty trucks (except cab and chassis units) shall be equipped with rear and under-ride protection in compliance with Texas Motor Carrier Safety Regulation, Part 393.86. Rear End Protection shall comply with, but not necessarily be limited to, the following specific areas:
 - (a) Clearance from bottom of bumper or protective device(s) and the ground shall not exceed 30 inches with the vehicle empty;
 - (b) Maximum distance between the closest points between bumpers or devices, if more than one is used, shall not exceed 24 inches;
 - (c) Maximum transverse distance from the widest part of the vehicle at the rear to the bumper or device(s) shall not exceed 18 inches;
 - (d) Bumper or device(s) shall be located not more than 24 inches forward of the extreme rear end of the vehicle; and
 - (e) Bumper or device(s) shall be substantially constructed and firmly attached.
3. **MUD FLAPS:** Mud flaps shall be installed complete on all vehicles prescribed by law to meet the Department of Public Safety regulation and the following requirements:
 - (a) Mud flaps or truck splash guards, color to be **black, anti-sail and anti-splash type**, constructed of rubber or polyethylene, 24 inches wide, 1/4 inch minimum thickness, and of sufficient length to reach within 8 inches of the surface of the highway. They shall be constructed in such a manner so as to prevent sailing and water splashing. They shall have punched mounting holes. If furnished in rubber material, they shall be fully molded and cord-reinforced with metal inserts to prevent sailing and shall weigh a minimum of 18 pounds per pair.

NOTE: NO ADVERTISEMENTS ARE PERMITTED ON MUD FLAPS.

- b. **Cab:** Conventional, unless otherwise specified in the invitation for bid. If OEM offers a taller cab option, it is to be provided as standard at no additional charge.
 1. **Air Conditioning:** Manufacturer's standard.
 2. **HEATER AND DEFROSTER;** Assembly shall be the fresh air type customarily offered as the Standard vehicle manufacturer's accessory and shall be chassis factory installed. Controls shall be mounted on the dashboard.
 3. **AM/FM Radio:** Manufacturer's standard.
 4. **Assist Handles:** Installed, one on each side of cab, near the door (except for Series 930). (Outside or Inside).
 5. **Horns:** Dual electric.
 6. **Instruments:** Medium-duty trucks shall be equipped with at least the following instruments:
 - (a) Ammeter or voltmeter.....
 - (b) Coolant temperature gauge

- (c) Fuel gauge
- (d) Oil pressure gauge
- 7. **REARVIEW MIRRORS, EXTERIOR, LEFT AND RIGHT SIDES (for Medium-duty Trucks only):** Mirrors shall have OEM installed metal or plastic frames. These mirrors shall be the type regularly offered as standard original vehicle manufacturer's accessory. Overall face size shall be the largest factory installed available. The mirrors shall have auxiliary convex mirrors (not the stick on type).
- 8. **Running Boards, External:** Furnished anti-skid on both left and right sides of Medium-duty trucks, mounted to the frame (including Series 930), and shall support a minimum 250 pounds.
ANTI-SKID STEPS SHALL BE CAB LENGTH (SHALL SUPPORT A MINIMUM OF 250 POUNDS) ARE ACCEPTABLE IN LIEU OF RUNNING BOARDS (Exceptions: TRUCKS FURNISHED WITH STEP TYPE FUEL TANKS (Option Nos. 57 or 58)).
- 9. **Seat Belts, Lap and Shoulder:** With 3-point mounting (with retractors for driver and right front passenger and lap belt only for center passenger with bench-type seats). Installed for each passenger space to meet or exceed the requirements of FMVSS Nos. 209 and 210.
- 10. **Seating with Air Brakes:** Air ride, high back driver's seat and 2-person bench seat. Bench seat shall be furnished with a head rest for each seating position. Head rests shall be height adjustable, if this feature is available from the OEM..
- 11. **Seating with Hydraulic Brakes: Full width,** 3-person bench seat or driver's seat and 2-person bench seat. Seat shall be furnished with a head rest for each seating position. Head rests shall be height adjustable, if this feature is available from the OEM.
- 12. **Sun Visors:** Dual.
- 13. **Windshield Wipers (as required by FMVSS No. 104):** Electric with intermittent feature windshield washers.
- 14. **Upholstery:** Seat fabric to be cloth or vinyl with cloth inserts. (See Option 258 for all vinyl seats).
- 15. **Bluetooth Wireless Communication:** Manufacturer's standard, where available.

c. Chassis:

- 1. **Alternator:** 12 volt, minimum 155 ampere for gasoline engines (Series 930D through 990D).
12 volt, minimum 160 ampere for diesel engines (Series 930D through 990D).
- 2. **Axle, Rear:** Single speed, unless otherwise specified in the RFP. See Paragraph C.9.d.5 for performance requirements. Rear axle dust shields (rock guards) shall be provided on air brake equipped models.
- 3. **Battery Box Cover, Removable:** Cover shall be furnished for any battery or batteries located outside of engine compartment and shall fully enclose the battery or batteries.(Note: May not apply to Hybrid batteries. Not available for Series 929 -950)
- 4. **Brakes:** Shall meet or exceed the requirements of FMVSS No. 105. Air dryer including integral 100-watt heater shall be easily accessible with spin on desiccant cartridge, and automatic moisture ejector on air brake system reservoir(s). EXAMPE: Rockwell WABCO System Saver 1200 or Ordering Entity Approved Equal.
- 5. **Bumper:** Front only.
- 6. **Clutch:** Minimum 13-inch single-plate clutch required.
NOTE: MINIMUM 14-INCH SINGLE-PLATE CLUTCH REQUIRED ON DIESEL POWERED TRUCKS (Series 970 through 981 and Series 985 through 990) OR 13-INCH TWO-PLATE CLUTCH MAY BE USED.
- 7. **Driver's Side Door:** Pocket shall be furnished at driver's side door for storage of driver's work/travel logs. Pocket to be a minimum 12 inches long if available.

8. **Magnetic Drain, Magnetic Disc, or Fill Plug:** In transmission case and rear axle housing.
9. **Power Steering:** Manufacturer's standard.
10. **Shock Absorbers:** Front, double action hydraulic.
11. **Springs, Rear:** Auxiliary overload type (N/A on Series 930).
NOTE: TWO-STAGE VARIABLE RATE MAIN SPRINGS ALONE ARE UNACCEPTABLE.
12. **Tires and Wheels:** Maximum 0.095 inch out-of-round tolerance. Manufacturer's standard. Unless otherwise specified on the RFP, tires and wheels shall be standard OEM approved FULL SIZE, STYLE AND SIZE. Wheels and tires (including spare, where applicable) shall be IDENTICAL for ALL axle positions.
 - (a) **Tires:** Steel belted radial, tubeless, all-position highway tread (shall meet FMVSS No. 119). Tires shall be at least heat range B rated.
 - (b) **Wheel:** Disc type, hub piloted.
 - (c) **Spare Wheel & Tire:** All Medium Duty Trucks (Series 930-959) shall be required to have full size mounted Spare Wheel & Tire. Tire to be identical in type and size of tire and wheel to those on vehicle. Trucks included in series 960 and up only require matching full size spare wheel, unless otherwise noted.
13. **Transmission:** Manual transmission shall be provided as standard equipment on Series 960 through 990, except 986D. Automatic transmission is required on Series 929 through 950 and 986D.

d. Engine:

1. **Battery:** 12 volt, minimum cold cranking performance of 500 amperes for gasoline and 1,000 cold cranking amperes for diesel at 0 degrees Fahrenheit and 115 minutes reserve capacity at 80 degrees Fahrenheit (Series 930 manufacturer's standard).
2. **Design:** Heavy-Duty V8 or V10 gasoline engine with manufacturer's maximum cooling capacity when specified by Series number.
3. **Governor, Engine Speed:** Installed and set at manufacturer's maximum recommended RPM.
4. **Mid-range Diesel Engine:** Provided when specified by Series Number.
5. **Engine Performance:** Transmission and rear axle ratio combination shall provide the following performance: grade-ability minimum 1.1 percent steady-state at 55 MPH; shall provide minimum 20% start ability from a complete stop (at clutch engagement), based upon full GVWR or GCWR. Maximum road speed 70 MPH, cruise control set at 65 MPH, based on maximum GVWR.
6. Synthetic lubricants and extended life coolants shall be provided where available.
7. Long life (Gates Blue Stripe or entity Ordering Entity Approved Equal) radiator hoses and silicone water lines shall also be provided where available.

e. Ratings, Complete Units:

1. **Ratings:** Each medium-duty truck shall have a Gross Vehicle Weight Rating (GVWR) which meets or exceeds the Minimum Requirements listed in each table for the respective Series. Each truck shall be equipped with appropriate tires, springs, axle capacities and a chassis designed to transport a combined body and payload allowance which meets or exceeds the minimum Requirement in each respective table. Combined truck and trailer towing weight allowances (Gross Combination Weight Rating - GCWR) are listed for each model in the following tables.

f. Cargo Weight:

1. **Base Units:** Deduct the driver, passenger, and cargo body weights from the body and payload allowance shown. The remainder is the cargo weight limit for the standard, base truck.

The following applies to Series 990 vehicles.

a. Chassis:

1. **Air Brake Lines:** Complete with trailer air couplings (with suitable protection to restrict dirt from entering coupling) and 7-wire electrical hook-ups. Lines shall be routed through the chassis to the end of frame and shall be securely fastened to the frame at intervals sufficient to prevent sagging and to provide clearance of any mechanical parts. Rubber grommets shall be used wherever air or electrical lines pass through metal.
2. **Batteries:** Minimum 1,200 amperes cold cranking capacity.
3. **Brakes, Straight Air:** Manufacturer's standard with desiccant type air dryer, designed for towing air brake equipped trailers. Complete with dummy glad hand seals.
4. **Clutch:** Minimum 13-inch diameter with two plates, or minimum 14" single plate.
5. **Compressor, Air:** Minimum 13.2 CFM with reservoir and low-air pressure warning indicator in cab.
6. **Coolant System:** Manufacturer's maximum cooling.
7. **Moisture Ejector, Automatic:** Manufacturer's standard (installed on wet tank).
8. **Parking Brake, Spring-Set Type:** Manufacturer's standard mounted forward of rear axle.
9. **Slack Adjusters:** Automatic adjusting type, front and rear.
10. **Tachometer:** Manufacturer's standard.
11. **Trailer Package:** Including hand-control valve, tractor-protection valve, and dummy for glad hands.
12. **Visual Brake Stroke Adjustment Indicators**
13. **Wheel bearings shall be fluid lubricated with synthetic lubricants.**
14. **Oil seals shall be STEMCO wet-type standard two-piece with sight glass, or Ordering Entity Ordering Entity Approved Equal.**

* NO EQUIPMENT SHALL BE BOLTED INSIDE THE FRAME FROM A POINT IMMEDIATELY BEHIND THE CAB AND EXTENDING 9 INCHES TOWARD THE REAR OF THE UNIT. IN ADDITION, A CLEAN FRAME RAIL SHALL BE PROVIDED ON THE PASSENGER SIDE FROM THE BACK OF THE CAB TO THE FRONT OF THE REAR SPRING HANGER.

**C.8. MEDIUM-DUTY TRUCKS (continued): Refer to General Requirements, Preceding Each Group.
CAB AND CHASSIS ***

DIESEL

929D—Diesel (8 – CYL) 4X4			
ITEM	Minimum Requirements	Ford F 450 Crew Cab 4x4 Pickup	RAM 4500 CREW CAB CHASSIS 4X4
Body Trim Designation Base Vehicle	As Shown	XL	DP9L93 TRADESMAN
GVWR, pounds	14000	TBD	15000
GCWR, pounds	33,000	TBD	32500
Front GAWR, pounds	5940	TBD	7000
Rear GAWR, pounds	9100	TBD	12000
Approximate Body/Payload Allowance lbs.	5800	TBD	6395
Wheelbase, inches **	172	TBD	173.4
Cab-to-Axle, inches **	56	TBD	60
Front Axle Capacity, pounds	6000	TBD	7,000
Rear Axle Capacity, pounds	9650	TBD	13,500
Engines, Displacement, liters	As Shown	6.7L V-8 B20	6.7 LI6 B20
Engines, HP	400	TBD	320
Engines, TORQUE	800	TBD	750
Transmission	Automatic	TBD	6-SPD AUTO AISIN AS69RC HD TRANS
Tire Size & Load Range	As Shown	TBD	225/70R19.5G ALL POS FT,RR TRACTION
Alternator, amperes	ALTERNATOR	TBD	180 AMP ALTERNATOR

**C.8. MEDIUM-DUTY TRUCKS (continued): Refer to General Requirements, Preceding Each Group.
CAB AND CHASSIS * DIESEL**

930D – DIESEL(6/8 – CYL)				
ITEM	Minimum Requirements	International	Ford F 450	RAM 4500 REGULAR CAB CHASSIS 4X2
Body Trim Designation Base Vehicle	As Shown	TerraStar	XL	DP4L63 TRADESMAN
GVWR, pounds	16,000	18,000	TBD	16,000
GCWR, pounds	16,500/19,000	26,000	TBD	26,000
Front GAWR, pounds	4,800	7,000	TBD	7,000
Rear GAWR, pounds	11,000	11,000	TBD	12,000
Approximate Body/Payload Allowance lbs	8,326	9,500	TBD	8326
Wheelbase, inches **	As Shown	134	TBD	144.4
Cab-to-Axle, inches **	60	60	TBD	60
Front Axle Capacity, pounds	7,000	7,000	TBD	7,000
Rear Axle Capacity, pounds	11,000	11,000	TBD	13,500
Heavy-Duty Frame, RBM	360	694,700	TBD	980-387
Engines, Displacement, liters	As Shown	6.4L V-8	6.7L V-8	6.7L I6 CUMMINS TURBO DIESEL B20
Engines, HP	300	300	TBD	325
Engines, TORQUE	610	660	TBD	750
Governed Speed, RPM	As Shown	2,800	TBD	2900
Transmission	Automatic	Allison 1000 Series	TBD	6-SPD AUTO AISIN AS69RC HD TRANS
Tire Size & Load Range	As Shown	225/70Rx19.5F	TBD	225/70R19.5G ALL POSITION TIRES
Rim Size, in	6	6	TBD	19.5X6.0 STEEL WHEELS
Alternator, amperes	180	190	TBD	180 Std/220 opt
* NOTE: See Sections F,G,H for Optional Truck Bodies.				

Additional Equipment: The following equipment is required in addition to that required above:

a. Body:

- 1. Rear End Protective Devices:** These are not required with standard purchase but when the clearance is less than 30 inches then see Section. C.9.a.3.

b. Cab:

- 1. Assist Handles:** Not required.
- 2. Dual Horns:** Not required.
- 3. Rearview Mirror, Camper Style:** Units shall be furnished with swing-out type; left and right side face size shall be the largest factory installed available mirrors and shall be camper style.

**** NOTE:** For longer cab-to-axle and wheelbase, see Options 33, 34, 35.

C.8. MEDIUM-DUTY TRUCKS (continued): Refer to General Requirements, Preceding Each Group.
CAB AND CHASSIS * CREW CAB
DIESEL AND GASOLINE 4 X 2

940D - DIESEL (6/8 - CYL)					940G - GASOLINE (8 CYL or 10 CYL)	
ITEM	Minimum Requirements	Ford F 450	Ram 4500	International	Minimum Requirements	Ram 4500
Body Trim Designation (Base Vehicle)	As Shown	XL	4500 DP4L93 Tradesman	TerraStar	As Shown	4500 DP4L93 Tradesman
GVWR, pounds	16,000	TBD	16500	18,000	16,000	16,500
GCWR, pounds	26,000	TBD	26,000	26,000	26000	26,000
Front GAWR, pounds	5,600	TBD	7,000	7,000	5,600	7,000
Rear GAWR, pounds	11,000	TBD	12000	11,000	12,000	12,000
Approximate Body/Payload Allowance, pounds	8,110	TBD	8108	9,000	8,400	8944
Wheelbase, inches **	172.3	TBD	173.4	203	200	200
Cab-to-Axle, inches **	84	TBD	84	85	84	84
Front Axle Capacity, pounds	5,600	TBD	7,000	7,000	5,600	6000
Rear Axle Capacity, pounds	11,000	TBD	12000	11,000	12,000	12,000
Heavy-Duty Frame, RBM	As Shown	TBD	980-387	694,700	As Shown	980-387
Engines, Displacement, liters	As Shown	6.7L V-8	6.7L I6 CUMMINS TURBO DIESEL ENGINE B20	6.4L V-8	As Shown	Hemi V8
Engines, HP	300	TBD	325	300	362	366
Engines, TORQUE	610	TBD	750	660	457	429 457
Governed Speed, RPM	As Shown	TBD	2500	2800	As Shown	2500 2,700
Transmission,	As Shown	TBD	6-SPD AUTO AISIN AS69RC HD TRANS	Allison 1000 Series	Automatic	6-SPD AUTO AISIN AS69RC HD TRANS
Tire Size & Load Range	As Shown	TBD	225/70R19.5G ALL POSITION TIRES	P225/70R19.5F	As Shown	225/70R19.5G ALL POSITION TIRES
Rim Size, inches	As Shown	TBD	6	6	6	6
Alternator, amperes	180	TBD	180 Std and a 220 opt	190	155	155

Additional Equipment: The following equipment is also required addition to that required above

a. Body:

1. Rear End Protective Devices: These are not required with standard purchase but when the clearance is less than 30 inches then see Section. C.9.a.3.

b. Cab:

1. Assist Handles: If available.

2. Dual Horns: If available.

3. Rearview Mirror, Camper Style: Units shall be furnished with swing-out type; left and right side face size shall be the largest factory installed available mirrors and shall be camper style.

c. Chassis: Shock Absorbers – Heavy duty shock absorbers shall be manufacturer's maximum capacity.

C.8. MEDIUM-DUTY TRUCKS (continued): Refer to General Requirements, Preceding Each Group.

**CAB AND CHASSIS * REG CAB, 17,500 GVW
6 or 8-CYLINDER, DIESEL, SHORT WHEELBASE**

950D -6/8 - CYL, DIESEL				
ITEM	Minimum Requirements	Ram 5500	Navistar	FORD F-550
Body Trim Designation (Base Vehicle)	As Shown	TRADESMAN DP5L64	TerraStar	XL
GVWR, pounds	18000	19,500	18,000	TBD
GCWR, pounds	26,000	32500	26,000	TBD
Front GAWR, pounds	7,000	7,000	7,000	TBD
Rear GAWR, pounds	11,000	13,500	11,000	TBD
Approximate Body/Payload Allowance, pounds	11,646	11,646	12,000	TBD
Wheelbase, inches **	As Shown	168.5	158	TBD
Cab-to-Axle, inches **	84	84	84	TBD
Front Axle Capacity, pounds	7,000	7,000	7,000	TBD
Rear Axle Capacity, pounds	11,000	13,500	11,000	TBD
Heavy-Duty Frame, RBM	As Shown	500,000	694,700	TBD
Engines, Displacement, liters	As Shown	6.7L I6 CUMMINS TURBO	6.4 V-8	6.7 L V-8
Engines, HP	300	325	300	TBD
Engines, TORQUE	610	750	660	TBD
Governed Speed, RPM	As Shown	2,500	2,800	TBD
Transmission	Automatic	6-SPD AUTO AISIN AS69RC HD TRANS	Allison 1000	Automatic
Tire Size & Load Range	As Shown	225/70R19.5G ALL POSITION TIRES	225/70R19.5F	TBD
Rim Size, inches	As Shown	19.5X6.0	6.0	TBD
Alternator, amperes	180	180 or optional 220	190	TBD

* **NOTE:** See Sections F,G,H for Optional Truck Bodies.

** **NOTE:** For longer cab-to-axle and wheelbase, see Option 33.

Additional Requirements:

a. Daytime Running Lights

NOTE: Manual transmissions are no longer available on the Ford chassis

NOTE: For Para-transit Vehicles and Shuttle Bus Bodies, see Options 136 thru 144, Options 270 thru 279, and Options 795 thru 797. Please check with the awarded vendors for the specific configurations available for this vehicle series. Additional requirements for Para-transit Vehicles are listed in Section I: Special Equipment Body

C.8. MEDIUM-DUTY TRUCKS (continued): Refer to General Requirements, Preceding Each Group.

**CAB AND CHASSIS * 22,000 GVWR, REGULAR CAB
6- AND 8-CYLINDER, DIESEL, LONG WHEELBASE**

960D - CAB AND CHASSIS, REGULAR CAB, 6/8 - CYL, 22,000 GVWR, DIESEL				
ITEM	Minimum Requirements	Freightliner	Navistar	Ford
Body Trim Designation (Base Vehicle)	As Shown	M2	4000	F 650SD
GVWR, pounds	22,000	22,000	23,500	23,600
GCWR, pounds	30,000	30,000	30,000	30,000
Front GAWR, pounds	8,000	8000	8,000	10,000
Rear GAWR, pounds	15,000	15,000	15,500	17,500
Approximate Body/Payload Allowance, pounds	13,385	14,500	14,324	14,218
Wheelbase, inches **	152	153	152	158
Cab-to-Axle, inches **	84	84	85	84
Front Axle Capacity, pounds	8,000	8,000	8,000	8,000
Rear Axle Capacity, pounds	15,000	15,000	15,500	15,000
Heavy-Duty Frame, RBM	1,275,000	1,358,400	1,275,200	1,275,000
Engines, Displacement, liters	As Shown	6.7T I-6	6.7 I-6	6.7L I-6
Engines, HP SAE Gross***	200	200	200	200
Engines, TORQUE	520	520	520	520
Governed Speed, RPM	As Shown	2400	2,600	2,600
Transmission	Manual	M5	M6	M6
Tire Size & Load Range	9R-22.5F	10R-22.5F	10R-22.5F	9R-22.5F
Rim Size, inches	6.75	8.75	7.5	7.5
Alternator, amperes	160	160	160	185
<p>* NOTE: See Sections F,G,H for Optional Truck Bodies. ** NOTE: For longer cab-to-axle and wheelbase, see Option 33. *** NOTE: Vendor shall furnish higher horsepower engine to meet grade-ability requirements if necessary. (See C.8.d.5.)</p>				

Additional Requirements:

a. Daytime Running Lights

NOTE: For Para-transit Vehicles and Shuttle Bus Bodies, see Options 136 thru 144, Options 270 thru 279, and Options 795 thru 797. Please check with the awarded vendors for the specific configurations available for this vehicle series. Additional requirements for Para-transit Vehicles are listed in Section I: Special Equipment Body

C.8. MEDIUM-DUTY TRUCKS (continued): Refer to General Requirements, Preceding Each Group.

Additional Equipment: The following equipment is also required on Series 970 through 990.

a. Body:

- 1. Hood, Forward Tilting**

b. Chassis:

- 1. Battery:** Minimum 1,000 amperes cold cranking capacity.
- 2. Brakes, Straight Air (ABS):** Manufacturer's standard, with desiccant type air dryer. Air dryer including integral 100-watt heater shall be easily accessible with spin on desiccant cartridge, and automatic moisture ejector on air brake system reservoir(s). EXAMPLE: Rockwell WABCO System Saver 1200 or Ordering Entity Approved Equal.
- 3. Automatic slack adjusters:** Front and rear, with visual brake stroke adjustment indicators.
- 4. Clutch:** Minimum 14-inch diameter with single plate; minimum 13-inch diameter with two plates.
- 5. Compressor, Air:** Minimum 13.2 CFM with reservoir and low-air pressure warning indicator in cab.
- 6. Coolant System:** Manufacturer's standard capacity for application.
- 7. Moisture Ejector, Automatic:** Manufacturer's standard (installed on wet tank).
- 8. Parking Brake, Spring-Set Type:** Manufacturer's standard mounted forward of rear axle.
- 9. Tachometer:** Manufacturer's standard.
- 10. Fuel Tank:** Minimum 45 gallon tank.

C.8. MEDIUM-DUTY TRUCKS (continued): Refer to General Requirements, Preceding Each Group.

**CAB AND CHASSIS * 25,500 GVWR, REGULAR CAB
6 or 8 CYLINDER, DIESEL, LONG WHEELBASE**

970D - CAB AND CHASIS, 6/8 - CYL, 25,500 GVWR, REGULAR CAB, DIESEL					
ITEM	Minimum Requirements	Freightliner	Navistar	Ford	Kenworth
Body Trim Designation (Base Vehicle)	As Shown	M2	4000	F 650SD	T270
GVWR, pounds	25,500	25,500	25,500	25,999	25,500
GCWR, pounds	30,000	30,000	30,000	30,000	30,000
Front GAWR, pounds	8,000	8,000	8,000	8,000	8000
Rear GAWR, pounds	17,500	17,500	17,500	17,500	17,500
Approximate Body/Payload Allowance, pounds	17,500	18,000	17,500	17,500	17,500
Wheelbase, inches **	152	153	152	158	152
Cab-to-Axle, inches **	84	84	85	84	84
Front Axle Capacity, pounds	8,000	8,000	8,000	10,000	8000
Front Spring Ground Rating, pounds	As Required	8,000	8,000	10,000	8000
Rear Axle Capacity, pounds	17,500	17,500	17,500	17,500	17,500
Rear and Auxiliary Ground Rating, pounds	As Required	18,000	18,500	18,500	20,000
Heavy-Duty Frame, RBM	1,275,200	1,358,400	1,275,200	1,275,200	1,776,000
Engines, Displacement, liters	As Shown	6.7L I-6	6.7 I-6	6.7L I-6 ISB	6.7L I-6
Engines, HP SAE Gross***	200	200	200	200	240
Engines, TORQUE	520	520	520	520	560
Governed Speed, RPM	As Shown	520	2600	520	560
Transmission	Manual	M5	M6	M6	M6 OD
Tire Size & Load Range	11R-22-5G	11R-22.5G	11R-22.5G	11R-22.5G	11 R-22.5G
Rim Size, inches	8.25	8.25	8.25	8.25	8.25
Alternator, amperes	160	160	160	185	160
<p>* NOTE: See Sections F,G,H for Optional Truck Bodies.</p> <p>** NOTE: For longer cab-to-axle and wheelbase, see Option 33, 34,35.</p> <p>*** NOTE: Vendor shall furnish higher horsepower engine to meet grade-ability requirements if necessary. (See C.8.d.5.)</p>					

Additional Requirements:

1. **Keyless Battery Disconnect & Engine Hour Meter required.**
2. **Daytime Running Lights**

NOTE: For Para-transit Vehicles and Shuttle Bus Bodies, see Options 136 thru 144, Options 270 thru 279, and Options 795 thru 797. Please check with the awarded vendors for the specific configurations available for this vehicle series. Additional requirements for Para-transit Vehicles are listed in Section I: Special Equipment Body

C.8. MEDIUM-DUTY TRUCKS (continued): Refer to General Requirements, Preceding Each Group.

**CAB AND CHASSIS *27,000 GVWR
6 OR 8 CYLINDER, DIESEL,**

980D - CAB AND CHASIS, 6/8 - CYL, 27,000 GVWR, REGULAR CAB, DIESEL					
ITEM	Minimum Requirements	Freightliner	Navistar	Ford	Kenworth
Body Trim Designation (Base Vehicle)	As Shown	M2	4000	F 650SD	T 370
GVWR, pounds	27,000	27,000	27,000	27,000	27,000
GCWR, pounds	45,000	45,000	45,000	45,000	45,000
Front GAWR, pounds	8,000	8,000	8,000	10,000	8000
Rear GAWR, pounds	19,000	19,000	19,000	19,000	19,000
Approximate Body/Payload Allowance, pounds	18,315	18,600	18,315	18,782	18,400
Wheelbase, inches **	152	153	152	158	152
Cab-to-Axle, inches **	84	84	85	84	84
Front Axle Capacity, pounds	8,000	8,000	8,000	8,000	8,000
Front Spring Ground Rating, pounds	As Required				
Rear Axle Capacity, pounds	19,000	19,000	19,000	19,000	19,000
Rear and Auxiliary Ground Rating, pounds	As Required				
Heavy-Duty Frame, RBM	1,275,200	1,358,400	1,275,200	1,275,200	1,716,000
Engines, Displacement, liters	As Shown	6.7L I-6	6.7 I-6	6.7L I-6 ISB	6.7L I-6
Engines, HP SAE Gross***	240	250	250	240	260
Engines, TORQUE	620	660	660	620	620
Governed Speed, RPM	As Shown		2,600		
Transmission,	Manual	M6	M6	M6	M6OD
Tire Size & Load Range	11R-22.5G	11Rx22.5 G	11R-22.5G	11R-22.5G	11R-22.5 G
Rim Size, inches	8.25	8.25	8.25	8.25	8.25
Alternator, amperes	160	160	160	185	160
<p>* NOTE: See Sections F,G,H for Optional Truck Bodies.</p> <p>** NOTE: For longer cab-to-axle and wheelbase, see Option 33.</p> <p>*** NOTE: Vendor shall furnish higher horsepower engine to meet grade-ability requirements if necessary. (See C.8.d.5.)</p>					

Additional Requirements:

- 1. Keyless Battery Disconnect Engine Hour Meter required.**
- 2. Daytime Running Lights standard**

C.8. MEDIUM-DUTY TRUCKS (continued): Refer to General Requirements, Preceding Each Group.

**CAB AND CHASSIS * REG CAB, 31,000 GVWR
6- CYLINDER, DIESEL, SHORT WHEELBASE**

985D - CAB AND CHASIS, 6/8 - CYL, REG CAB, 31,000 GVWR, DIESEL					
ITEM	Minimum Requirements	Freightliner	Navistar	Ford	KenWorth
Body Trim Designation (Base Vehicle)	As Shown	M2	4000	F 750SD	Model T-370
GVWR, pounds	31,000	31,000	31,000	31,000	31,000
GCWR, pounds	50,000	50,000	50,000	50,000	50,000
Front GAWR, pounds	10,000	10,000	10,000	10,000	10,000
Rear GAWR, pounds	21,000	21,000	21,000	21,000	21,000
Approximate Body/Payload(Pounds)	As Shown	20,000	18,276	20,845	20,000
Wheelbase, inches	152	153	152	158	152
Cab-to-Axle, inches	84	84	85	84	84
Front Axle Capacity, pounds	10,000	10,000	10,000	10,000	10,000
Rear Axle Capacity, pounds	21,000	21,000	21,000	21,000	21,000
Heavy-Duty Frame, RBM **	1,275,200	1,808,400	1,275,200	1,275,200	1,776,000
Diesel Engine Displacement, liters	As Shown	6.7L I-6	6.7 I-6	6.7L I-6 ISB	6.7L I-6
Horsepower, SAE	250*	250	250	250	260
Torque, SAE, lbs-ft	620	660	660	620	620
Governed Speed, RPM	As Shown	2,400	2600	2,600	2,600
Transmission, Manual (Standard)	6 or 7 speed	M6	M6	M6	7 or 9 speed
Tire Size & Load Range	11R-22.5G	11R-22.5G	11R-22.5G	11R-22.5G	11R-22.5 G
Rim Size, inches	8.25	22.5X 8.25	8.25	8.25	8.25x22.5
Alternator, amperes	160	160	160	185	160

See Option 33 and 34 for longer Effective cab-to-axle availability.

Additional Requirements:

7. Keyless Battery Disconnect Engine Hour Meter required.

8. Daytime Running Lights

b. NOTE: For Para-transit Vehicles and Shuttle Bus Bodies, see Options 136 thru 144, Options 270 thru 279, and Options 795 thru 797. Please check with the awarded vendors for the specific configurations available for this vehicle series. Additional requirements for Para-transit Vehicles are listed in Section I: Special Equipment Body

C.8. MEDIUM-DUTY TRUCKS (continued): Refer to General Requirements, Preceding Each Group.

**CAB AND CHASSIS, 33,000 GVWR
6 CYLINDER, DIESEL, LONG WHEELBASE**

TXDOT STANDARD SPEC 755-10-50

<http://www.txdot.gov/inside-txdot/forms-publications/consultants-contractors/publications/purchasing-specifications.html>

986D - CAB AND CHASSIS, 6 CYLINDER, DIESEL, SHORT WHEELBASE			
Item	Minimum Requirements	Freightliner	International / Navistar
Body Trim Designation (Base Vehicle)	As Shown	108SD	7300
GVWR, pounds	33,000	33,000	33,000
GCWR, pounds	50,000	50,000	50,000
Front GAWR, pounds	12,000	12,000	12,000
Rear GAWR, pounds	21,000	21,000	21,000
Approximate Body/Payload Allowance, pounds	As Shown	23,000	21,500
Wheelbase, inches	Per Body Co.	189	195
Cab-to-Axle, inches	Min. Per Body Co. or 120	120	120
Front Axle Capacity, pounds	12,000	12,000	12,000
Rear Axle Capacity, pounds	21,000	21,000	21,000
Heavy-Duty Frame, RBM	1,780,800	1,808,400	1,780,800
Diesel Engine Displacement, liters	7.6L / 6.7	6.7L	6.7 I-6
Horse power SAE	260	260	260
Torque, SAE lbs/ft	660	660	660
Governed Speed, RPM	As Shown	2,600 00	2,600
Allison Transmission, Model 3500 RDS with PTO port	6 Speed	6 Speed	6 Speed
Two Speed Rear Axle	Gear Ratio TBD		
Tire Size & Load Range	11R22.5 14Ply	11R22.5 14Ply	11R22.5 14 Ply
Rim Size, inches	8.25	8.25	8.25
Alternator, amperes	160	160	160
<p>* NOTE: See Sections F,G,H for Optional Truck Bodies. ** NOTE: For longer cab-to-axle and wheelbase, see Option 33, 34, 35. *** NOTE: Vendor shall furnish higher horsepower engine to meet grade-ability requirements, if necessary.(See C.8.d.5.) ****NOTE: This Cab and Chassis is only, for Truck Mounted Asphalt Maintenance Units (AMU)</p>			

Additional Equipment: The following equipment is also required of addition to that required above.

- 1) Chassis: Battery: Minimum 1,850 amperes cold cranking capacity

Additional Requirements:

- 1) Keyless Battery Disconnect Engine Hour Meter required.
- 2) Daytime Running Lights
- 3) Minimum 20" Factory Installed Integral Front Frame Extension (Bolt-On or Aftermarket Not Acceptable)
- 4) Front Engine PTO Capability Factory Installed (Aftermarket Not Acceptable)

Additional Options 621 through 635 **may be** requested with this unit.

C.8. MEDIUM-DUTY TRUCKS (continued): Refer to General Requirements, Preceding Each Group.

**CAB AND CHASSIS * REGULAR CAB
6-CYLINDER DIESEL, SHORT AND LONG WHEELBASE**

990D - CAB AND CHASIS, REGULAR CAB, 6/8 - CYL, 35,000 GVWR, DIESEL				
ITEM	Minimum Req.	Freightliner	Navistar	Kenworth
Body Trim Designation (Base Vehicle)	As Shown	M2	4000	
GVWR, pounds	33,000	33,000	35,000	35,000
GCWR, pounds	50,000	50,000	50,000	50,000
Front GAWR, pounds	12,000	12,000	12,000	12,000
Rear GAWR, pounds	23,000	23,000	23,000	23,000
Approximate Body/Payload Allowance, pounds	As Shown	23,000	20,000	23,500
Wheelbase, inches	128/152	158	128/152	152
Cab-to-Axle, inches	84	84	85	84
Front Axle Capacity, pounds	12,000	12000	12,000	12,000
Rear Axle Capacity, pounds	23,000	23,000	23,000	23,000
Heavy-Duty Frame, RBM **	1,275,200	1,358,400	1,275,200	1,776,000
Diesel Engine Displacement, liters	As Shown	8.9L 9.0L I-6	9.0L I-6	8.3L I-6
Horsepower, SAE	260	270	275	260
Torque, SAE, lbs-ft	800	800	860	800
Governed Speed, RPM	As Shown	2,200	2200	2,600
Transmission, Manual (Standard)	6 or 7 Speed OD	6 or 7	6 or 7	7 or 9 speed
Tire Size & Load Range	11R-22.5G	11R-22.5G	11R-22.5G	11R22.5G
Rim Size, inches	8.25	8.25	8.25	8.25x22.5
Alternator, amperes	160	160	160	160

* **NOTE:** See Sections F,G,H for Optional Truck Bodies.

** **NOTE:** For longer cab-to-axle and wheelbase, see Option 33.

Additional Equipment: The following equipment is also required in addition to that required above:

a. Body:

- 1. Hood, Forward Tilting**
- 2. Engine: Shall be In-Line 6-Cylinder**
- 3. Keyless Battery Disconnect & Engine Hour Meter required.**
- 4. Daytime Running Lights**

C.9. HEAVY-DUTY TRUCKS: Unless otherwise specified, all units shall be furnished complete with standard equipment and factory-installed accessories as listed in the manufacturer's printed literature.

**TRUCK CAB/CHASSIS *
6 CYL DIESEL TANDEM AXLES
54,000 GVWR
TXDOT STANDARD SPEC 072-08-15
<http://www.dot.state.tx.us/GSD/purchasing/purchasing.htm>**

1000D - TRUCK CAB/CHASSIS * 6 CYL, DIESEL TANDEM AXLES, 54,000 GVWR						
ITEM	Minimum Requirements	Kenworth	Navistar/ International	Western Star	Mack/ Granite	Freightliner
Body Trim Designation (Base Vehicle)	As Shown	T-800	7600 SFA 6 X 4	4700	Granite	114SD SFA
GVWR, pounds	52,000	52,000	54,000	52,000	52,000	54,600
GCWR, pounds	78,000	78,000	80,000	80,000	80,000	80,000
Front GAWR, lbs	14,000	14,600	14,000	14,700	14,600	14,600
Rear GAWR, lbs	40,000	40,000	40,000	40,000	40,000	40,000
Wheelbase inches	As Required	177	193	183	174	192
Cab-to-Axle, inches	108/111	110	110	108	108	108
Front Axle, lbs	14,000	14,600	14000	14,700	14,600	14,700
Rear Axle, lbs	40,000	40,000	40000	40,000	40,000	40,000
Diesel Engine Displacement, liters minimum	As Shown	8.7L	12.4L	12.8 L	11.0 L	12.8L
Horsepower, SAE	345	345	370	350	345	350
Torque, SAE lbs-ft	1,350		1350	1350	1360	1350
Governed Speed, RPM	1,950		2100	1900	1950	1900
Transmission, Manual	13 Speed or Equal		13 speed	13 Speed	13 Speed	13 Speed
Tire Size & Load Range	12R 22.5H	12R22.5 / G	12R 22.5H	12R22.5	12R22.5	12Rx22.5
Rim Size, inches	8.25 10 Hole Disc	8.25x22.5	8.25	8.25 – 10 Hole	8.25 – 10 Hole	22.5x8.25 10 Hole
Alternator, amps	160	160	160	160	160	160

Additional Equipment: The following equipment is also required in addition to that required above:

- a. **Body: Hood, Forward Tilting**
- b. **Engine: Shall be In-Line 6-Cylinder**

Additional Requirements:

- 1. **Keyless Battery Disconnect Engine Hour Meter required.**
- 2. **Daytime running lights.**
- 3. **TxDOT standard specification 072-08-15 Latest Revision (where a conflict exists, this document takes precedence).**
- 4. **Bluetooth Wireless Communication:** Manufacturer's standard, where available.

C.9 HEAVY-DUTY TRUCKS (continued): Unless otherwise specified, all units shall be furnished complete with standard equipment and factory-installed accessories as listed in the manufacturer's printed literature. See TxDOT Specification 070-45-26 for requirements.

**TRUCK TRACTOR CAB/CHASSIS *6 CYL DIESEL TANDEM AXLE
80,000 GCWR**

TXDOT STANDARD SPEC 072-08-82 (<http://www.dot.state.tx.us/GSD/purchasing/purchasing.htm>)

1200D - TRUCK TRACTOR CAB/CHASSIS *6 CYL DIESEL TANDEM AXLE, 80,000 GCWR						
ITEM	Minimum Requirements	FreightLiner M	Western Star	International	Volvo	Mack
Body Trim Designation (Base Vehicle)	As Shown	2112	4900SA	7600 SFA 6x4	VNM64T300	Pinnacle
GVWR, pounds	52,000	52,000	52,000	52,000	52,000	52,000
GCWR, pounds	80,000	80,000	80,000	80,000	80,000	80,000
Front GAWR, pounds	12,000	12,000	12,000	12,000	12,000	12,000
Rear GAWR, pounds	40,000	40,000	40,000	40,000	40,000	40,000
Wheelbase, inches	144-169	144-169	175-181	As Req'd By Bid	180-186	168-174
Cab-to-Axle, inches	102-108	102-108	102-108	102-108	102-108	102-108
Front Axle Capacity, pounds	12,000	12,000	12,000	12,000	12,000	12,000
Rear Axle Capacity	40,000	12000	40000	40,000	40,000	40,000
Heavy-Duty Frame, RBM **	1,463,000	1,808,400	1,776,400	1,780,800	1,591,200	1,810,000
Diesel Engine Displacement, liters	10L	12.8L	12.8L	12.4L	10.8L	11.0L
Horsepower, SAE Gross Min.	345	370	350	370	365	345
Torque, SAE, lbs/ft	1350	1450	1350	1350	1350	1360
Governed Speed, RPM	1900	1900	1900	2100	2100	1950
Transmission, Manual (Standard) ***	13 Speed or Agency App Equal.	13 speed	13 speed	13 speed	13 Speed	13 Speed
Tire Size & Load Range	11R-22.5G	11R 22.5 G	11R 22.5 G	11R22.5 G	11R22.5 G	11R22.5 G
Rim Size, inches	8.25 10 Hole Steel Disc	8.25 10- hole disc	8.25 10 hole disc	8.25	8.25 – 10 Hole Disc	8.25 – 10 Hole Disc
Alternator, amperes	160	160	160	160	165	160

Additional Equipment: The following equipment is also required in addition to that required above:

- a. Body:
 - 1. Hood, Forward Tilting
- b. Engine:
 - Shall be In-Line 6-Cylinder

Additional Requirements:

- 1. Keyless Battery Disconnect & Engine Hour Meter required.
- 2. Daytime running lights.
- 3. Technical Specifications for Truck Tractor, Tandem-Axle, Diesel, 80,000 GCWR will be based on the latest revision of Texas Department of Transportation (TXDOT) Specification No. 072-08-82 . (Where a conflict exists, this document takes precedence.)
- 4. **Bluetooth Wireless Communication:** Manufacturer's standard, where available..

C.9. **HEAVY DUTY TRUCKS (continued):** Unless otherwise specified, all units shall be furnished complete with standard equipment and factory-installed accessories as listed in the manufacturer’s printed literature.

**TRUCK/TRACTOR, 6 CYLINDER, DIESEL, TANDEM AXLE
50,000 GVWR, 80,000GCWR
Texas Department of Criminal Justice (TDCJ) specific**

1202D - TRUCK/TRACTOR ,6 CYLINDER, DIESEL, TANDEM AXLE, CONVENTIONAL DAY CAB, 80,000GCWR				
Item	TX Minimum Requirements	International	Freightliner	VOLVO
Body Trim Designation (Base Vehicle)	Per R1084284	ProStar	Cascadia CA125DC-Day Cab	VNL64T300
GVWR, pounds	52,000	52000	53220	52000
GCWR, pounds	As Shown	80000	80000	110000
Front GAWR, pounds	12,000	12000	13300	12000
Rear GAWR, pounds	40,000	40000	40000	40000
Wheelbase, inches	225	226	242	225
BBC (Bumper to Back of Cab)	121.6	121.9	126	121.6
Front Axle Capacity, pounds	12,000	12000	13300	12000
Rear Axle Capacity, pounds	40,000	40000	40000	40000
Set Back Front Axle	49	50.2	49	51.1
Heavy-Duty Frame, RBM	As Shown	1782000	1808400	1778400
Diesel Engine Displacement, liters	Diesel In-Line 6	12.4L	14.8L	13L
Horse power SAE	475	475	485	475
Torque, SAE lbs-ft	1,650	1700	1650	1650
Governed Speed, RPM	As Shown	1900	1900 RPM	75 at 1620 RPM
Transmission, Manual Standard (RTLO-16913A)	13 Speed	13 Spd	13 Spd RTLO-16913A	13 Spd RTLO 16913A
Tire Size & Load Range	11R24.5 14PLY	11R24.5 14 Ply	11R24.5 14 PLY	11R24.5 14 PLY
Rim Size, inches	As Shown	8.25	8.25	8.25
Alternator, amperes	As Shown	160	160	165

- Bluetooth Wireless Communication: Manufacturer’s standard, where available.**

SECTION D – ALTERNATIVE FUEL VEHICLE SPECIFICATIONS

1. ALTERNATIVE FUELED VEHICLES:

ALL ALTERNATIVE FUEL EQUIPMENT SHALL BE INSTALLED BY THE ORIGINAL EQUIPMENT MANUFACTURER AND SHALL MEET THE LATEST ENVIRONMENTAL PROTECTION AGENCY REQUIREMENTS APPLICABLE TO THE VEHICLE MODEL(S) SPECIFIED.

Bidders must furnish a list of Texas dealer's names and addresses that are licensed and authorized to service alternative fuel vehicles.

Engines and fuel systems furnished for the respective vehicle Series shall operate on alternative fuels as specified for the vehicle series. The engine and the related integral fuel system shall be the chassis manufacturer's standard, or optional system for the vehicle type, which meets or exceeds the power requirements specified for each Series, at the engine manufacturer's rated operating speed. The engine may be of a standard production design or retrofitted by the manufacturer to operate on mono- or bi-alternative fuels.

Bi-fuel systems shall have installed an automatic and/or manual switch-over control. The engine and integral fuel system shall be of such design and construction that it will give an even flow of power at all engine speeds without undue vibration, strain, or overheating of engine components. Alternative fueled vehicle operation and performance shall be equal to or better than that of similar makes and models operating on conventional fuels, including, but not limited to, cold starting and acceleration performance. The fuel system shall meet all applicable standards including those of the FMVSS and The Texas Railroad Commission. These vehicles shall be fully operational when delivered to the ordering entity without any additional modification or adjustments -

Alternatively fueled vehicles, including all applicable engine and fuel system components, shall be fully warranted (and detailed within or becoming an amendment/attachment to the warranty) by the chassis OEM for a period of not less than 3 years and/or 36,000 miles, whichever comes first, including all engine and emission parts, and fuel system components.

Alternative fuel system components covered under the Clean Air Act emissions rules will be covered under the OEM warranty. As component upgrades become available, the engine manufacturer or his approved designate, may be permitted to upgrade engines/fuel systems in the field to improve durability, reliability, or emissions with the approval of the ordering entities. Vendors shall provide the emission values of alternatively-fueled vehicles in accordance with Paragraph A.4.21 of this document.

COMPRESSED NATURAL GAS (CNG): The engine shall be fueled to operate on compressed natural gas. The engine, fuel system, and all related components shall meet all applicable requirements. Although compressed natural gas is listed by the Texas Commission on Environmental Quality as an alternative fuel, the ordering entity must satisfy itself that the vehicle being purchased complies with all state and federal safety standards in effect at that time. **(See Options 779-794 for availability)**

LIQUIFIED PETROLEUM GAS (LPG): The engine shall be fueled to operate on liquefied petroleum gas (a mixture of 90% propane and other gases). The engine, fuel system, and all related components shall meet all applicable requirements. Although LPG is listed by the Texas Commission on Environmental Quality as an alternative fuel, the ordering entity must satisfy itself that the vehicle being purchased complies with all state and federal safety standards in effect at that time. **(See Options 779-794 for availability)**

NOTE TO ORDERING ENTITIES: The availability of refueling facilities within the range for this vehicle should be determined before ordering this option.

ETHANOL (E85) / FLEX FUEL-TYPE: The engine shall be fueled to operate on ethanol. The engine, fuel system, and all related components shall meet all applicable requirements. Although ethanol is listed by the Texas Commission on Environmental Quality as an alternative fuel, the ordering entity must satisfy itself that the vehicle being purchased complies with all state and federal safety standards in effect at that time. **There are many E85 engines available as standard equipment or as an option. Check the information in the vehicle series for verification of E85 being available.**

NOTE TO ORDERING ENTITIES: The availability of refueling facilities within the range for this vehicle should be determined before ordering this option.

HYBRID: The engine shall be fueled to operate on Hybrid, gas/electric. The engine, fuel system, and all related components shall meet all applicable requirements. Although electricity is listed by the Texas Commission on Environmental Quality as an alternative fuel, the ordering entity must satisfy itself that the

vehicle being purchased complies with all state and federal safety standards in effect at that time. .
OEM/Vendor of Hybrid vehicles shall provide estimated ranges for electricity use and conventional fuel use as a percentage of total drive time (i.e. 25% electricity, 75% gas) and expected variations between highway and city use.

PLUG-IN HYBRID ELECTRIC (PHEV): In addition to Hybrid requirements, OEM/Vendor shall provide details regarding driving range, recharge time, battery life and replacement costs, and vehicle weight.

ELECTRIC VEHICLES: OEM/Vendor shall provide details regarding driving range, recharge time, battery life and replacement costs, and vehicle weight.

NOTE: In addition to the vehicles listed in this section; additional vehicle models may modified to accommodate alternative fuels. Please see the "Options" section of these specifications for availability. For example, options 779-794 detail which vehicles have LPG/CNG engine options.

SECTION D – ALTERNATIVE FUEL VEHICLE SPECIFICATIONS (continued):

**MULTIPURPOSE LOW SPEED
ELECTRIC VEHICLE**

330ALT - MULTIPURPOSE LOW SPEED ELECTRIC VEHICLE							
ITEM	Minimum	Gem E2	Gem E2	Gem ES	Gem E4	Gem E6	Gem E6S
Body Trim Designation (Base Vehicle)	As Shown	Long Bed	No Bed	Short Bed	Extended Cab	No Bed	Short Bed
Wheelbase, inches	72	102	72	72	102	131	131
Length, inches	99	144	99	108	128	162	162
Width, inches	55	55	55	55	55	55	55
GVWR	1600	2300	1600	1850	2100	3000	3200
Passengers	As shown	2	2	2	4	6	6
Electric motor	As shown	72 V Shunt GE Motor	73 V Shunt GE Motor	74 V Shunt GE Motor	75 V Shunt GE Motor	76 V Shunt GE Motor	77 V Shunt GE Motor
Engine Gross HP	As shown	5 hp					
Range		25 miles	25 miles	25 miles	25 miles	30 miles	40 miles
Tire Size & Load Range /two-ply street rated tires	As shown	12-inch	12 inch	12 inch	12 inch	13 inch	13 inch
Emissions Certification	As shown	0 emissions	0 emissions	0 emissions	0 emissions	0 emissions	0 emissions
Note: Standard Colors are Red, Yellow, Green or White.							

Note: Standard Colors are Red, Yellow, Green or White. See Options No. 39 through 42, 65 and 115 for the Multipurpose Electrical Vehicles Options.

Additional Options Requirements:

- g)** Select Option 44 for Stake back kit for long bed
- h)** Select Option 53 for Scuff Guards for a four-seater
- i)** Select Option 54 for Scuff Guards for a six-seater
- j)** Select Option 55 for Grab Handle Package for a four-seater
- k)** Select Option 56 for Grab Handle Package for a six-seater

SECTION D – ALTERNATIVE FUEL VEHICLE SPECIFICATIONS (continued):

ALTERNATIVE FUELED AUTOMOBILES: Unless specified, all units shall be furnished complete with standard equipment and factory-installed accessories as listed in the manufacturer's printed literature for the models specified herein (but See Section A.4.1 and Section C.1.1). The Alternative Fueled Automobiles are required to have the same equipment as all automobiles (see Section C.2.1 through C.2.2.).

**COMPRESSED NATURAL GAS (CNG) SEDAN
4-CYLINDER, 4-DOOR, FRONT WHEEL DRIVE**

340ALT - COMPRESSED NATURAL GAS (CNG) SEDAN, 4-CYLINDER, 4-DOOR, FWD			
ITEM	Minimum Requirements	Honda Civic	Ford Focus
Body Trim Designation (Base Vehicle)	As Shown	Natural Gas	TBD
Wheelbase, inches	102.9	106.3	102.9
Length, inches	175	177.3	175
Width, inches	67.8	69	67.8
Displacement, liters	As shown	1.8L	2.0L
Engine Net HP	110	110	TBD
Tire Size & Load Range	As shown	P195/65R15 89H	P195/60R15
Emissions Certification	As shown	Tier II, Bin-2 + ILEV, SULEV. AT-PZEV	TBD

SECTION D – ALTERNATIVE FUEL VEHICLE SPECIFICATIONS (continued):

ALTERNATIVE FUELED AUTOMOBILES: Unless specified, all units shall be furnished complete with standard equipment and factory-installed accessories as listed in the manufacturer's printed literature for the models specified herein (but See Section A.4.1 and Section C.1.1). The Alternative Fueled Automobiles are required to have the same equipment as all automobiles (see Section C.2.1 through C.2.2.).

HYBRID GAS/ELECTRIC COMPACT SEDAN

4-CYLINDER, 4-DOOR, FRONT WHEEL DRIVE

341ALT - HYBRID GAS/ELECTRIC COMPACT SEDAN, 4-CYL, 4-DOOR, FWD					
ITEM	Minimum	Toyota Prius	Honda Civic	Ford C-Max	Chevrolet Volt
Body Trim Designation (Base Vehicle)	As shown	1223	Hybrid	Hybrid	1RF68 Hybrid
Wheelbase, inches	104.3	106.3	106.3	104.3	106.1
Length, inches	173.6	175.6	176.7	173.6	180.4
Width, inches	68.7	68.7	69	72	71.2
Displacement, liters	As shown	1.8L 4 cyl	1339 cc	2.0L I4	1.5L 4 cyl.
Engine Gross HP (CVT) @rpm (SAE net/with IMA)	As shown	98@5200/ 134 IMA Net HP	110@6000	141@6000/ 188 Net HP	83@4,900/ 149 Net HP
Tire Size & Load Range	As shown	P195/65R15	P195/65R15 89S	P225/50R17	P215/50R17
Emissions Certification	As shown	AT-PZEV (Emissions SULEV) Bin 3	ULEV	TBD	Bin 4 ULEV2

HYBRID GAS/ELECTRIC INTERMEDIATE SEDAN

4-CYLINDER, 4-DOOR, FRONT WHEEL DRIVE

359ALT - HYBRID GAS/ELECTRIC INTERMEDIATE SEDAN, 4-CYL, 4-DOOR, FWD				
ITEM	Minimum Requirements	Camry Hybrid	Ford Fusion	Chevrolet Malibu
Body Trim Designation (Base Vehicle)	As shown	2559	P0L - Hybrid	1ZE69 w/1HY
Wheelbase, inches	107.8	109.3	112.2	111.4
Length, inches	189.2	189.2	191.8	193.8
Width, inches	71.7	71.7	72.9	73.0
Displacement, liters	As shown	2.4L 4 Cyl	2.0L I4	1.8L 4 cyl
Engine Gross HP (CVT) @rpm (SAE net/with IMA)	As shown	147@6000 187 IMA net HP	141@6000 (188 net HP when combined with electric motor)	124@5,000
Tire Size & Load Range	As shown	P215/60R16	P215/60H16	P225/55R17
Emissions Certification	As shown	AT-PZEV Bin 3	Tier 2 Bin 3 ULEV II	BIN5/ULEV125

SECTION D – ALTERNATIVE FUEL VEHICLE SPECIFICATIONS (continued):**ALL ELECTRIC VEHICLE****4 Door Sedan Front Wheel Drive**

342ALT - ELECTRIC VEHICLE, 4-DOOR SEDAN, FWD					
ITEM	Minimum Requirements	Miles (Low Speed)	Nissan Leaf (Highway Speed)	Ford Focus-Electric	Chevrolet Bolt
Body Trim Designation (Base Vehicle)	As shown	ZX40S	S	P3R	1FB48
Wheelbase, inches	93.5	94	106.3	104.3	102.4
Length, inches	134	134	175	172.9	164.0
Width, inches	58	58	69.7	71.8	69.5
GVWR (approx.)	As Shown	2350	4409		3580
Passengers	As shown	4	5	5	5
Electric motor	As shown	72V Brushless 3 Phase Induction AC Motor	Lithium Ion Manganese	Permanent magnet electric traction, lithium-ion (23-kWh capacity)	Permanent magnetic drive motor
Engine Gross HP Rated/Peak Power	As shown	10 hp/35 hp	107	143	200
Range	As shown	35-45 miles	100 miles*	76 miles	200
Top Speed (MPH)	As shown	25	90	84	91
Tire Size & Load Range /two-ply street rated tires	As shown	13 inch	P205/55R16	P225/50/R17	P215/50R17
Emissions Certification	As shown	ZEV	ZEV	ZEV	ZEV

Coulomb Charging Station (See Options 489 and 490)

* Based on LA4 test cycle, no A/C or heat

ALL ELECTRIC TRUCK

2 Door Ext Cab Truck Rear Wheel Drive

343ALT – ELECTRIC VEHICLE, 2-DOOR, EXTENDED CAB TRUCK, RWD		
ITEM	Minimum Requirements	Miles
Body Trim Designation (Base Vehicle)	As shown	ZX40ST
Wheelbase, inches	103	103
Length, inches	162	162
Width, inches	59	59
GVW	2553	2553
Passengers	As shown	2
Electric motor	As shown	72V Brushless 3 Phase Induction AC Motor
Engine Gross HP Rated/Peak Power	As shown	10 hp/35 hp
Range	As Shown	30-40 miles
Tire Size & Load Range /two-ply street rated tires	As shown	13 inch
Emissions Certification	As shown	Zero Emissions

SECTION D – ALTERNATIVE FUEL VEHICLE SPECIFICATIONS (continued):

UTILITY VEHICLES (CARRYALLS, 4-WHEEL DRIVE UTILITY, AND CARGO VANS): Unless otherwise specified, all units shall be furnished complete with standard equipment and factory- installed accessories as listed in the manufacturer's printed literature for the models specified herein (but See Section A.4.1. and Section C.1.1.).The Alternative Fueled Utility Vehicles are required to have the same equipment as all utility vehicles (see Section C.4.a through C.4.c.).

**640ALT HYBRID GAS/ELECTRIC UTILITY
4-DOOR, FRONT WHEEL DRIVE**

ITEM	Minimum Requirements	Toyota Highlander
Body Trim Designation (Base Vehicle)	As Shown	6964 HYBRID
Wheelbase, inches	109.8	109.8
Length, inches	188.2	188.2
Width, inches	75.2	75.2
Displacement, liters	As shown	3.5L V6
Engine Gross HP	As shown	280
Net Torque	As shown	212
Tire Size & Load Range	As shown	P245/65R17
Emissions Certification	As shown	SULEV/ TIER2BIN3

UTILITY VEHICLES (CARRYALLS, 4-WHEEL DRIVE UTILITY, AND CARGO VANS): Unless otherwise specified, all units shall be furnished complete with standard equipment and factory- installed accessories as listed

in the manufacturer's printed literature for the models specified herein (but See Section A.4.1. and Section C.1.1.). The Alternative Fueled Utility Vehicles are required to have the same equipment as all utility vehicles (see Section C.4.a through C.4.c.).

**UTILITY HYBRID GAS/ELECTRIC, FULL SIZE
4-DOOR**

665ALT - UTILITY , FULL SIZE, HYBRID GAS/ELECTRIC UTILITY VEHICLE, 4-DOOR		
ITEM	TX Requirements (Min. unless specified)	
Body Trim Designation (Base Vehicle)	As Shown	
Wheelbase, inches	116	
Payload Allowance, max pounds (Approximate)	1835	
Length (overall), inches	202	
Length(Cargo) Behind 2nd row, inches	49.4	
GVWR, pounds	7,100	
Displacement, liters (Base Vehicle)	As Shown	
Engine HP	335	
Torque	340	
Transmission	Automatic	
Tire Size & Load Range	As Shown	
Rim size,(dia), inches	As Shown	

SECTION D – ALTERNATIVE FUEL VEHICLE SPECIFICATIONS (continued):

ALTERNATIVE FUELED LIGHT-DUTY TRUCKS: Unless otherwise specified, all units shall be furnished complete with standard equipment and factory-installed accessories as listed in the manufacturer's printed literature for the models specified herein (but See Section A.4.1. and Section C.1.1.). The Alternative Fueled Trucks are required to have the same equipment as all light duty trucks (see Section C.6.a through C.6.c.).

**PICK UP TRUCK/
HYBRID GAS/ELECTRIC
FULL SIZE, 1/2 TON, CREW CAB
6 PASSENGERS, SHORT BED, SINGLE AXLE**

862ALT - HYBRID GAS/ELECTRIC PICK UP TRUCK, FULL SIZE, 1/2 TON, CREW CAB, 6-PASSENGER, SHORT BED							
ITEM	Minimum Requirements						
Body Trim Designation (Base Vehicle)	As Shown						
Wheelbase, inches	143.5						
Approximate Payload Allowance, pounds	1759						
Length, inches	229.9						
Width, inches	79.9						
GVWR, pounds	6,800						
Displacement, liters	As shown						
Engine Gross HP	As shown						
Net Torque	As shown						
Transmission, Automatic	As shown						
Rim size, inches	As shown						
Tire Size & Load Range	As shown						
Emissions Certification	As shown						

***Hybrid**

Additional Equipment: The following equipment is also required in addition to that required above:

a. Body:

- 1. Seats:** Seating shall be provided for a minimum of 5 persons, including driver (See Option No. 98 for Rear Seat Delete Option).

Options:

- 1. Four Wheel Drive:** See Option No. 52.

SECTION E - OPTIONAL EQUIPMENT SPECIFICATIONS

NOTE TO ORDERING ENTITIES:

- 1) **ALL OPTIONS ARE NOT AVAILABLE ON ALL MODELS – CHECK WITH THE AWARDED DEALER.**
- 2) PLEASE LIST THE OPTION NUMBER AND A BRIEF DESCRIPTION (as shown below) FOR EACH OPTION REQUIRED ON YOUR BID REQUISITION.

EXAMPLE: Option No. 1 – Access Panel(s)

The OEM/Vendor shall provide a comprehensive list of ALL standard and optional feature/equipment codes with their bid documents. The OEM/Vendor shall align and provide (as closely as possible) the OEM standard and optional feature codes for each option and identify which options are incompatible or required with one another. *NOTE: All options shall be OEM, unless otherwise noted. Furthermore, adding some options to vehicles may result in a change in vehicle model (within a particular series).*

The following optional equipment shall be furnished when so specified in the Request For proposal (RFP):

OPTION NO.	OPTION DESCRIPTION
1	ACCESS PANEL(S): Shall be equipped with at least one engine access panel on each side of the hood.
2	AIR CONDITIONING/HEATING UNIT, OEM FACTORY INSTALLED FRONT AND REAR (for full size cargo, passenger vans and utility vehicles and medium/heavy duty trucks):
4	AXLE RATIO: Rear axle ratio shall be specified by the ordering entity in accordance with manufacturer availability. (Customer to specify the ratio).
6	ALL WHEEL DRIVE (Any series where this upgrade is available)
7	EXTRA KEYS-At Time Of Delivery, Each Vehicle Will Have Three (3) Ignition/Door (In addition to minimum provided by manufacturer).
10	AUTOMATIC TRANSMISSION for Heavy Duty Trucks (Allison 4000HS Or 4500RDS)
13	FLASHER SYSTEM- Headlamp And Tail Lamp. Separates the headlamp and tail lamp flashing
15	ALTERNATOR (for light-duty trucks and pickups only): Manufacturer's higher capacity alternator. Ordering entity to specify the minimum amperage required on the purchase order.
16	ALTERNATOR (primarily for medium-duty trucks): Manufacturer's heavy-duty high capacity alternator. Ordering entity to specify the minimum amperage required on the purchase order.
17	EMERGENCY LED LIGHTBAR
18	AXLE, FRONT: (Series 985 through 990). Minimum 13,200 pound capacity front GAWR.
19	AXLE, FRONT: (Series 985 through 990). Minimum 12,000 pound capacity front GAWR.
20	AXLE, REAR, TWO-SPEED (for Series 950 through 985 trucks only): Shall be furnished with a manual transmission. Transmission and rear axle combination shall provide the following performance: grade ability minimum 1.1 percent at 55 MPH; maximum road speed 70 MPH; cruise control set at 60 MPH. Not recommended (and limited availability) for vehicles with automatic transmission.
23	ANTITHEFT DEVICE Vendor Must Furnish All Parts And Labor To Install The Antitheft Device According To Manufacturer And Customer Instructions. Referenced Brand/Model: Tremco Antitheft System (CHGR12=INT-RI). If offering other than the referenced Brand/Model, the respondent must submit literature to CPA for approval from TxDPS prior to award
24	BRAKES, AIR (ABS) FOR TRACTOR APPLICATION WITH GLAD-HANDS (Complete Package for use with diesel or gasoline engines - for Series 970 through 980 trucks, but may be used on other size trucks based on availability with gasoline engines): An under-hood air-compressor shall be installed to power the air brake system.
25	BRAKES, AIR (ABS) FOR TRACTOR APPLICATION WITH GLAD-HANDS (Complete Package for use with diesel- for Series 970 through 1200 series trucks, but may be used on other size trucks based on availability): An under-hood air-compressor shall be installed to power the air brake system.

30	BED LINER, SPRAY-ON: Shall be elastomeric polyurethane. Bed liner shall be 100% solids (no VOC's, no solvents). Shall be applied at a thickness no less than 1/8" on walls and no less than 1/4" on floor and tailgate. Application will not inhibit access and use of factory tie downs. Durable, impact absorbing, abrasion resistant and skid resistant. Shall also be weather and corrosion resistant and shall not become brittle due to sun, rain, ice, or other environmental factors, at ambient temperatures of -20 degrees to 110 degrees Fahrenheit. Shall resist damage from grease, oil, gasoline and other chemicals. Shall be covered by limited lifetime warranty. Referenced Brand: Rhino Linings, TUFF STUFF© - man
33	CAB-TO-AXLE (C-A:102-108 inch effective), INCREASED/LONGER, for medium-duty and heavy duty trucks): Cab-to-Axle (C-A) will be 102 -108 inches.
34	CAB-TO-AXLE (C-A:120 inch effective) INCREASED/LONGER, (for medium-duty and heavy duty trucks): Cab-to-Axle (C-A) will be 120 inches.
35	CAB-TO-AXLE (C-A: 136-139 inches effective), INCREASED/LONGER, (for medium-duty and heavy duty trucks): Cab-to-Axle (C-A) will be 121-186 inches.
36	BATTERIES-Dual Cranking 730 CCA MIN
37	COLORS: Manufacturer's Standard Colors - shall be as specified by the ordering entity from manufacturer's standard colors available.
38	(DELETE) DAYLIGHT RUNNING LIGHTS : Option to delete the daytime running lights
44	EV-MULTIPURPOSE ELECTRIC VEHICLE: Stake back kit for short bed
45	DIFFERENTIAL, MAXIMUM TRACTION, LIMITED SLIP TYPE: The maximum traction type differential shall be Posi-traction, no-spin, or equal (N/A on front wheel drive vehicles or medium duty trucks)
48	ENGINE, HIGHER PERFORMANCE (HORSEPOWER/DISPLACEMENT) WHERE AVAILABLE: Provide the next higher Horsepower ILO and/or larger displacement over what is listed as the base vehicle in the table for the appropriate series.
51	PILOT MODEL
52	FOUR-WHEEL DRIVE: Four-wheel drive vehicles shall include automatic locking hubs and skid plates.
53	EV-MULTIPURPOSE ELECTRIC VEHICLE: Scuff guards for a four-seater.
54	EV-MULTIPURPOSE ELECTRIC VEHICLE: Scuff guards for a six-seater.
55	EV-MULTIPURPOSE ELECTRIC VEHICLE: Grab handle package for a four-seater.
56	EV-MULTIPURPOSE ELECTRIC VEHICLE: Grab handle package for a six-seater.
57	FUEL TANK, STEP TYPE: (65 GALLONS) FUEL TANK(S), AUXILIARY, CONVENTIONAL FUEL, DOT (FHA) - for Series 930 through 990 trucks only (See Options 57 and 58): Auxiliary fuel tank(s) shall be furnished in addition to the standard fuel tank(s) and shall be complete with in-cab fuel gauges. Tank(s) shall be securely mounted to the frame and shall not interfere with dump operation (where applicable) - See external running board requirements in Section C.8.b.8. NOTE: SHOP-BUILT TANKS ARE UNACCEPTABLE; ALL FUEL TANKS SHALL BE CHASSIS-FACTORY INSTALLED.
58	FUEL TANK, DUAL STEP TYPE: (70 GALLONS) FUEL TANK(S), AUXILIARY, CONVENTIONAL FUEL, DOT (FHA) - for Series 930 through 990 trucks only (See Options 57 and 58): Auxiliary fuel tank(s) shall be furnished in addition to the standard fuel tank(s) and shall be complete with in-cab fuel gauges. Tank(s) shall be securely mounted to the frame and shall not interfere with dump operation (where applicable) - See external running board requirements in Section C.8.b.8. NOTE: SHOP-BUILT TANKS ARE UNACCEPTABLE; ALL FUEL TANKS SHALL BE CHASSIS-FACTORY INSTALLED.
59	FUEL TANKS, INCREASED CAPACITY: The manufacturer shall furnish the largest fuel capacity available for the model offered. The fuel tank(s) furnished must meet or exceed requirements set forth in FMVSS No. 302-75. NOTE: Optional, increased capacity fuel tank(s) are not available on passenger cars and station wagons. They are also not available on certain models of light duty trucks and vans. Ordering this option will provide the largest capacity available (if any) furnished by the manufacturer.
61	GREASE LUBRICATION

63	GRILLE GUARD, HEAVY-DUTY, ROUND TUBE: A heavy-duty grille guard to protect headlamps and grille of a vehicle. This guard shall include: (1) Push Bar Pads (2) Made from 14 gauge (min) steel tubing (3) Bolted to the frame (Thread-forming bolts or screws are not acceptable) (4) Pre-treated for rust prevention prior to application of powder coated final finish.(Color specified by the ordering entity). (Ref: Section A.4.8 – General Requirements and Information).
66	HEADLINER, FULL LENGTH: For cargo vans, factory installed required where available
67	SEATS - ALL SEATS TO BE CLOTH, 40/20/40 FRONT SPLIT
68	SEATS - DRIVER'S SEAT TO BE POWER ADJUSTABLE
69	LIGHTING - LAMP INOPERATIVE DOME,
70	FLOOR MATS, FRONT AND REAR, (Only available in vehicles with carpeted floors)
73	LIGHTING-LIGHT BAR- LAW ENFORCEMENT- Pursuit police vehicle LED overhead light bar. The light bar shall contain: four corner linear LED lamps; Two front-facing directional linear lamps consisting of one red and one blue; Four rear-facing duplex linear lamps consisting of two red and two blue positioned over a six lamp linear LED traffic advisor; Six halogen lamps consisting of left and right alley lights, two takedown lights and two flashing and/or constant-on take down lights. Example: Whelen FL8TX2 or equal. Agency must specify 49 ¾ inch or 55 inch length light bar.
74	MIRRORS, REARVIEW, EXTERIOR, LOW MOUNT, TRAILER TOW/CAMPER TYPE, LEFT AND RIGHT SIDES (where available): Manufacturer's low mount (below eye level) wide view-type mirror, which shall meet or exceed the requirements of FMVSS No. 111 and shall have a face size approximately 6 inch by 9 inch. Extension arms are required on chassis-cab unit.
75	MIRRORS, REARVIEW, EXTERIOR, POWER, LOW MOUNT TYPE, LEFT AND RIGHT SIDES (where available). Manufacturer's low mount (below eye level) wide view-type mirror, which shall meet or exceed the requirements of FMVSS No. 111 and shall have a face size approximately 6 inch by 9 inch. Extension arms are required on chassis-cab unit
77	MIRRORS HEATED, REARVIEW, EXTERIOR: Power, Body Color (if available).
78	TRUNK RELEASE TO BE IGNITION FED
81	POWER TAKE-OFF (PTO), Hydraulic (when available), SINGLE SPEED, ONE GEAR (NO REVERSE): PTO shall have a shaft output speed (RPM) of minimum 50 percent and a maximum of 80 percent of engine speed (RPM) for truck dump body operation. The output shaft shall have an RPM speed of approximately 90 percent on diesel engines. The PTO shall be furnished complete with cab controls (including a dash-mounted light to indicate when PTO is in operation) and shift linkage. The cut-out for the cab controls shall be held to the absolute minimum necessary for installation and operation and shall be sealed watertight. All PTO assemblies shall be repairable type with replaceable bearings, seals, gaskets, and other parts
83	POWER TAKE-OFF (PTO), SINGLE SPEED, HYDRAULIC (when available), TWO GEAR (ONE FORWARD AND ONE REVERSE): PTO shall have a shaft output speed (RPM) of minimum 50 percent a maximum of 80 percent of engine speed (RPM) for truck operation. The output shaft shall have an RPM speed of approximately 90 percent of diesel engines. The PTO shall be furnished complete with cab controls (including a dash-mounted light to indicate when PTO is in operation) and shift linkage. The cut out for the cab controls shall be held to the absolute minimum necessary for installation and operation and shall be sealed watertight. All PTO assemblies shall be repairable type with replaceable bearings, seals, gaskets, and other parts
87	DELETE - POWER PACKAGE DELETE OPTION: This Option should be recorded on the purchase order if buying entity wishes to delete Power package, to include power windows, power locks, power mirrors, cruise control, and tilt steering wheel.
88	HEADACHE RACK STEEL, (for light-duty pickup trucks only): A light-duty headache rack shall be provided to protect the rear window. It shall be constructed of a frame of minimum 1/2 inch by 3 inch steel flat bar, and a window covering of 16-gauge horizontal louvers, evenly spaced at approximately 2 inch intervals, adequately braced with gussets to insure stability and strength. The mounting shall be accomplished by the use of the most appropriate size bolts with nuts and flat washers to insure safe and secure mounting. It shall be mounted to facilitate cleaning of the rear window, and so designed to provide an unobstructed visibility of the center-mounted, rear window of cab-mounted stop

89	HEADACHE RACK, NO LOUVER WINDOW GRILL (for light-duty pickup trucks only): End plates are to be constructed at a minimum of ½" x 3" cold rolled steel flatbar. Upper and lower crossbars are to a minimum of 2" x 2" square tubing with minimum .065 wall. Mounting brackets are constructed of a minimum of 3/16" steel. A light-duty headache rack shall be provided to protect the rear window. The mounting shall be accomplished by the use of the most appropriate size bolts with nuts and flat washers to insure safe and secure mounting. Headache rack shall be treated in a chemical bath or dip, or similarly treated for rust prevention prior to application of the final finish.
91	DELETE - DELETE GM ON-STAR (GM CODE UE0)
93	<p>RADIO FREQUENCY INTERFERENCE (RFI): <u>This option will be required on all vehicles by MY2012</u></p> <p><i>Radio frequency (RFI) interference suppression shall be incorporated so as to provide RF interference immunity to and from land mobile radio transceivers operating in the following bands: Low band (30 to 50 MHz), high band (140 to 174 MHz), UHF band (440 to 512 MHz) and the 700/800/900 MHz band (700 to 975 MHz).</i></p> <p><i>Typical land mobile radio transceivers will utilize a 3dB gain roof mount antenna with up to a 125 watt RF power output. Antennas will be mounted on the roof, front fender, and/or rear fender.</i></p> <p><i>The RF immunity requirement shall apply to all vendor supplied equipment and components thereof.</i></p> <p>THESE VEHICLES WILL BE SUBJECT TO TESTING UPON DELIVERY IN ACCORDANCE WITH THE TESTS DEFINED BELOW. Dealers must provide OEM's RFI ordering code designation with their bid response.</p> <p><i><u>RADIO TRANSCIVER IMMUNITY:</u> The vehicle electronic equipment shall not be adversely affected in operation, safety, or control by radio frequency (RF) energy. For Land Mobile Radio Transceiver Interference:</i></p> <p><i>All vehicle electronic circuits including, but not limited to, ignition, AM/FM radio receivers, computers, emission controls, fuel pumps, wiper motors, alternative fuel electronic components, air bag systems, and ABS controller, shall be designed to suppress, bypass, or otherwise prevent interference from affecting the radio transceiver. In accordance with the tests defined below, vendor will be accessed any and all charges associated with the testing of vehicles, which fail to meet RFI requirements. TEST METHOD/TEST LIMIT: Texas Department of Transportation (TxDOT) Radio Frequency (RF) Radio Interference "SINAD" Test, Texas Test Method TEX 1160-U, Latest Revision.</i></p> <p><i><u>VEHICLE:</u> The vehicle electronic equipment including, but not limited to, ignition, AM/FM radio receivers, computers, emission controls, fuel pumps, wiper motors, alternative fuel electronic components, air bag systems, and ABS controller, shall not be adversely affected in operation, safety, or control by radio frequency (RF) energy generated and radiated by the transmitter portion of installed transceivers (up to 120 watt output). In accordance with the tests defined below, vendor will be accessed any and all charges associated with the testing of vehicles which fail to meet RFI requirements. TEST METHOD/TEST LIMIT: Society of Automobile Engineers (SAE) Surface Vehicle Standard Vehicle Electromagnetic Immunity-On-Board Transmitter Simulation-J551/12, Latest Revision.</i></p>
94	PACKAGE-CRUISE CONTROL AND TILT STEERING WHEEL PACKAGE: CHASSIS MANUFACTURER'S STANDARD
95	SEATS, 40/60 or 40/20/40 SPLIT BENCH SEAT (for Series 930 through 1200).
96	SEATS, PASSENGER, HIGH-BACK AIR RIDE:(for Series 970 through 1200)–Same as driver's seat.
98	(DELETE)-REAR SEATS DELETE (for extended cab pickups only). * Note: May Not be available from certain manufacturers)
99	SEATS-REAR SEATS, THIRD ROW (for utility vehicles, where available): To increase seating capacity
100	(DELETE)-REAR SEATS DELETE OPTION: (Series 760C full size extended passenger VAN
101	EXTRA REMOTE KEYLESS ENTRY DEVICES: With a minimum of 3 fobs/keyless entry devices furnished. (In addition to standard number of devices provided by manufacturer)

102	LIGHTING-LIGHT BAR LED MULTI-DIRECTIONAL, AMBER– Full width LED Multi-directional, Amber Light Bar shall be LED technology and consist of the following: One extruded aluminum I-beam light bar, eight 400 series Linear 8 LEDs and one pair 400 series halogen rear work lights. Light bar shall not include the wig-wag feature. Referenced brand:Whelen model FL8AAA (Whelen number or TxDOT – FLTXDOT1).
103	LIGHTING-LIGHT BAR LED MULTI-DIRECTIONAL AMBER/BLUE – full width LED multi-directional, Amber/Blue Light bar shall be LED technology and consist of the following: One extruded aluminum I- beam light bar, four amber 400 series Linear 8 LEDs and one pair 400 series halogen rear work lights. Light bar shall not include the wig-wag feature. Whelen model FL8AAA (TxDOT item #FLTXDOT1).
104	LIGHTING-LIGHT BAR LED LOW PROFILE, AMBER – width low profile LED multi-directional, Amber Light bar shall be LED technology and consist of the following: One extruded aluminum I – beam light bar, eight 400 series Linear 8 LEDs. Light bar shall not include the wig-wag feature. EXAMPLE: Whelen model FL8AAA (Whelen number for TxDOT - #FLTXDOT1).
105	LIGHTING-LIGHT BAR LED LOW PROFILE AMBER/BLUE– full width low profile LED multi-directional, Amber/Blue Light bar shall be LED technology and consist of the following: One extruded aluminum I – beam light bar, four amber 400 series Linear 8 LEDs and four blue (to be located on the driver side when mounted) 400 series Linear 8 LEDs. Light bar shall not include the wig-wag feature. EXAMPLE: Whelen model FL8AAA (TxDOT item #SLTXDOT3).
106	LIGHTING-TRAFFIC ADVISOR– LED Multi-Directional AMBER Traffic Advisor shall be LED technology and consist of the following: eight amber TIER 6 LED lights. Referenced brand: Whelen #TAM85.
108	SPACE SAVER TIRE: Spare wheel and tire: space saver type, mounted. (OEM ONLY) Manufacturer supplied aftermarket not acceptable.
109	LIGHTING-SPOTLAMPS (Available for LE Series vehicles): - Left Hand, Independently Fused . Factory Installed
110	LIGHTING-SPOTLAMPS (Factory Installed): Left and Right Hand, Independently Fused. (Available for LE Series vehicles)
112	LIGHTING - SPOT LAMP (LED BULB) , PERMANENT MOUNT, DRIVER SIDE ONLY , must be factory installed
113	LIGHTING - SPOT LAMP (LED BULB) , PERMANENT MOUNT, LEFT AND RIGHT HAND SIDES, must be factory installed
116	TIRES, ALL TERRAIN: To provide the vehicle with All Terrain Tires in the largest size for the application as available. (4 x 4 only)
117	TOOL BOX, SINGLE LID, HEAVY-DUTY. ALUMINUM, SMOOTH OR DIAMOND TREAD, STANDARD APPLICATION: Dimensions shall be approximately 60 inches long (overall length, approximately 72 inches) by 17.5 inches deep, 20.0 inches wide. (Series 800s). Example: Weather Guard Model No. R-127, Rawson-Koenig Model No. C63A or equal. Substitutes must be approved by the ordering agency.
118	TOOL BOX, DUAL LID, STEEL, CROSSOVER TYPE, STANDARD APPLICATION: 118. TOOL BOX, STEEL, CROSSOVER TYPE, STANDARD APPLICATION: Dimensions shall be approximately 60 inches long (overall length 70 inches) by 16-1/2 inches deep, 20 inches wide. Example: Rawson-Koenig Model No. ST-63, Weather Guard Model No. R-125, or equal. Substitutes must be approved by the ordering agency.
119	TOOL BOX, STEEL, CROSSOVER TYPE, SPECIAL APPLICATION, DEEP: Used mainly by engineers and surveyors. Dimensions shall be approximately 60 inches long (overall length 70 inches) by 25-1/2 inches deep, 30 inches wide. NOTE: Will not fit short bed pickups. Example: Rawson-Koenig Model No. ST-63WD, Weather Guard Model No. R-115 with E Dimension of 18 inches, or equal. Substitutes must be approved by the ordering agency.
120	TOOL BOX, SINGLE LID, HEAVY-DUTY. ALUMINUM, SMOOTH OR DIAMOND TREAD, ALL PURPOSE CHEST TYPE, STANDARD APPLICATION: Dimensions shall be approximately 58 inches long (overall length 61 inches) by 19 inches deep, 23 inches wide. Example: Weather Guard Model No. 664, Rawson-Koenig Model No. M60FW-1NMA or equal. Substitutes must be approved by the ordering agency.

121	TOOL BOX, SINGLE LID, HEAVY-DUTY. ALUMINUM, SMOOTH OR DIAMOND TREAD, ALL PURPOSE CHEST TYPE, APPLICATION FULL SIZE WIDE BED TRUCKS: Dimensions shall be approximately 48 inches long (overall length 61 inches) by 19 inches deep, 23 inches wide. Example: Rawson-Koenig Model No. M60U-1NMA or equal. Substitutes must be approved by the ordering agency.
122	TOOL BOX, SINGLE LID, HEAVY-DUTY, STEEL, SMOOTH, CHEST TYPE, STANDARD APPLICATION (Series 842 – 888): Dimensions shall be approximately 58 inches long (overall length, approximately 58 inches) by 17.5 inches deep, 20.0 inches wide. Mounted to the floor of the body. Example: Rawson-Koenig Model No. M58U-1NM or equal. Substitutes must be approved by the ordering agency.
123	TOOL BOX, DUAL LID, HEAVY-DUTY, STEEL, SMOOTH, CHEST TYPE, STANDARD APPLICATION (Series 842 – 888): Dimensions shall be approximately 60 inches long (overall length, approximately 58 inches) by 18.5 inches deep, 20.0 inches wide. Mounted to the floor of the body. Example: Rowson-Koenig Model No. M60U-2NM or equal. Substitutes must be approved by the ordering agency.
124	TOW DEVICES: 2 front mounted tow hooks (loops are acceptable) or 1 front-mounted heavy-duty tow pin, with minimum horizontal pull capacity of 28,000 pounds shall be installed by the truck chassis manufacturer.
125	TRAILER, IN-CAB ELECTRIC BRAKE CONTROLLER: Cab control unit shall be furnished and installed, for applying trailer brakes both simultaneously and independent of the brakes of the towing vehicle. Approved Brand – Cequent Towing. Factory installed, if available.
128	TRANSMISSION, MANUAL, 5-SPEED (Series 842 – 888): Manufacturer's standard for series specified.
129	TRANSMISSION, MANUAL, 6-SPEED: Manufacturer's standard for series specified.
130	TRANSMISSION, MANUAL, 7-SPEED (Series 970 – 1200): Manufacturer's standard for series specified.
131	TRAILER TOWING PACKAGE (available for LE vehicle, Special Service Package: HEAVY-DUTY TRAILER TOW PACKAGE: Class IV hitch receiver, 4- and 7- pin connectors, heavy-duty auxiliary transmission oil cooler and radiator, and electronic brake wiring kit.
133	PACKAGE-TRAILER TOWING PACKAGE (light and medium duty trucks, utility vehicles and vans). All items are to be heaviest available OEM equipment for and installed by manufacturer. Shall include, but not be limited to, the following: (1) Auto Transmission oil cooler (2) heavy-duty radiator (3) Trailer wiring harness: A 7-Pin, RV style, Flat (spade) electrical connector to connect trailer wiring circuitry to the vehicle wiring harness. Class III (frame mounted), Class IV (frame mounted) or Class V (frame mounted or may be after frame mounted) Receiver Hitch. EXAMPLE: Grote 82-1058 or Equal.
134	CLASS V RECEIVER HITCH and 7-Pin RV style, Flat (spade) electrical connector plug, (Example : Grote 82-1058 or Equal)
137	WHEELCHAIR LIFT: Conversion of a full size van, or para-transit van body equipped with a raised roof, wheelchair lift, provisions for stand-up entry and wheelchair passenger securement for one wheelchair position. Note; this option reduces ambulatory passenger capacity . Refer to Section I Special Equipment-Para-transit Vehicles
138	WHEELCHAIR LIFT: Conversion of a full size van, or a para-transit van body equipped with a raised roof, wheelchair lift, provisions for stand-up entry and wheelchair passenger securement for two-wheelchair positions. Note; This option reduces ambulatory passenger capacity. Refer to Section I Special Equipment-Para-transit Vehicles
140	WINDOW TINT (Limited Application on non-passenger vehicles): Maximum available tint- factory-installed. Tinting shall meet Texas Department of Public Safety regulations. Note: Tint to be installed at the factory and not at the dealership.
141	PARA-TRANSIT BODY: 8 ADULTS, 2 WHEELCHAIRS -Conversion of a full size van equipped with a raised roof to a para-transit vehicle with provisions for stand-up entry, seating for eight (8) adult ambulatory passengers and two wheelchair positions along with the wheelchair lift and tie downs. Wheelbase upgrade (if required) to be included in the price of the body. Approximate Payload Allowance, 2,550 pounds. Overall Length, 240 inches. Refer to Section I Special Equipment-Para-transit Vehicles

142	PARA-TRANSIT BODY:12 ADULTS, 2 WHEELCHAIRS - Conversion of a full size van equipped with a raised roof to a wide body para-transit vehicle with provision for stand-up entry, seating for twelve (12) adult ambulatory passengers and two wheelchair positions along with the wheelchair lift and tie downs. Wheelbase upgrade (if required) to be included in the price of the body. Approximate Payload Allowance, 2,550 pounds. Overall Length, 264 inches. Refer to Special Equipment-Para-transit Vehicles
143	PARA-TRANSIT BODY: 16 ADULTS, 2 WHEELCHAIRS. Conversion of a full size van equipped with a raised roof to a wide body para-transit vehicle with provision for stand-up entry, seating for sixteen (16) adult ambulatory passengers and two wheelchair positions along with the wheelchair lift and tie downs. Wheelbase upgrade (if required) to be included in the price of the body. Refer to Section I Special Equipment-Para-transit Vehicles
144	WHEELCHAIR VEHICLE FIXED ROUTE OPTIONS TO INCLUDE DESTINATION SIGNS, PUBLIC INFORMATION SYSTEM AND STOP REQUEST CHIME: DESTINATION SIGNS: Changeable destination, twelve (12) volt motor driven movable mechanism signs shall be furnished on the curb side above the passenger window and at the front of the vehicle above the windshield. Front sign curtain to be approximately 36 inches wide. Sign curtains to be illuminated. Front bulkhead or sign box shall have door to open for viewing sign curtain position. Door shall be positioned for ease of driver operation. Sign shall comply with ADA requirements. Example: Trans Sign, Model D-3110, or equal. PUBLIC INFORMATION SYSTEM: Driver activated PIS. Refer to Section I Special Equipment-Para-transit Vehicles
146	WIRING, ACCESSORY, POWER SUPPLY (Limited Availability): Shall provide a minimum 12 volt power supply from the battery with 2 separate 30 amp serviceable fused circuits. Wiring shall be routed to the cab, under the dashboard. Sufficient wiring shall be provided to permit in-dash mounting of ancillary equipment controls. Each secondary circuit shall be fused for both positive and ground to protect electrical accessories. Shall provide either direct battery power or operation through the ignition system. Hook wire shall be provided on or under the dash. This option shall not compromise any requirements of RFI, identified in Option No. 93, when ordered.
147	WIRING, AUXILIARY FOR CAB-MOUNTED LIGHTING (Limited availability): A dash-mounted switch and wiring to the roof of the cab shall be provided for installation and connection of a cab roof mounted double flash strobe warning light or other similar device. System shall supply a minimum 12 volt or 24 volt D.C. power, through an independently fused connection, as required to operate a double strobe warning light. All wiring shall be housed within the cab and ends shall be capped. Requires: 8 gauge wire, 35 amp manual re-set circuit breaker, and 40 amp switch. Instructions for wiring access through the cab roof shall be furnished. This option shall not compromise any requirements of RFI,
151	GLASS IN ALL DOORS: For cargo vans, glass must be factory installed;
153	GLASS IN EACH DOOR AND SIDE PANEL (Same as Window Van): For cargo van
157	PLATFORM DUMP BODY, WOODEN FLOOR (See Section F.2.)
158	STATIONARY PLATFORM BODY, WOODEN FLOOR (See Section G.)
159	STATIONARY PLATFORM BODY, STEEL FLOOR (See Section G.)
160	STATIONARY STAKE BODY, WOODEN FLOOR (See Section G.)
161	STAKE DUMP BODY, WOODEN FLOOR (See Section F.3.)
162	PLATFORM DUMP BODY, STEEL FLOOR (See Section F.2.)
163	UTILITY BODY, STANDARD (See Section H.) For Light Duty Chassis
164	UTILITY BODY-OPTION NO. 163 WITH TELESCOPING TOP AND TAILGATE ENCLOSURE
165	UTILITY BODY-OPTION NO. 163 WITH TOP OPENING SMALL PARTS TRAY ON BOTH COMPARTMENT
166	UTILITY BODY-OPTION NO. 163 WITH THROUGH COMPARTMENT AND REAR ACCESS DOOR
167	STATIONARY STAKE BODY, STEEL FLOOR (See Section G.)
168	STAKE DUMP BODY, STEEL FLOOR (See Section F.3.)
169	UTILITY BODY, STANDARD (See Section H.) For Medium Duty Chassis
170	UTILITY BODY-OPTION NO. 169 WITH TELESCOPING TOP AND TAILGATE ENCLOSURE
171	UTILITY BODY-OPTION NO. 169 WITH TOP OPENING SMALL PARTS TRAY ON BOTH COMPARTMENT
172	UTILITY BODY-OPTION NO. 169 WITH THROUGH COMPARTMENT AND REAR ACCESS DOOR
173	STATIONARY PLATFORM BODY, WOODEN FLOOR (See Section G.)
174	STATIONARY STAKE BODY, WOODEN FLOOR (See Section G.)

175	STATIONARY STAKE BODY, STEEL FLOOR (See Section G.)
176	STAKE DUMP BODY, WOODEN FLOOR (See Section F.3.)
177	PLATFORM DUMP BODY, STEEL FLOOR (See Section F.2.)
178	CONTRACTOR'S DUMP BODY, 96 INCH, 2 CUBIC YARD CAPACITY (See Section F)
179	CONTRACTOR'S DUMP BODY, 120 INCH, 3 CUBIC YARD CAPACITY (See Section F)
180	CONTRACTOR'S DUMP BODY, 96 INCH, 4 CUBIC YARD CAPACITY (See Section F)
181	CONTRACTOR'S DUMP BODY, 120 INCH, 4 CUBIC YARD CAPACITY (See Section F)
182	CONTRACTOR'S DUMP BODY, 96 INCH, 5 CUBIC YARD CAPACITY (See Section F)
183	CONTRACTOR'S DUMP BODY, 120 INCH, 5 CUBIC YARD CAPACITY (See Section F)
185	STATIONARY PLATFORM BODY, STEEL FLOOR (See Section G and J)
186	STAKE DUMP BODY, STEEL FLOOR (See Section F.3.)
187	<p>6 CUBIC YARD DUMP TRUCK CHASSIS CONFIGURATION (DT-1)</p> <p><u>STATEMENT OF INTENDED USE:</u> These chassis will be up-fitted by state forces for use in 6 cubic yard dump truck applications, and shall be certifiable as straight trucks.</p> <p><u>Special Chassis Requirements:</u></p> <p>Verify wording to add to dimension from back of cab to center of rear axle – Confirm final configuration with ordering entity – rear cross members no closer than 14 inches.</p> <p>Front Frame Extensions optional on the 970D - 990D, base and DT – 1 model</p> <p>Effective CA (dimension from back of cab to center of rear axle) shall be 84 inches. Dimension from back of cab to end of frame shall be minimum 124 inches with the rear cross member located no more than inches 120 inches from back of cab.</p> <p>No equipment shall be bolted inside the frame from a point from immediately behind the cab and extending 9 inches toward the rear of the unit. No equipment, such as air actuators, proportioning valves, etc. shall extend from the exterior rear of the cab. All valves, actuators, etc. shall be mounted inside or under the cab.</p> <p>A clean frame rail (inside and outside) shall be provided on the passenger's side from the back of the cab to the front of the rear spring hanger. A clean frame rail shall also be provided from immediately behind the rear spring hanger to the end of the frame on both frame rails.</p> <p>The frame shall be compatible for installation of a NTEA Class 40 arm type hoist.</p> <p><u>EXAMPLE:</u> Heil Model No. 1721.</p> <p>Air lines and wiring/cables shall be routed along the frame and mounted at the rear using bulkhead fittings, through a steel mounting plate.</p> <p>Synthetic lubricants and extended life coolants shall be provided where available. Long life (Gates Blue Stripe or entity Ordering Entity Approved Equal) radiator hoses and silicone water lines shall also be provided.</p> <p>Units shall be equipped with the following, to facilitate entity mounting of ancillary equipment integral in the vehicle electrical system shall be installed by the OEM as either standard or optional equipment: 4 dash mounted toggle (on/off) switches with power source to each switch. Power to switches shall be supplied from an easily accessible power strip or junction box. Each terminal on the power strip or junction box shall be supplied with power and each circuit protected by a minimum 20 amp manual or automatic reset circuit breaker(s) - SAE type III with trip indicators. Installation shall be that of and/or equal to OEM quality.</p> <p>Tire tread shall be highway type, identical on front and rear axles. <u>EXAMPLE:</u> Goodyear G149, Michelin XZE, or entity Ordering Entity Approved Equal. Vendor shall provide tire make, model, and performance information for entity approval, prior to vehicle order. Wheels shall be HUB piloted, 10-hole disc type.</p> <p>OPTIONS: <u>Each unit shall be equipped with the following options and special equipment. The price for the following options and equipment shall be included in the DT-1 and DT-2 option prices:</u> No. 16 - Alternator, 160 amp minimum</p>

	<p>No. 37 - Color, manufacturer's standard white No. 57 - Fuel Tank, Center Step Type, shall not extend past rear of cab more than inches 3 inches No. 93 - Radio Frequency Interference (RFI) Package No. 96 - Seat, Passenger, High Back Air Ride No. 124 - Tow Devices No. 258 - Vinyl Seats NOTE: Hydraulic pump and PTO will be furnished and installed by entity after delivery.</p> <p><u>Documents:</u> Owner's manual, line setting ticket (listing the component of the chassis), spare keys, and warranty papers shall be provided for each chassis. All delivery documents shall list the entity's requisition number for reference. Documents, including one additional owner's manual for office use, shall be delivered to entity specified location. Manufacturer's Statement of Origin (MSO) shall be provided to ordering entity. Please contact ordering entity prior to filling out the MSO and Form 130U.</p> <p><u>Deliveries:</u> Units shall be delivered completely assembled, serviced, adjusted, and all equipment including standard and optional equipment shall be installed and the units shall be ready for continuous operation. On-site (F.O.B. point) dealer servicing or other type work will not be permitted. Units that have low fluid levels or other areas requiring service will not be accepted. Units not meeting specification requirements may not be stored at the Texas Department of Criminal Justice (TDCJ).</p> <p>Deliveries of chassis ordered F.O.B. TDCJ facilities shall be made only between the hours of 8:00 a.m. and 12:00 p.m. (noon) Monday through Friday, excluding state and federal holidays. TxDOT Inspector (903-928-2217 extension 326) shall be notified 24 hours in advance of any deliveries to the TDCJ facilities.</p> <p><u>Entity Inspection:</u> Each unit received will be thoroughly inspected to insure strict purchase specification compliance. Units not fully meeting specification requirements will be rejected at the vendor's expense. Acceptance inspection of units delivered will not take more than 5 working days, weather permitting.</p> <p>Vendor shall notify entity contact at least 3 working days prior to making initial delivery from each purchase order. Upon such notification, the entity, may, at its option, make a pre-delivery inspection and road test at the current location of the vehicles, (within the state of Texas). Vehicles that fail to pass the inspection will not be accepted until necessary repairs or corrections are made.</p> <p><u>Warranty:</u> Units shall be warranted against defects in materials and workmanship for a period of not less than 12 months <u>after the vehicle has been placed into service</u> and shall cover 100 percent parts and labor for the unit. Should manufacturer's standard warranty exceed these requirements, then the manufacturer's standard warranty shall be in effect.</p> <p>A delayed warranty in-service start date will be requested and the paperwork necessary to obtain such warranty shall be provided and delivered with each chassis.</p> <p><u>For units delivered to TDCJ, vendor shall be responsible for pick-up and delivery of chassis, which require servicing/repair while the units are located at TDCJ facilities, within 2 working days after notification from either ordering entity and/or TDCJ.</u></p>
189	<p>6 CUBIC YARD DUMP TRUCK CHASSIS, SNOW PLOW CONFIGURATION (DT-2)</p> <p><u>Statement of Intended Use:</u> These chassis will be up-fitted by state forces for use in 6 cubic yard dump truck and snow plowing applications. Units shall be certifiable as straight trucks.</p> <p>Chassis shall meet all requirements of TxDOT Configuration DT-1 (Option No. 187) and to include the following additional equipment:</p> <p>Option No.19 -12,000 pound front axle, with corresponding increase in vehicle front GAWR. GVWR shall be minimum 33,000 pounds.</p> <p>24" Front Frame Extensions required on the 990D, DT – 2 model</p> <p>Electrically heated mirrors with dash mounted controls.</p> <p>Stationary grille - shall maintain a minimum 70 degree forward tilt.</p>

	<p>Frame shall be rated at a minimum 2,134,800 RBM</p> <p>Fender mounted turn signals.</p> <p>110 volt engine block heater.</p> <p>Engine access panels and engine intake snow valve: Required from the OEM as either standard or optional equipment.</p>
190	PLATFORM DUMP BODY, WOODEN FLOOR (See Section F.2.)
191	<p>LIFT AND DUMP TAILGATE :</p> <p>Electric/ hydraulic tailgate shall provide lift and dump functions for use on trucks with up to a 15,000 lb. GVWR. Shall be installed and ready for operation.</p> <p>1. DESIGN: The lift and dump tailgate shall:</p> <p>1.1 Lift a minimum 1,300 pounds from ground level to flush with the truck bed.</p> <p>1.2 Close flush against lift body and act as a tailgate.</p> <p>1.3 Not extend more than six inches (152 mm) above truck bed when closed.</p> <p>1.4 Be secured in stowed position with a safety latch.</p> <p>1.5 Be constructed of heavy-duty diamond tread-plate steel. Platform depth shall be a minimum 26 inches, including an angled loading ramp for use with freight dollies.</p> <p>1.6 Be constructed to withstand off-center loads and to prevent twist and flex of platform.</p> <p>1.7 Be equipped with fittings for lubrication of all major friction or wear points.</p> <p>1.8 Include light kit(s) if lift will obstruct the truck's original rear lights and reflectors.</p> <p>2. POWER:</p> <p>2.1 Shall be powered by the vehicle's electrical system through a fused connection.</p> <p>2.2 Shall provide power up, power down, and manual tailgate closure.</p> <p>2.3 Built-in relief valve shall be provided to protect against overload.</p> <p>2.4 Installed power unit shall be protected from weather.</p> <p>3. CONTROLS:</p> <p>3.1 Control(s) for raising, lowering, stopping, and holding the platform at any position shall be furnished at the rear of the truck bed.</p> <p>3.2 Shall return to neutral or off position automatically when released.</p> <p>3.3 Installed controls shall be protected from weather.</p> <p>3.4 Shall be readily accessible for servicing and maintenance.</p> <p>4. SAFETY PLAQUES OR DECALS:</p> <p>4.1 Product safety plaques or decals shall be furnished and affixed at the operator's station and at any hazardous area. The safety plaques or decals shall describe the nature of the hazard, level of hazard seriousness, how to avoid the hazard, and the consequence of human interaction with the hazard. Permanent plaques are preferred to decals. Type, size, and location of product safety plaques or decals shall be in accordance with the current ANSI Z535.4.</p> <p>PAINTING: The unit shall be painted an approved manufacturer's standard lead free white color, except for rubber, plastic, and metallic accessories or fixtures constructed of rust-resistant or plated material not normally painted.</p>
192	<p>ELECTRIC/HYDRAULIC 3,200 LB. CRANE</p> <p>Electric/hydraulic crane with a minimum 3,200 lb. lifting capacity at 3 ft load radius and a moment rating not less than 10,000 lb/ft, for mounting on trucks with a minimum 10,000 lb. GVWR. Crane shall provide power elevation and rotation of the boom. Crane shall meet or exceed the current OSHA 1910.180 and ANSI B30.5.</p> <p>1. LIFTING CAPACITIES: The unit shall be powered up and down through 360-degree continuous rotation. The unit shall have the following lift capacities:</p> <p>1.1 At a 3 ft radius, the crane shall have a minimum capacity of 3,200 pounds., double lined, fully retracted.</p> <p>1.2 Shall be rated at a minimum of 900 pounds. with the boom horizontal at a radius of 15 ft.</p> <p>2. BOOM: Boom shall hydraulically extend. Retracted length of the boom shall be a maximum 8 ft. Extended length of the boom shall be a minimum of 15 ft. Boom shall be hydraulically powered up and down. Boom shall rotate hydraulically, left and right, through a 360 degree continuous rotation. Hydraulic system shall be self-contained and powered by a 12 volt vehicle electrical system. The unit shall be equipped with a boom support rest and retaining strap(s) to hold and retain the boom during transport.</p>

	<p>3. <u>WINCH</u>: The winch shall lift a minimum of 3,200 pounds, using a double line pull. The winch shall be worm gear or planetary gear driven with the appropriate reduction. Shall be equipped with self-locking worm gears or a mechanical load apportioning brake. Solenoid activated (applied) brakes are not acceptable. Cable drum shall be complete with a minimum of 62 ft of 7/32-inch galvanized aviation type cable. Cable shall be minimum 5,600 lb breaking strength. Cable shall have a swagged-on eye. Eye shall be equipped with a swivel type traveling block, connected to the eye by means of a safety hook. Traveling block assembly shall be equipped with a minimum 1.65 ton capacity lifting hook. Lifting hook shall be equipped with a spring loaded safety latch. Load line shall be power up and down.</p> <p>4. <u>MOTOR</u>: The winch shall be powered by a minimum 1.8 horsepower, 12 volt DC operated, reversible electric motor. Horsepower shall be sufficient for routine operation at rated capacity. A minimum of 24 ft of #1 battery cable with grommets, frame clips, high-current plug-in connector for the unit, and a terminal connector for the 12 volt vehicle battery shall be furnished.</p> <p>5. <u>CONTROLS</u>: The operation of the unit shall be by a hand-held remote pendent type control, complete with minimum 18 ft. industrial grade extension cord and plug-in connector. All remote controlled relays necessary for operation shall be provided.</p> <p>6. <u>LOAD SENSOR</u>: A load sensing device meeting OSHA requirements shall be furnished to prevent overloading. The sensor shall stop winch up, boom extension, and boom down operations, but shall allow power rotation, and hoist down operation.</p> <p>7. <u>ANTI-TWO BLOCK</u>: The unit shall be equipped with a boom-tip-mounted anti-two block device which shall prohibit the traveling block or hook assembly from coming into contact with the boom.</p> <p>8. <u>OUTRIGGER(S)</u>: The unit shall have crane manufacturer-recommended hydraulic or manual slide-out, pin and crank down outrigger(s) which meet all applicable ANSI standards. The outrigger(s) shall be equipped with minimum 6 inch by 8 inch foot pad(s). JACK LEGS ARE NOT PERMITTED.</p> <p>9. <u>BASE PLATE</u>: Shall be constructed of steel plate a minimum of 5/8 inch thick. The rectangular dimensions of the base plate shall be approximately 14 inches by 14 inches, with a range of tolerance of ± 2 inches.</p> <p>10. <u>MOUNTING</u>: Crane shall be mounted in accordance with the crane manufacturer's instructions. When mounted on a service, the service body must be factory reinforced as an OEM upgrade by the original manufacture of the body and should be rated to the total foot pounds of the crane installed. No aftermarket or shop fabricated reinforcements are acceptable.</p> <p>11. <u>LOAD CAPACITY CHART</u>: A permanent load capacity chart with gravity activated boom angle indicator shall be located near the operator's position, easily visible to the operator. The load capacity chart shall show rated load capacities at various radii resulting from different boom angles and lengths.</p> <p>12. <u>SAFETY PLAQUES OR DECALS</u>: Safety plaques or decals shall be furnished and affixed at any hazardous area. The safety plaques or decals shall describe the nature of the hazard, level of hazard seriousness, how to avoid the hazard, and the consequence of human interaction with the hazard. Permanent plaques are preferred to decals. Type, size, and location of product safety plaques or decals shall be in accordance with the current ANSI Z535.4.</p> <p>13. <u>PAINTING</u>: The unit shall be painted an approved manufacturer's standard lead free white color, except for rubber, plastic, and metallic accessories or fixtures constructed of rust-resistant or plated material not normally painted.</p> <p>5. <u>MANUAL(S)</u>: Manual(s) containing illustrated parts list(s) and operating and service instructions for the crane shall be delivered with each</p>
195	DISABLE-Rear Doors lock/handles inoperable at factory.
196	(DELETE)-Rear Window Switch Delete (include rear power window switches operable by driver)
198	OUTRIGGERS (S) TO THE ELECTRIC/HYDRAULIC 3,200 LB. CRANE (OPTION 192): Single Outrigger – The unit shall have crane manufacturer-recommended hydraulic or manual slide-out, pin and crank down outrigger(s) which meet all applicable ANSI standards. The Outrigger(s) shall be equipped with minimum 6 inch by 8 inch foot pad (s).

199	OUTRIGGERS (S) TO THE ELECTRIC/HYDRAULIC 4,000 LB. CRANE (OPTION 204): Dual Outrigger Assemblies – The unit shall have crane manufacturer-recommended hydraulic or manual slide-out, pin and crank down outrigger(s) which meet all applicable ANSI standards. The outrigger(s) shall be equipped with minimum 6 inch by 8 inch foot pad(s).
200	BODY, STATIONARY STAKE BODY, WOODEN FLOOR (See Section F and G of this specification)
201	DOORS-SLIDING SIDE DOOR (for Cargo and Passenger Vans)
202	DOORS- SWING –OUT Doors: Drivers side swing-out doors. for Cargo Vans)
203	DOORS-CARGO DOOR: Left Side, with RH Swing-Out Doors
204	<p>CRANE - ELECTRIC/HYDRAULIC 4,000 LB. CRANE(Series 930, 950, 960, 970, 980, 981,&990) Electric/hydraulic crane with a minimum 4,000 lb. lifting capacity at 4 ft load radius using single or double line only and a moment rating not less than 16,000 lb/ft for mounting on trucks with a minimum 11,000 lb.</p> <ol style="list-style-type: none"> 1. LIFTING CAPACITIES: The unit shall be powered up and down through 360-degree continuous rotation. The unit shall have the following lift capacities: <ol style="list-style-type: none"> 1.1 At a 4 ft radius, the crane shall have a minimum capacity of 4,000 pounds, fully retracted. 1.2 Shall be rated at a minimum of 1000 pounds. with the boom horizontal at a radius of 16 ft. 2. BOOM: Boom shall hydraulically extend. Retracted length of the boom shall be a maximum 8 ft. Extended length of the boom shall be a minimum of 16 ft. Boom shall be hydraulically powered up and down. Boom shall rotate hydraulically, left and right, through a 360 degree continuous rotation. Hydraulic system shall be self-contained and powered by a 12 volt vehicle electrical system. The unit shall be equipped with a boom support rest and retaining strap(s) to hold and retain the boom during transport. 3. WINCH: The winch shall lift a minimum of 4,000 pounds, using a single or double line pull. The winch shall be worm gear or planetary gear driven with the appropriate reduction. Shall be equipped with self-locking worm gears or a mechanical load apportioning brake. Solenoid activated (applied) brakes are not acceptable. Cable drum shall be complete with a minimum of 80 ft of 5/16 inch galvanized aviation type cable. Cable shall be minimum 9800 lbs. breaking strength. Cable shall have a swagged-on eye. Eye shall be equipped with a swivel type traveling block, connected to the eye by means of a safety hook. Traveling block assembly shall be equipped with a minimum 1.65 ton capacity lifting hook. Lifting hook shall be equipped with a spring loaded safety latch. Load line shall be power up and down. 4. MOTOR: The winch shall be powered by a minimum 1.8 horsepower, 12 volt DC operated, reversible electric motor. Horsepower shall be sufficient for routine operation at rated capacity. A minimum of 25 ft .of #1 battery cable with grommets, frame clips, high-current plug-in connector for the unit, and a terminal connector for the 12 volt vehicle battery shall be furnished. 5. CONTROLS: The operation of the unit shall be by a hand-held remote pendent type control, complete with minimum 18 ft. industrial grade extension cord and plug-in connector. All remote controlled relays necessary for operation shall be provided. 6. LOAD SENSOR: A load sensing device meeting OSHA requirements shall be furnished to prevent overloading. The sensor shall stop winch up, boom extension, and boom down operations, but shall allow power rotation, and hoist down operation. 7. ANTI-TWO BLOCK: The unit shall be equipped with a boom-tip-mounted anti-two block device which shall prohibit the traveling block or hook assembly from coming into contact with the boom. 8. OUTRIGGER(S): The unit shall have crane manufacturer-recommended hydraulic or manual slide-out, pin and crank down dual outrigger(s) which meet all applicable ANSI standards. The outrigger(s) shall be equipped with minimum 6 inch by 8 inch foot pad(s). JACK LEGS ARE NOT PERMITTED. 9. BASE PLATE: Shall be constructed of steel plate a minimum of 5/8 inch thick. The rectangular dimensions of the base plate shall be approximately 14 inches by 14 inches, with a range of tolerance of ± 2 inches. 10. MOUNTING: Crane shall be mounted in accordance with the crane manufacturer’s instructions. When mounted on a service, the service body must be factory reinforced as an OEM upgrade by the original manufacture of the body and should be rated to the total foot pounds of the crane installed. No aftermarket or shop fabricated reinforcement and acceptable. 11. LOAD CAPACITY CHART: A permanent load capacity chart with gravity activated boom

	<p>angle indicator shall be located near the operator's position, easily visible to the operator. The load capacity chart shall show rated load capacities at various radii resulting from different boom angles and lengths.</p> <p>12. SAFETY PLAQUES OR DECALS: Safety plaques or decals shall be furnished and affixed at any hazardous area. The safety plaques or decals shall describe the nature of the hazard, level of hazard seriousness, how to avoid the hazard, and the consequence of human interaction with the hazard. Permanent plaques are preferred to decals. Type, size, and location of product safety plaques or decals shall be in accordance with the current ANSI Z535.4.</p> <p>13. PAINTING: The unit shall be painted an approved manufacturer's standard lead free white color, except for rubber, plastic, and metallic accessories or fixtures constructed of rust-resistant or plated material not normally painted.</p> <p>MANUAL(S): Manual(s) containing illustrated parts list(s) and operating and service instructions for the crane shall be delivered with each</p>
206	14. MIRRORS-Hood Mounted Convex Mirrors
207	HEADLIGHTS-Headlights on with wipers
208	ALARM-Parking Brake Alarm
209	INSPECTION-Pre-Trip Light Inspection
210	STEERING-Tilt & Telescopic Steering
211	TRANSMISSION MANUAL, 9-Speed: Manufacturer's Standard for series specified
213	INVERTER, 3000W, Example: GO-Power P/N GP-SW3000 or equal.
214	IMPACT WRENCH AND DRILL COMBO - 7/16 inch quick change hex drive chuck, 7/16 inch hex shank by 1/2 inch square drive adaptor, Jacob Chuck- 1/2 inch square drive female plain chuck 1/8 inch to 1/2 inch plain shank still drills, EXAMPLE: Fairmont Textron H8508 or equal.
215	CIRCULAR SAW, HYDRAULIC - to include 10 feet of nonconductive hose with required fittings, EXAMPLE: Stanley CR27, Fairmont Textron 43180 or equal.
216	LIGHTS, DUAL SPOT - Remote Control, EXAMPLE: Golight P/N GL-2020-32, with 400,000 Candle Power or equal.
217	CRANE PEDESTAL: standard design for an Electric/Hydraulic 3,200 LB. Crane, Insulated to 46kV AC, in accordance with TxDOT Spec. 065-05-13 Revised May 2015, mounted per manufacturer recommendation with minimum overhang on both front and rear of truck, 24 to 35 inches tall.
218	WELDER, GENERATOR, DIESEL: Example: Miller Bobcat 250 or equal
219	TRAFFIC ADVISOR:(Arrow Stick) with Control Head, P/N TAM85,(or equal) mounted on rear tail shelf.
220	TOOL CIRCUIT, HYDRAULIC: For use of hydraulic hand tools. Two outlets shall be furnished. One outlet shall be located curbside at the rear of the body, the second shall be located within reach of the bucket. Outlets shall be equipped with driplless quick-coupling fittings.
221	BODY, STATIONARY PLATFORM BODY, 168" INCH (14 FOOT), STEEL FLOOR, (see Section G): Meeting Texas Specification 071-072-AT latest revision with following configuration: a.) Two (2) white 24" x 16" x 60" L weather guard deck mounted tool boxes, mounted street side. b.) Two (2) white 18" x 18" x 36" L weather guard deck mounted tool boxes, mounted curb side. NOTE: The 4-top mounted box lids are to swing open and down approx. 180 degrees. c.) Two (2) black 18" x 18" x 24"L weather guard under-deck tool box's mounted on street side and curb side, in front of rear axle. d.) One (1) 12" x 36" x 48" and one (1) 12" x 48" x 60", enclosed vertical sign boxes shall be deck mounted curbside in front of rear axle. e.) One (1) 12" x 16" x 96" expanded metal box with open top shall be mounted street side on top of tool box's. f.) One (1) 16" x 18" x 156" metal, multi-level pipe rack shall me mounted curbside on floor alongside tool box's. g.) One (1) 10 gallon water tank mounted under deck, behind rear axle, street side, with electric pump and plumbed to 15' ft. hose reel located on curbside. h.) Rear bumper shall be 2-section, recessed for hitch mount with pipe vise mounted on curb side. i.) Bulkhead or headache rack shall be as wide as platform body and high enough to protect cab with diamond-punched steel or expanded metal diamond mesh directly behind rear window of cab. j.) Platform body shall have a rub rail along street side and curbside of body that is covered with red/white reflective conspicuity tape. k.) Platform body shall accommodate mounting of oxygen/acetylene tanks with 15' ft. hose reel, against bulkhead on street side. All top surface area shall have non-skid/slip coating. Platform Body shall be braced for aerial pedestal cutout and braced for 3,200 lb. crane, mounted on curbside rear.

224	<p>AERIAL, ARTICULATING AND TELESCOPING, 40 FOOT, INSTALLED, Insulated to 46kV AC, in accordance with TxDOT Specification 065-05-13 , Revised, June 2015, to include the following options: Option 2: Hydraulic Tool Circuit Option 6: Material Handling System Option 7: Extra set of manuals Option 8: Manufacturer Developed Training Materials (ANSI/SIA 6.10 and 8.12) Option 11: Backup Camera with Monitor</p>
225	<p>LIGHTING PACKAGE, TxDOT One Fleet Lighting package, to include: Note: The manufacturer and model numbers shown below are examples only. An equivalent product from other manufacturers may be considered by the Customer.</p> <ol style="list-style-type: none"> 1. Rack, flush mounted, front of truck bed for lighting package 2. Whelen Mini LFL Liberty lightbar, Amber, P/N IT9AAAAP, with four additional Amber light heads, P/N SLDAA mounted passenger side 3. Whelen Mini LFL Liberty lightbar, blue, P/N IT9BBBBP, with four additional blue light heads, P/N SLDBB mounted driver side 4. Whelen M Series amber, P/N M7A and Whelen LIN3 amber, P/N RSA02CCR mounted passenger side rear tool box 5. Whelen M Series blue, P/N M7B and Whelen LIN3 amber, P/N RSA02CCR mounted driver side rear tool box
226	<p>ELECTRIC/HYDRAULIC 3200 LB CRANE WITH TYPE “A” OUTRIGGERS: This option includes:</p> <ol style="list-style-type: none"> 1. Option 192 Electric/Hydraulic 3200 lb crane without item # 8 (Standard Outriggers) 2. Two (2) each Type “A” Outriggers to include: <ol style="list-style-type: none"> a. Telescoping and self-locking. b. Hydraulically operated with double-acting cylinders and shall be individually controlled to permit leveling of the truck on moderately sloping surfaces. The hydraulic system shall be equipped with manual shut-off or diversion valve or valves to prevent inadvertent operation of the outriggers when the boom is aloft. c. Have the controls protected from unintentional operation and located at the back of unit. A flashing warning light shall be installed in the cab to alert the driver when outriggers are extended. Vendor shall also provide an audible alarm when outriggers are activated. d. Have an interlock system to prevent boom operation if outriggers are not set. e. Have a spread at full extension that shall not exceed 144, (edge of pad to edge of pad). f. Have a 12 inch ground clearance when fully retracted. g. Not interfere with stowing the bucket. <p>NOTE: Addition of this option will increase the curb weight of the aerial device unit by 300 to 600 pounds. This weight, along with the weight of the aerial device, body, passengers, and fuel will be deducted directly from the chassis GVWR to determine payload capacity</p>
227	<p>ELECTRIC/HYDRAULIC 3200 LB CRANE WITH TYPE “H” OUTRIGGERS: This option includes:</p> <ol style="list-style-type: none"> 1. Option 192 Electric/Hydraulic 3200 lb. crane without item # 8 (Standard Outriggers) 2. Two (2) each Type “H” Outriggers to include: <ol style="list-style-type: none"> a. Telescoping and self-locking. b. Hydraulically operated with double-acting cylinders and shall be individually controlled to permit leveling of the truck on moderately sloping surfaces. The hydraulic system shall be equipped with manual shut-off or diversion valve or valves to prevent inadvertent operation of the outriggers when the boom is aloft. c. Have the controls protected from unintentional operation and located at the back of unit. A flashing warning light shall be installed in the cab to alert the driver when outriggers are extended. Vendor shall also provide an audible alarm when outriggers are activated. d. Have an interlock system to prevent boom operation if outriggers are not set. e. Have a spread at full extension that shall not exceed 144, (edge of pad to edge of pad).

	<p>f. Have a 12 inch ground clearance when fully retracted.</p> <p>g. Not interfere with stowing the bucket.</p> <p>NOTE: Addition of this option will increase the curb weight of the aerial device unit by 300 to 600 pounds. This weight, along with the weight of the aerial device, body, passengers, and fuel will be deducted directly from the chassis GVWR to determine payload capacity.</p>
228	Vendor shall furnish and install a 9,500lb. pull capacity electric winch. Winch shall be equipped with a remote control suitable for cab mounting and a 4 way roller fair lead. Winch shall be mounted on and protected by min. 12" wide chassis frame supported bumper/shelf. Shelf step shall be min. 3/8" tread plate steel. Vendor shall also fabricate and install an a-frame structure with a fixed sheave mounted at the apex of the a-frame. Sheave shall guide and serve as a fulcrum for the winch's wire rope. A-frame shall be a minimum 2 1/4' in height and constructed of four members of minimum 1 1/4" diameter carbon steel pipe. The base of the a-frame shall be a min. of 3ft. in length. The center of the sheave and the winch drum shall be aligned perpendicular to the center line of the chassis frame width to minimize lateral stress on the a-frame. A-frame and bumper shall be painted black and shall not interfere with the opening of the hood. Vendor shall furnish and install two outriggers to be installed on the right and left corners of the front bumper. See example pictures at: ftp://ftp.dot.state.tx.us/pub/txdot-info/gsd/pdf/afame_line3.pdf
229	LIGHTING PACKAGE LED Lighting package for Aerial Body, includes side markers, stop lights and turn signals
230	STAKE BODY 14 FOOT WITH TOOL BOXES AND TANK (Ref: Section G, Texas Fleet Specification)...
231	OUTRIGGERS NARROW GAGE...in accordance with TxDOT Specification 065-05-13 Revised May 2015.
232	OUTRIGGERS MODIFIED "A" FRAME used for Aerial Devices...in accordance with TxDOT Specification 065-05-13 Revised May 2015.
233	(DEDUCT) FOR 2WD FORD POLICE INTERCEPTOR. Some options may not be available with 2WD models. Please check with the vendor.
234	AERIAL, ARTICULATING AND TELESCOPING, 52 FOOT, INSTALLED, Insulated to 46kV AC, in accordance with TxDOT Specification 065-05-13 , Revised, June 2015, to include the following options: Option 2: Hydraulic Tool Circuit Option 6: Material Handling System Option 7: Extra set of manuals Option 8: Manufacturer Developed Training Materials (ANSI/SIA 6.10 and 8.12) Option 11: Backup Camera with Monitor
235	Single spot light - Remote Control, EXAMPLE: Golight P/N GL-2020-32, with 400,000 Candle Power or equal.
258	SEAT FABRIC, VINYL
270	UPGRADE TO GVWR 12,300 - 12,500 FOR 1 TON CARGO/PASSENGER VANS AND CUTAWAYS- Includes Max GVWR on front axle. This option may require dual rear wheels.
271	PARA-TRANSIT BODY 14 ADULTS, Stand up entry -Conversion of a full size van equipped with a raised roof to a para-transit vehicle with provisions for stand-up entry, seating for fourteen (14) adult ambulatory passengers. Wheelbase upgrade (if required) to be included in the price of the body. Approximate Payload Allowance, 2,550 pounds. Overall Length, 256 inches. Refer to Section I of TX Fleet Specification for Para-transit Vehicles.
272	PARA-TRANSIT BODY: 10 ADULTS, 4 WHEELCHAIRS -Conversion of a full size van equipped with a raised roof to a para-transit vehicle with provisions for stand-up entry, seating for ten (10) adult ambulatory passengers and four (4) wheelchair positions along with the wheelchair lift and tie downs. Wheelbase upgrade (if required) to be included in the price of the body. Approximate Payload Allowance, 2,550 pounds. Overall Length, 256 inches. Refer to Section I of TX Fleet Specification for Para-transit Vehicles.

273	PARA-TRANSIT BODY: 8 ADULTS, 5 WHEELCHAIRS -Conversion of a full size van equipped with a raised roof to a para-transit vehicle with provisions for stand-up entry, seating for eight (8) adult ambulatory passengers and five (5) wheelchair positions along with the wheelchair lift and tie downs. Wheelbase, 176 inches. Approximate Payload Allowance, 2,550 pounds. Overall Length, 298 inches. Refer to Section I of TX Fleet Specification for Para-transit Vehicles.
274	PARA-TRANSIT BODY: 2 ADULTS, 6 WHEELCHAIRS -Conversion of a full size van equipped with a raised roof to a para-transit vehicle with provisions for stand-up entry, seating for two (2) adult ambulatory passengers and six (6) wheelchair positions along with the wheelchair lift and tie downs. Wheelbase, 176 inches. Approximate Payload Allowance, 2,550 pounds. Overall Length, 298 inches. Refer to Section I of TX Fleet Specification for Para-transit Vehicles.
275	TRANSMISSION, AUTOMATIC (for medium-duty trucks, Series 950 through 990)
277	PACKAGE PREP PACKAGE FOR SHUTTLE BUS BODY
278	FLOORING WITH RECESSED TRACK WITH WHEELCHAIR POSITIONS for Para-transit Vehicles
279	FLOORING WITH RECESSED TRACK WITH TRACK SEATING for Para-transit Vehicles
294	SEATS-Seats To Be Cloth Bucket Or Split Bench Type, Colors To Be Selected At time of ordering
295	SEATS- CLOTH SEATS,DRIVER'S TO BE POWER ADJUSTABLE, , FRONT BUCKETS, REAR 60/40 SPLIT BENCH
304	SEATS, Cloth. Front Bucket And Rear Bench.
306	FLOORS-Floor Covering To Be Carpet, With Front And Rear Floor Mats,
321	PACKAGE-Street Appearance Package
322	PILOT MODEL
338	UPGRADE - INCREASE GVWR TO 9500 LBS.
345	SUSPENSION-Heavy Service Suspension
350	BODY - TRUCK DUMP BODY, SPECIAL MATERIAL HANDLING
354	<p>VAN BODY (CAB & CHASSIS APPLICATION): Unless otherwise specified, all units shall be furnished complete with standard equipment and factory-installed accessories as listed in the manufacturer's printed literature for the models specified herein (but See Section A.4.1. and Section C.1.1.). The following items are minimum requirements for the models specified herein, and shall be provided whether shown as optional or standard equipment by the manufacturer. The following are some of those standard features or additional features as listed for these models. Please note any additional requirements following the table for each series number. These additional requirements listed below any table are in addition to, the standard. Vendors shall conform to OEM Builder's Book or structural guidelines to ensure warranty and safety compliance.</p> <p>Vendors shall provide van body dimensions (L x W x H Min & Max) with price for each size variant they intend to bid.</p> <p>Additional Equipment: The following equipment is also required in addition to that required above:</p> <p>Body:</p> <ul style="list-style-type: none"> • Body: Aluminum body or agency approved equal • Airbags: Driver and passenger side • Floor covering: Front vinyl • Logistic Track: Inlaid, 12-gauge steel, painted. E-Track or agency approved equal • Side Mirrors: trailer towing • Cab-access: sliding door in cargo • Interior Lights: 12-volt dome light with rear switch • Floor: Flat, 2 X 6 Dense Pine shiplapped, formed X-member-16 O.C., 3" X 1-1/2" single lip X-member, 4" I beam longills, or agency approved equal, undercoating • SCUFF: GALV STL TUFF SCUFF UP12"SIDES, GALV STL TUFF SCUFF UP12"FRONT • Lining: 3/4" Full height plywood lining • Interior Lights: Dome light with rear switch, hot wired • Bulkhead: 6" setback with or without access • Front End: 6-14" radius composite corner wind deflector extruded aluminum front corners with def. rad. 050, smooth • Undercoating: Required • Mud Flaps: standard supreme <p>Chassis:</p>

	<ul style="list-style-type: none"> • Sidewalls: .040 pre-painted, side wall Z-posts on 16" centers • Roof: .032 Aluminum rood shin-seamless 1 piece, anti-snag roof bows on 24" centers • Exterior Lights: FMVSS standard 108 lights, standard taillight package • Rear End: Standard rear end w/door opening, galvanneal rear door frame • Rear Door: Overhead door, aluminum clad, 85-1/4" X 71", maximum security lock on over 2 grab handles – rear aluminum 12" <p>Vendor should also bid various lifts (i.e, rail type or tuckaway), in various weight ratings.</p>
357	SEATS-Cloth Seats, Split Bench Or Bucket, Color To Be Determined
363	SEATS-Seats To Be Front Split Bench Or 40/20/40 Cloth Seats, Rear Seats To Be vinyl
371	SEATS-Seats To Be Split Bench Or 40/20/40 Or Bucket Type
380	MIRRORS- Outside Rearview, Power Adjustable, Foldaway
381	SEATS-Front And Rear Seats To Be Cloth
388	SEATS-Front And Rear Seats To Be Cloth, Front To Be Bucket Seats
392	HEADLINER - HEADLINER TO COVER PASSENGER AREA ONLY
396	FLOORS- ALL WEATHER, Full Length Rubber Or Vinyl Floor Mat
398	SEATS-All Seats To Be Cloth, Front Bucket With Armrests (0)
399	Vinyl/Rubber Floor
402	SEATS-Front Bucket Seats With Power Driver Seat
408	SEATS-Seats To Be Cloth, Front To Be High Back Or Captain Type With Arm Rest
411	SEATS-Seats To Be Front Split Bench Or 40/20/40 Cloth Seats, Rear Seats To
412	MIRRORS-Rear View Mirrors, Exterior, To Be Remote Adjustable (0)
424	SEATS - SEATS TO BE CLOTH, FRONT TO BE HIGH BACK
425	PARTITION-Metal Bulkhead Partition Behind Second Row Bench Seat Required From
427	MIRRORS - LEFT AND RIGHT EXTERIOR MIRRORS, MANUALLY ADJUSTED
433	WHEELBASE - UPGRADE WHEELBASE TO 172+ INCHES
435	HITCH - GOOSENECK TRAILER HITCH
441	BRAKES- Air Brakes
442	AIR DRYER
443	SEATS- HIGH BACK WITH AIR RIDE for Heavy Duty Truck/Tractor, Both Driver & Passenger Seats with 1. HIGH BACK WITH AIR RIDE 2. AIR VALVE HEIGHT ADJUSTMENT 3. ARM RESTS, FOLD DOWN, DUAL 4. ADJUSTABLE LUMBAR SUPPORT 5. SEAT CUSHION TILT, 3 POSITION INDEPENDENTLY ADJUSTABLE 6. INFINITE BACK ANGLE ADJUSTMENT 7. PREMIUM CLOTH FABRIC 8. 5" FORE-AFT ADJUSTMENT 9. CUSHIONS, WIDE, WITH LENGTH ADJUSTMENT
444	OEM Service Contract- BUMPER TO BUMPER, 6 Year / 100,000 miles @ \$0 Deductible
465	BUMPER - REAR BUMPER AND TRAILER HITCH W/PINTLE
469	LADDER RACK - LADDER RACK W/ CAB OVER STYLE
482	UNDERCOATING - SPRAY ON
488	SEATS-3rd Row Seat for SUVs (example: Ford, Expedition)
502	SWITCHES- Cutoff Switches. (Refer To Spec)
503	WHEELBASE - 172" For FULL SIZE 3/4TON, CREW CAB PICKUP TRUCK
507	BED - STAKE BED (Offered on model EL)
508	UPGRADE-Upgrade to 19,500 GVWR
509	PTO Opening
512	UPGRADE-Upgrade to next body trim style
519	CAMERA, BACK UP CAMERA W/MONITOR
523	COLOR-Color Green Special Paint
525	HYDRAULIC JACK - 6 TON HYDRAULIC JACK
526	HEATER - ENGINE BLOCK HEATER WITH CORD
528	CRANE BODY-Re-enforced crane body with 84" CA dimension, Examples: Knapheide 6132DLHR-60J, Dakota 132-SB or equal (For use with 3200H Crane)
529	INCREASE CRANE BODY SIZE (OPTION 528) FROM 84" CA TO 102" - 108" CA DIMENSION
533	LIGHT BAR-, LIGHT BAR, FULL FEATURE, LAW ENFORCEMENT - contractor must provide light bar, mounting hardware, serial box and labor to mount the police pursuit LED overhead light bar

	according to manufacturer and customer provided instructions. Contractor will be required to route the cables/wiring to specific locations, but will not be required to complete the connections to power-up the light bar. Reference Brand/model - Whelen Legacy Duo Lightbar Model # GS8TX6. If offering other than the referenced brand/model, vendor must submit literature to DPS and receive DPS approval prior to bid.
536	INSTALLATION-DECAL INSTALLATION. Contractor provides labor to install the customer provided decal package
537	WINDOW TINT - AFTER-MARKET DEEP WINDOW TINT FOR LAW ENFORCEMENT VEHICLES - vendor shall install high performance window tint capable of eliminating up to 98% of UV rays on the front and rear door glass of both passenger and drivers side doors and rear glass. Tint shall comply with all applicable State of Texas laws and shall have a legible window tint label that contains all the information required by the Department regarding light transmission and luminous reflectance of the film. The film and glass shall not have a light transmission of 35% or more: or a luminous reflectance of 35% or less. Parts (tint) and labor shall be warranted for a period of three (3) years from the date the vehicle is put into service. All warranty repairs will be performed at the vendors location or at the DPS Fleet Operations Headquarters. Warranty repairs will be coordinated through DPS Fleet Operations Management.
538	STREET APPEARANCE PACKAGE DODGE : Includes: (1)18x7.5 Aluminum Wheels (2)Black Grille with Bright Surround (3) Exterior Mirrors with Heating Element (4) Fog lamps (5) Front/Rear Climate Control Outlets (6) Full Length Floor Console (7) Illuminated Front Cup holders (8)Power Heated Mirrors w/Man F/Away (9) rear Stabilizer Bar Example: Dodge Charger Code: AEB
542	BODY CRANE, Reinforced Crane Body for Cab-to-Axle 84 inch, used for Aerial Devices (Refer to TXDOT specifications)
546	LIGHTING- Rear Deck Lights (Red & Blue). Brand Signal Vehicle Product3 DL 16 OR EQUAL
547	GUN LOCK- DUAL VERTICAL GUN LOCK,PARTS & LABOR floor mounted (M-4 & shotgun) - contractor must furnish all parts and labor to install the vertical rear seat mount gun lock according to manufacturer and customer provided instructions. Vendor will be required to complete the connections to the wiring harness supplied in the Dodge (AYE) Base Prep Pkg. Referenced Brand/model - Jotto Desk PN 475-1026. If offering other than the referenced brand/model, vendor must submit literature to DPS and receive DPS approval prior to bid.
548	PACKAGE EMERGENCY EQUIP-emergency equipment console and computer mount package - contractor must furnish and install equipment console that includes armrest, face plates, cup holders, printer mount, & computer mount according to manufacturer and customer provided instructions. Referenced Brand/model - Jotto Desk Part # 425-6700 or Havis model # PKG-TDPS-103. If offering other than the referenced Brand/model, vendor must submit literature to DPS and receive DPS approval prior to bid.
551	EXHAUST-Vertical Exhaust (TDCJ Specific)
552	TIRES-24.5 Tires and Wheels (TDCJ Specific)
553	TIRES-Dual Tire Pressure Equalization Valves (TDCJ Specific)
554	SERVICE-Balance Tires and Alignment (TDCJ Specific)
555	AUDIO-AM/FM/CD Player (TDCJ Specific)
557	COMPACTOR-20 Yard New Way Cobra Compactor (TDCJ Specific)
558	BODY -STEP VAN BODY FOR COMMERCIAL STRIP DOWN CHASSIS CAB, 22500 GVWR, UPS STYLE BODY (950G SERIES) . Reference Brand: 22 ft Utilimaster Ford F-59 chassis, Bulkhead 93.5 X 81.0 with roll up doors and 4" Lowered Stepwell both sides (refer to Utilimaster specs)
562	FIFTH WHEEL - STATIONARY FIFTH WHEEL PER TxDOT 072-08-82OPTION 5.1
563	FIFTH WHEEL - AIR SLIDING TYPE FIFTH WHEEL PER TxDOT 072-08-82OPTION 5.2
600	Automatic Transmission for Heavy Duty Trucks (Allison 4000HS or 4500RDS)per TxDOT 072-08-15
601	HEADLIGHTS WITH WIPERS TxDOT 072-08-15OPTION 2
602	MIRRORS - HOOD MOUNTED CONVEX MIRRORS TxDOT 072-08-15OPTION 3
603	ALARM - PARKING BRAKE ALARM TxDOT 072-08-15OPTION 4
604	INSPECTION - PRE-TRIP LIGHT INSPECTION TxDOT 072-08-15OPTION 5
605	STEERING - TILT AND TELESCOPING STEERING TxDOT 072-08-15OPTION 6
606	POWER TAKE-OFF TxDOT 072-08-82OPTION 1
607	WINCH - UPRIGHT WINCH TxDOT 070-45-26 OPTION 2
608	RACK - HEADACHE RACK TxDOT 072-08-82OPTION 3
609	TAIL PIPE - ROLLING TAIL PIPE TxDOT 072-08-82OPTION 4

610	FIFTH WHEEL - OILFIELD BODY TxDOT 072-08-82 OPTION 5
611	TOW DEVICES for Light Duty Trucks: Manufacturer's Standard (This option is no longer available. Use Option 124) TxDOT 072-08-82 OPTION 6
612	QUARTER FENDERS AND MUD FLAPS TxDOT 072-08-82 OPTION 7
613	ENGINE BLOCK HEATER 110V TxDOT 072-08-82OPTION 8
614	FIFTH WHEEL - OILFIELD BODY TxDOT 072-08-82 OPTION 9
615	MANUALS - EXTRA SET OF MANUALS FOR HEAVY DUTY TRUCKS TxDOT 072-08-82OPTION 10. Includes: One(1) complete set of Operator's , Service and Parts manuals shall be provided at the time of delivery.
616	BUG SCREEN - FRONT END MOUNTED BEHIND GRILLE - Heavy Duty Trucks
618	SWITCH - BATTERY DISCONNECT SWITCH for Heavy Duty Trucks
620	PACKAGE - HEAVY HAUL TRACTOR GROUP PACKAGE - Includes GVWR: 62,000, GCWR: 135,000 per TxDOT requirements
621	UPGRADE PACKAGE - CHASSIS UPGRADE TO MEET ASPHALT MAINTENANCE UNIT(AMU) , TxDOT Specification # 755-10-50 (latest revision) AND to include following options from TX Fleet Specification(latest revision): Options: 16, 19, 34, 37, 57, 93, 94 & 275
622	BODY, 1500 gallon Highway Class Maintenance Body, Asphalt Maintenance Unit per TxDOT specification 755-10-50(latest revision) with 12'-0 Std. Spraybar.
623	SPRAYBAR EXTENSIONS - Per TxDOT 755-10-50 Option No. 1
624	SPRAYBAR NOZZLES - Per TxDOT 755-10-50, Option No. 2, The size of the nozzle to be selected by the customer at the time of ordering
625	MECHANICAL POINTER GUIDE WITH HYDRAULIC LIFT - Per TxDOT 755-10-50 Option No. 3
626	FILL LINE - THREE (3) INCH REAR MOUNTED FILL LINE - Per TxDOT 755-10-50 Option No. 4
627	POWER WASH DOWN - Per TxDOT 755-10-50 Option No. 5
628	SPIRIT LEVELS - Per TxDOT 755-10-50 Option No. 6, Unit shall be equipped with two spirit levels mounted at the rear of the unit on the driver side.
629	HEATING SYSTEM - HIGH PRESSURE DIESEL (FUEL OIL) HEATING SYSTEM - Per TxDOT 755-10-50 Option No. 7
630	BOXES , SPRAYBAR EXTENSION STORAGE BOXES - Per TxDOT 755-10-50 Option No. 8
631	BACK UP ALARM SYSTEM- Per TxDOT 755-10-50 Option No. 9
632	FLUSHING SYSTEM - ENVIRONMENTAL Per TxDOT 755-10-50 Option No. 10 in lieu of SPRAYBAR AND PUMP FLUSHING SYSTEM
633	SPRAYBAR, TELESCOPING - Per TxDOT 755-10-50 Option No. 11
634	TRAINING VIDEO - Per TxDOT 755-10-50 Option No. 12
635	MANUALS - EXTRA SET OF MANUAL -Per TxDOT 755-10-50 Option No. 13
636	MANUALS - COMPLETE SET OF OVERHAUL MANUAL -Per TxDOT 755-10-50 Option No. 14
637	LIGHTING Sealed L.E.D. lights for the AMU Body, which include turn signals and marker lights
638	MUD FLAPS -Full Width Rubber Mud Flap, mounted behind the rear wheels for AMU body
639	CONTROLS - IN-CAB CONTROLS FOR Heavy duty Truck/Tractor with Conventional Day Cab (TDCJ Specific): (1) C.B. RADIO POWER SUPPLY TO BE OVERHEAD MOUNT WITH SINGLE COAXIAL CABLE INSTALLED TO RADIO LOCATION (2) HEADLAMPS AND MARKER LAMPS ON INDEPENDENT SWITCHES OR A MARKER LAMP INTERRUPT SWITCH (3) FOG LAMPS ON INDEPENDENT SWITCH, TO OPERATE LOW BEAMS (4) DUAL PURPOSE BRAKE CONTROL VALVE, HAND OPERATED, TO OPERATE TRAILER BRAKES IF AIR LINE IS CONNECTED (5)WORK LAMP SWITCH (6) AIR DUMP VALVE CONTROL (7) POWER DIVIDER CONTROL (8) FIFTH WHEEL AIR SLIDE CONTROL
640	PACKAGE - POWER PACKAGE FOR MEDIUM AND HEAVY DUTY TRUCK/TRACTOR Includes:(1) POWER DOOR LOCKS AND WINDOWS, DRIVER CONTROLLED ELECTRIC WINDOWS (2) WINDSHIELD WIPERS: ELECTRIC DUAL INTERMITTENT WITH WASHER (3)DUAL WEST COAST TYPE, MOTORIZED AND HEATED, ON 102" MIRROR FRAME OR AERO STYLE ONE PIECE DESIGN
701	Lighting - Front Headlamp / Police Interceptor Housing Only – Includes amber, park-turn signals indicators – Pre-drilled LED holes (does not include LED installed lights). Note: Not available with Police Interceptor Package #1 Option 701 and Package #6 – Option 706
702	Lighting – Tail Lamp Lighting Solution – Two (2) Rear Integrated LED Lights (in tail lamps) Note: Not available with Police Interceptor Package #6 – Option 706

703	Lighting – Rear Lighting Solution – Two (2) Backlite Flashing LED Lights (window mounted on each side of chimsel stop light) – Two (2) Decklid Inner Flashing LED Lights Note: Not available with Police Interceptor Package #6 – Option 706
704	Trunk (Cargo) Upfit Package !"Rear Console Mounting Plate !"Wiring Harness – Two (2) light cables – supports up to (6) LED lights (engine compartment) – Two (2) grille LED light cables – Trunk Power Distribution Box (PDB) – Two (2) 50 amp battery and ground circuits in-trunk – One (1) 10 amp siren / speaker circuits (engine to trunk) !"Trunk Circulation Fan !"Trunk Electronics Tray !"Pre-Wiring for grille lamp, siren, and speaker Note: Not available with the following Police Interceptor Packages: #5 (Option 705) ; #6 (Option 706)
705	Light Controller Package !"Includes content from the following Police Interceptor Packages: #4 (854) plus: – Whelen Light Controller (PCC8R) – Whelen PCC8R Light Relay Center (trunk-mounted) – Light Controller / Relay Center Wiring – Pre-Wiring for grille lamp, siren, and speaker Note: Not available with the following Police Interceptor Packages: #4 (Option 704); #6(Option 706)
706	Ready for the Road Package "Includes content from the following Police Interceptor Packages: Options 702, 703, 704, 705 plus: – Whelen Cencom Light Controller – Whelen Cencom Relay Center / Siren Amp (mounted on Electronics Tray) – Light Controller / Relay Cencom Wiring – Grille LED Lights – 100 Watt Siren / Speaker – LH Trunk Storage Boxes – (9) I/O Digital Serial Cable (console to trunk) – Hidden Door Lock Plunger / Rear Door Handles Inoperable – Pre-Wiring for grille lamp, siren, and speaker.
708	SWITCHES, Mappable Switches
709	WHEEL COVERS, Full Wheel Covers, Law enforcement vehicles
711	Lighting - Daytime Running Lamps
712	Trunk Storage Vault (Includes lockable door)
713	Hidden Door Lock Plunger and Rear Door Handle Inoperable (Not available with 63B, 18L or 18G)
714	Rear Console Plate
715	NOISE SUPPRESSION BONDS
716	Ballistic Door Panels – Driver Front Door Only
717	Ballistic Door Panels – Driver & Pass Front Doors
718	BLIS® – Blind Spot Monitoring with Cross Traffic Alert (Manual fold-away mirrors, w/heat, w/o memory, w/o puddle lamps
719	Lockable Gas Cap for Easy Fuel® Capless Fuel-Filler
720	Reverse Sensing
721	COLOR-Two-Tone Vinyl Package Includes: Labor and Materials to wrap, Roof ,RH/LH Front Doors with White Vinyl, RH/LH Rear Doors. The vinyl wrap must be factory installed or by the manufacturer's authorized upfitter. (Different color scheme may be substituted by the customer at the time of placing the order.)
722	COLOR-Two-Tone Vinyl Package Includes: Labor and Materials to wrap Hood, Roof and Trunk Deck Lid with White Vinyl. The vinyl wrap must be factory installed or by the manufacturer's authorized upfitter. (Different color scheme may be substituted by the customer at the time of placing the order.
723	COLOR-Two-Tone Vinyl Package Includes: Labor and Materials to wrap Roof , RH/LH Front Doors with White Vinyl. The vinyl wrap must be factory installed or by the manufacturer's authorized upfitter. (Different color scheme may be substituted by the customer at the time of placing the order.
724	Vinyl Word Wrap – "POLICE" located on LH/RH sides of vehicle ("White" lettering) Note: May Not available with the other following Vinyl Wrap Packages:
725	Two-Tone Vinyl Package (Per TxDPS specifications)
728	Police Interior Upgrade Package "Cloth rear-seats "Floor mats, front and rear"1st Row Carpet Floor Covering with 2nd Row Vinyl "Floor Covering" Full floor console with unique police finish panels Note: Not available with the following Police Interceptor Packages: Options 704,705,706
729	Lighting - Dome Light - Red/White in Cargo Area
731	ROOF RACK SIDE RAILS-BLACK
735	COLOR- FACTORY TWO TONE BLACK & WHITE PAINT, Hood to be white (secondary) and all remaining panels to be black (primary color) Paint Code Options: TGL & 01U, Paint ScemeJ002 with paint codes WA8555 for Black (primary) and WA8624 Summit White (secondary)

736	CARGO BOX, SCALE/EQUIPMENT Referenced Brand: Ctech box # 27762 or equal
737	CARGO BOX, EQUIPMENT CARGO BOX, Parts only, Installation is not required. Referenced Part # Ctech box # 27762 or equal
738	PACKAGE- UPFIT PACKAGE PER TxDPS SPECIFICATIONS KT17DPS-3T. Includes: (1) TxDPS wiring upfit package (2)Motorola PTT option (3) Install following items provided by TxDPS:Motorola Radio Harness, Antennas, Console Mounting Base, Decal Package,(4) Supply and install red & blue lights on either side of third brake light (5) Supply and install red & blue lights on edge of rear liftgates (6) Supply and install Kerr anti-theft device with valet switch (7) Supply & install window tint to both front windows to 35% Must be provided by a GM Authorized Upfitter: Kerr Industries
739	PACKAGE- UPFIT PACKAGE PER TxDPS SPECIFICATIONS KT17DPS-3C. Includes: (1) TxDPS wiring upfit package (2)Motorola PTT option (3) Install following items provided by TxDPS: Motorola Radio Harness, Three(3)Antennas(VHF, 700/800 & air Card), (4) Supply and install red & blue Whelen lights on rear package tray (5) Supply and install red & blue Whelen lights with override switch on inside of trunk deck lid (6) Supply and install Kerr anti-theft device with valet switch (7) Supply & Install Whelen 100W Siren Speaker (8) Supply & install window tint to all passenger and driver side windows & rear window glass to 35% (9) Supply and Install white vinyl wrap to Hood, Roof and Trunk Deck Lid. Must be provided by a GM Authorized Upfitter: Kerr Industries
740	AIR BAG, HEAD CURTAIN, ROOF RAIL MOUNTED-Dual stage frontal, thorax side-impact, front and rear outboard seating positions, includes Passenger Sensing System.
741	Battery, Auxiliary, 600 Cold-cranking amps, 70-amp hour for accessory equipment, located in trunk
742	LIGHTING, DOME LIGHT, 5" Red & White Front Auxiliary Dome Light
743	LIGHTING, INOPERABLE DOME AND COURTESY LAMPS
744	EQUIPMENT TRAY-Full Width Slide Out Trunk Tray with removable tray. Referenced Brand: Jotto Desk Part# 425-8104
745	EQUIPMENT MOUNT - CONSOLE, COMPUTER STAND AND PRINTER MOUNT - Provide Parts and Installation, Referenced Brand: Jotto Desk Part # 452-6472
753	PACKAGE- BASE PREP POLICE PACKAGE - for Dodge Charger Police RWD to include: (1) Front and Rear Wire Harness(XPW), (2) Power Distribution Center (XWK), (3) Siren Speaker & Bracket (XWP), (4) Trunk Tray & Cooling Fan
754	PACKAGE-CONVENIENCE GROUP, Includes: Power 4-way Driver Seat Lumbar, Power 8-way Driver Seat, Power Adj Pedals, Power Driver/Passenger Seats, Power Driver/passenger Lumbar Adj
755	PACKAGE-PATROL PACKAGE - For Dodge Charger LE, Includes: Front and rear Wire Harness ,Front Corner LED Lamps ,Police Floor Console, Power Distribution Center, Rear Corner LED Lamp, Siren Speaker and Bracket(XWP), Trunk Tray and Cooling Fan(XWP)
757	PACKAGE- PATROL PACKAGE-For Dodge Charger to include: (1) Front and rear Wire Harness (XPW), (2) Front Corner LED Lamps (LNB),(3)Police Floor Console(CUG), (4)Power Distribution Center(XWK), (5)Push Bumper(MBR), (6)Rear Corner LED Lamp(LNU), (7)Siren Speaker and Bracket(XWP), Trunk Tray and Cooling Fan(XWP)
760	PACKAGE UPFIT Leggett & Platt TXDPS Upfit Package # TXDPSCHG to include:(1) Provide an install a self-contained high amp timer capable of operating on either a programmable time setting or by sensing a low battery voltage of less than 10.5 volts. Referenced Brand Model - Copeland Top-Hat Timer Part # 6001 (2) Provide & install three (3) antennas and associated coax and connectors to include: (a) VHF antenna - reference and/model - PCTEL # MHB-5800 W/mini U connector installed on end. (b) 700/800 antenna - referenced brand/model - Larsen # NMOQW700 with mini U connector installed on coax end. (c) Aircard Transit Style Antenna - referenced brand/model - Larsen # LPT825/19NMOHF with FME connector installed on coax end. (3) Provide and install a Park/Neutral Siren Kill System - referenced brand/model - Whelen Amplifier Module # PEIMDC08 & Whelen Park/Kill Module # WPKM1. If offering other than the referenced brand/model, vendor must submit literature to DPS and receive DPS approval prior to bid.
765	TIRES-PERFORMANCE TIRES P225/60R18 BSW BRAND:GOODYEAR
766	SPEED CONTROLLER- BASE ENGINE CONTROLLER ,Limits Max Speed to 130MPH
767	SIREN-CAN CONTROL SIREN YSTEM
768	LIGHTING-FRONT CORNER LED LAMPS
769	LIGHTING - GRILLE LIGHTS
770	LIGHTING - MIRROR LIGHTS
772	BUMPER - PUSH BUMPER
773	LIGHTING - Rear Corner LED Lamps

774	LIGHTING - Rear Deck Lights - Full Length
775	CONSOLE - MINI CONSOLE - Replace Full Console with Mini Console
776	LIGHTING - SIDE LIGHTS
777	KIT-TIRE RELOCATION: Vendor to provide and install spare tire relocation kit. Example: Jotto Desk Part # 425-3759
778	LIGHTING - VISOR LIGHTS
779	Dedicated CNG 2 Tank Rated 11 GGE (available on series #:658A)
780	Dedicated CNG 3 Tank Rated 16 GGE (available on series #:658A)
781	BI-FUEL CNG RATED 10 GGE (available on series #:680C, 685C, 755C, 760C)
782	DEDICATED CNG RATED 20 GGE (available on series #:680C, 685C, 755C, 760C)
783	Dedicated CNG 3 Tank (available on series #:741A)
784	RAM - Upgrade to 5.7 HEMI Bi-Fuel CNG Engine (EZF) and 4x4 (available on series #:866C)
785	UNDERBED DEDICATED 20 GGE (available on series #:866C, 868C, 869C, 870C, 872C, 875C, 876C, 881C, 882C, 886C, 887C)
786	UNDERBED BI-FUEL CNG 10 GGE (available on series #:866C, 868C, 869C, 870C, 872C, 875C, 876C, 881C, 882C, 886C, 887C)
787	IN-BED BI-FUEL CNG 20 GGE (available on series #:866C, 868C, 869C, 870C, 872C, 875C, 876C, 881C, 882C, 886C, 887C)
788	IN-BED BI-FUEL CNG 21 GGE (available on series #:866C, 868C, 869C, 870C, 872C, 875C, 876C, 881C, 882C, 886C)
789	DEDICATED CNG 40 GGE (available on series #940G)
790	6.0L V8 SFI GASEOUS (available on series #:868C, 869C)
791	6.0L V8 SFI GASEOUS - 3-TANK CONFIGURATION, ENGINE CONSOLE WITH SWING-OUT STORAGE BIN (available on series #:680C, 685C)
792	6.0L V8 SFI GASEOUS - 4-TANK CONFIGURATION, ENGINE CONSOLE WITH SWING-OUT STORAGE BIN (available on series #:680C, 685C)
793	6.0L V8 SFI GASEOUS - 3-TANK CONFIGURATION, LIQUID PETROLEUM GAS (LPG) SYSTEM, DEDICATED (available on series #:883C, 884C, 885C)
794	6.0L V8 SFI GASEOUS - 4-TANK CONFIGURATION, LIQUID PETROLEUM GAS (LPG) SYSTEM, DEDICATED (available on series #:883C, 884C, 885C)
795	PARA-TRANSIT BODY: 24 ADULTS, 2 WHEELCHAIRS. Conversion of a full size van equipped with a raised roof to a wide body para-transit vehicle with provision for stand-up entry, seating for twenty-four (24) adult ambulatory passengers and two wheelchair positions along with the wheelchair lift and tie downs. Wheelbase upgrade (if required) to be included in the price of the body. Refer to Section I Special Equipment-Para-transit Vehicles.
796	PARA-TRANSIT BODY: 32 ADULTS, 2 WHEELCHAIRS. Conversion of a full size van equipped with a raised roof to a wide body para-transit vehicle with provision for stand-up entry, seating thirty-two (32) adult ambulatory passengers and two wheelchair positions along with the wheelchair lift and tie downs. Wheelbase upgrade (if required) to be included in the price of the body. Refer to Section I Special Equipment-Para-transit Vehicles.
797	PARA-TRANSIT BODY: 40 ADULTS, 2 WHEELCHAIRS. Conversion of a full size van equipped with a raised roof to a wide body para-transit vehicle with provision for stand-up entry, seating for forty (40) adult ambulatory passengers and two wheelchair positions along with the wheelchair lift and tie downs. Wheelbase upgrade (if required) to be included in the price of the body. Refer to Section I Special Equipment-Para-transit Vehicles.
798	OEM BACK-UP ALARM SYSTEM.
799	OEM DAYTIME RUNNING LIGHTS.
800	OEM REVERSE SENSING SYSTEM.
801	OEM RUNNING BOARDS, COLOR BLACK.
802	OEM CNG/LPG GASEOUS ENGINE PREP PACKAGE.
803	UP-FITTER SWITCHES, VENDOR SHALL PROVIDE A MINIMUM OF (4) FOUR UP-FITTER SWITCHES, MOUNTED IN CAB AND ACCESSIBLE TO DRIVER ON RIGHT HAND SIDE
804	WINDOW TINT, VENDOR SHALL INSTALL HIGH PERFORMANCE WINDOW TINT CAPABLE OF ELIMINATING UP TO 98% OF UV RAYS ON THE FRONT AND REAR DOOR GLASS AND ANY

	OTHER GLASS THAT MAY BE BEHIND THE REAR DOORS OF BOTH PASSENGER AND DRIVERS SIDE, INCLUDING THE REAR WINDOW OR LIFTGATE GLASS. TINT SHALL COMPLY WITH ALL APPLICABLE STATE OF TEXAS LAWS AND SHALL HAVE A LEGIBLE WINDOW TINT LABEL THAT CONTAINS ALL THE INFORMATION REQUIRED BY LAW REGARDING LIGHT TRANSMISSION AND LUMINOUS REFLECTANCE OF THE FILM. THE FILM AND GLASS SHALL NOT HAVE A LIGHT TRANSMISSION OF 35% OR MORE: OR A LUMINOUS REFLECTANCE OF 35% OR LESS. PARTS (TINT) AND LABOR SHALL BE WARRANTED FOR A PERIOD OF THREE (3) YEARS FROM THE DATE THE VEHICLE IS PUT INTO SERVICE.
805	OEM PHONE HANDS FREE DEVICE
806	OEM LONG BED IN LIEU OF SHORT
807	CAMERA SYSTEM, TWO CAMERA SYSTEMS, WITH IN-CAB MOUNTED 7" MONITOR
808	OEM STATIONARY FRONT GRILLE
809	MINIMUM 70 DEGREE FORWARD TILT HOOD
810	OPT - WINDOW TINT , VENDOR SHALL INSTALL HIGH PERFORMANCE WINDOW TINT CAPABLE OF ELIMINATING UP TO 98% OF UV RAYS ON THE FRONT AND REAR DOOR GLASS AND ANY OTHER GLASS THAT MAY BE BEHIND THE REAR DOORS OF BOTH PASSENGER AND DRIVERS SIDE, INCLUDING THE REAR WINDOW OR LIFTGATE GLASS. TINT SHALL COMPLY WITH ALL APPLICABLE STATE OF TEXAS LAWS AND SHALL HAVE A LEGIBLE WINDOW TINT LABEL THAT CONTAINS ALL THE INFORMATION REQUIRED BY LAW REGARDING LIGHT TRANSMISSION AND LUMINOUS REFLECTANCE OF THE FILM. THE FILM AND GLASS SHALL NOT HAVE A LIGHT TRANSMISSION OF 35% OR MORE: OR A LUMINOUS REFLECTANCE OF 35% OR LESS. PARTS (TINT) AND LABOR SHALL BE WARRANTED FOR A PERIOD OF THREE (3) YEARS FROM THE DATE THE VEHICLE IS PUT INTO SERVICE.
811	OPT – OEM Up-Fitter Switches – Vendor shall provide a minimum of (4) four Up-fitter Switches, mounted in cab accessible to driver on right hand side.
812	OEM Rearview Camera System (After-Market not acceptable)
813	<i>HEADACHE RACK, NO LOUVER WINDOW GRILL WITH LIGHTS (for light-duty pickup trucks only): One piece welded type headache rack shall include two (2) left and right side turn signals with brake lights and two (2) reverse lights that are integrated into the headache rack with wiring that is not exposed to the weather. All lights shall be L.E.D type. Material shall be a minimum 2" X .095 square tubing wall. A light-duty headache rack shall be provided to allow a mounting point for a light bar. The mounting shall be accomplished by the use of the most appropriate size bolts with nuts and flat washers to insure safe and secure mounting without causing damage to the bed of the vehicle. Headache rack shall be treated in a chemical bath or dip, or similarly treated for rust prevention prior to application of the final finish which shall consist of a black powder coat finish. Example: Roughneck Model No. BHD-BHRSANLWL or equal. Substitutes must be approved by the ordering agency.</i>
814	<i>TOOL BOX, SINGLE LID, HEAVY-DUTY. ALUMINUM, SMOOTH OR DIAMOND TREAD, LOW PROFILE APPLICATION: Dimensions shall be approximately 62 inches wide (overall width, approximately 72 inches) by 13 inches height, 20.0 inches deep. Example: Weather Guard Model No. R-127, Better Built Model No. 73010910, Camlocker Model No. CAM/S71LP or equal. Substitutes must be approved by the ordering agency.</i>

SECTION F - REQUIREMENTS FOR DUMP BODIES - CONTRACTOR'S, PLATFORM, AND STAKE BODIES

The specific requirements for the Contractor's, Platform, and Stake Dump Bodies are given in Paragraphs F.1, F.2, and F.3, respectively. Section F.4, Installation and Mounting, and Section F.5, Painting, cover these requirements for all three types of bodies. Required dimensions are nominal.

F.1. CONTRACTOR'S TYPE DUMP BODY (See Options 178 through 183):

Sizes Available: 12', 14' & 16' long

Standard Features:

Fold-down sides (both sides of bed). The contractor's bed must have 14 - 18 inch max. side height, with brackets for nominal 2 inch sideboards. Body to be constructed of minimum 10 gauge steel.

10 gauge high strength steel front and side construction with formed sloping top rail. Front is fully welded to corner posts and front cross member for maximum strength. Sides have continuously welded vertical supports with drain holes.

Equipped with brackets for 2" nominal side board extensions. End heights available in 20". Clearance lights located high on rear corner posts and three light cluster (Identification lights) located in rear apron are recessed shock resistant rubber mounted. Fully boxed high strength steel construction tail gate with two vertical braces. 10 gauge high strength steel two-piece floor with 2" radius corners.

NOTE: A contractor's type dump body has low profile panels for easy access from the ground.

BODY SIZES AND DIMENSIONS - The front and rear of the body shall be 6 inches higher than the sides. The sizes and dimensions of the bodies used on the various truck series shall be as follows:

1.1.1. Dimensions of the bodies shall be as shown for the truck series listed in the following table:

Series Number	Wheelbase (nominal)	Cab-to-Axle (nominal)	Recommended Body Length	Body Width
930	135.5 inches	60/84 inches	96/120 inch	70-84 inches
950	128 inches	60 inches	96 inches	84 inches
960 - 990	126 inches	84 inches	98 inches	84 inches
960 - 990	150 inches	84 inches	120 inches	84 inches

1.1.2. **Dump Body Capacities:** When so specified in the Invitation for Bid, medium-duty trucks shall be equipped with dump bodies having capacities as follows:

SERIES	CAPACITY (cubic yards)
930	2-3
960	3
970, and, 980	4
985, and 990	5
Not available on Series 971 and 981.	

1.2. **STEEL:** The contractor's type dump body (including floor) shall be constructed from 0.1345 inch high-strength low-alloy steel (minimum yield point of 30,000 PSI and minimum tensile strength of 40,000 PSI) conforming to ASTM Standards A-607; or 0.1345 inch high carbon steel may be used. Standard AISI tolerances are allowed for the metal thickness specified.

1.3. **CONSTRUCTION AND COMPONENT REQUIREMENTS:** Body shall include but not be limited to the following components:

1.3.1. **Braces:** Body shall have tapered box type side braces installed with continuous weld as follows:

1.3.1.1. **96 inch body:** At least 2 braces on each side and 1 at each rear corner.

1.3.1.2. **120 inch body and above:** At least 3 braces on each side and 1 at each rear corner.

1.3.2. **Cross Members:** Cross member spacing shall be the manufacturer's standard spacing. Cross members which form the front and rear outer box frame or to which the hoist is anchored shall be 3 inch minimum. 4.1 pound-foot structural steel channel. The other cross members shall be either the above structural steel channel or minimum 3 inch, 2.98 pound-foot high-strength junior I-beam. If a cross member must be cut to provide hoist clearance, this member may be 3/8 inch by 3 inch by 1-1/2 inch steel angle. Only 1 cross member may be constructed of steel angle and only then if it must be cut to provide hoist clearance. Body shall have cross members as follows:

- 1.3.2.1. **96 inch body:** A minimum of 7 cross members.
- 1.3.2.2. **120 inch body:** A minimum of 9 cross members.
- 1.3.3. **One-half Cab Protector:** One-half cab protector shall cover approximately one-half of the truck cab (minimum 20 inch overhang). The material shall be as specified in Section 1.2.(above).
- 1.3.4. **Back-up Alarm:** Unit shall be complete with back-up alarm in compliance with applicable OSHA requirements.
- 1.3.5. **Floor/Sidewall Joints:** The joint between the side and floor of the body shall be one of the following types of construction to facilitate body clean-out:
 - 1.3.5.1. A 2 inch minimum radius, or,
 - 1.3.5.2. Body sheet with a 2 inch minimum 45 degree break (no welding) or,
 - 1.3.5.3. Square corners. reference (price being equal) will be given in the above order.
- 1.3.6. **Hoist and Hoist Sub-frame:** The design of the hoist shall be the one customarily offered to the commercial trade for the body and hoist specified here. Hoist shall be double acting and have a positive stop incorporated to prevent hoist from reversing or locking up, and shall be complete.
 - 1.3.6.1. Power hoists for two cubic yard dump bodies shall be equipped with a 12 volt electric/hydraulic drop hinge low profile scissors hoist. A hydraulic type is preferred where available.
 - 1.3.6.2. Power hoists for 3 and 4 cubic yard capacities shall be NTEA minimum Class 20 arm type; on 96 inch dump body and minimum Class 30 arm type; on 120 inch dump body from current chart on classification in effect. Power hoists for 5 cubic yard capacities shall be NTEA minimum Class 40 arm type on both the 96 inch and the 120 inch dump bodies. The following paragraphs (1.3.6.3 through 1.3.6.7) apply only to 3-5 cubic yard bodies:
 - 1.3.6.3. The 96-120 inch dump body hoist shall have a 2 inch minimum diameter piston rod with a nominal stroke of 13-1/2 inches.
 - 1.3.6.4. The 144 inch dump body hoist shall have a 2-3/16 inch minimum diameter piston rod with a nominal stroke of 20 inches.
 - 1.3.6.5. The hoist shall have an anti-friction bearing pump with a minimum capacity of 12.7 GPM at 1,000 RPM and 1,000 PSI (sleeve bearing pump is not acceptable) and a hoist cylinder bore of not less than 7 inches".
 - 1.3.6.6. Power hoists shall have at least a 3-stage valve to: (1) raise, (2) hold and (3) lower the body.
 - 1.3.6.7. Hoist manufacturer's identification plate shall show the hoist model, class, and serial numbers.

NOTE: HOIST MUST BE REPAIRABLE TYPE HAVING REPLACEABLE BEARINGS, GASKETS, SEALS, AND OTHER LESS DURABLE PARTS.
- 1.3.7. **Longitudinal Sills:** A minimum of 2 are required which shall be manufactured from minimum 5 inch, 6.7 pound-foot structural steel channel or 5 inch, 10 pound/foot steel I-beam.
- 1.3.8. **Power-Take-Off (PTO):** PTO for dump operation shall be at least single speed. The output shaft shall have a speed (RPM) of not less than 50 percent or more than 80 percent of engine RPM. The output shaft shall have a speed (RPM) of approximately 90 percent on diesel engines.

NOTE: PTO MUST BE REPAIRABLE TYPE HAVING REPLACEABLE BEARINGS, GASKETS, SEALS, AND OTHER LESS DURABLE PARTS.

NOTE: Some light-duty trucks with automatic transmissions require an electric-powered PTO if ordered. If furnished, it shall be equipped with in-cab push-button or cable controls.
- 1.3.9. **Rub Rails:** Body shall have rub rails with a minimum slope of 30 degrees, constructed from 0.1345 inch steel (standard AISI. tolerances) and installed the full length of both sides and the tailgate.
- 1.3.10. **Safety Strut (Brace):** Each body shall be equipped with a "safety strut" designed to support the empty dump body in a raised position at an angle of approximately 45 degrees from the hoist sub-frame. The safety strut (brace) shall conform to OSHA Regulations, Section 1926.601 Motor Vehicles (b) (10) Trucks with Dump Bodies.
- 1.3.11. **Sideboard Slots:** The body shall have slots in the sides to accommodate sideboards.
- 1.3.12. **Tailgate:** Body shall be equipped with a double acting tailgate. Tailgate shall be designed and

installed to close flush with body, and eliminate/minimize material loss between the tailgate and the dump body when chained in the horizontal position. The design and installation of the tailgate shall also prevent damage to the body/lights/reflectors when the tailgate is unlatched and deployed. Manufacturer's standard bracing shall be installed by continuous weld. Inner and outer panels of the tailgate shall also be connected by continuous weld. Spot welding is not acceptable. The tailgate shall be 6 inches higher than the sides of the body and shall consist of, but shall not be limited to, the following:

1.3.12.1. Upper Hinges and Hinge Pins: The tailgate shall be fitted with upper offset hinges of minimum 0.75 inch thick steel plate. These hinges shall not protrude above the sideboard gussets. The hinge pins shall be minimum 1 inch diameter. Supports made from minimum 0.5 inch thick steel shall be provided for each end of both upper hinge pins. Drilling of the sideboard gussets and reinforcing with minimum 0.375 inch thick steel plate for the upper hinge support is acceptable. Means shall be provided for adjusting the amount of tailgate opening when opened at the bottom and hinged at the top. Tailgate hinge pins shall be constructed with stops, to prevent lateral tailgate movement or accidental unlatching.

1.3.12.2. Lower Body Hardware and Hinge Pins: The lower body hardware on the tailgate shall be overhead hook type latch designed to hook and retain the hinge pins in supports on each side of the tailgate. The diameter of the lower hinge pins shall be minimum 1.25 inches. Means shall be provided to hold the tailgate in the same plane as the dump body floor when opened at the top and hinged at the bottom.

1.3.12.3. Operation and Control: A lever control for securing and releasing the lower tailgate latches shall be provided. This lever control shall be positioned on front of the body at the left so that operation of the lever shall not prevent opening the left cab door.

F.2 PLATFORM TYPE DUMP BODY (See Options 157, 162, 177, and 190):

2.1. BODY SIZES AND DIMENSIONS: The sizes and dimensions of the bodies used on the various truck series shall be as follows:

2.1.1. Length: 144 inch minimum unless otherwise specified in the Invitation for Bid.

2.1.2. Width:

2.1.2.1. Light-Duty Truck Bodies: Minimum 80 inches to maximum 84 inches unless otherwise specified in the Invitation for Bid.

2.1.2.2. Medium-Duty Truck Bodies: Minimum 94 inches to maximum 96 inches unless otherwise specified in the Invitation for Bid.

2.2. FLOORING:

2.2.1. Steel: Steel platform type dump bodies (including floor) shall be constructed from 0.1345 inch high-strength low-alloy steel (minimum yield point of 50,000 PSI and minimum tensile strength of 70,000 PSI) conforming to ASTM standards A-606; or 0.1345 inch high carbon steel may be used. Standard AISI tolerances are allowed for the metal thickness specified.

2.2.2. Wood: Wood platform type dump bodies (including floor) shall be constructed from 1-1/2 inch finished thickness, kiln-dried, Womanzed or Penta-treated lumber, free from such defects as loose knots, knotholes, excessive warp, or edge splits. Each section shall be securely fastened to each cross member by recessed screws or bolts and installed flush with side rails.

2.3. CONSTRUCTION AND COMPONENT REQUIREMENTS: Body shall include but shall not be limited to the following components:

2.3.1. Rails:

2.3.1.1. Steel Body: The floor edges shall be enclosed with minimum 5 inch, 12-gauge, high-strength steel channel rails installed on both ends and on both sides.

2.3.1.2. Wood Body: The floor edges shall be enclosed with rails installed on both ends and on both sides as follows:

2.3.1.2.1. End Rails: Minimum 12-gauge formed steel channel.

2.3.1.2.2. Side Rails: Minimum 11-gauge formed steel channel.

2.3.2. Cross Members: Cross members shaping shall be the manufacturer's standard spacing with a

minimum of 8 cross members on dump bodies spacing should be a minimum of 12" centers (including front and rear members) which shall be minimum 3 inch, 4.1 pound-foot structural steel channel, 3 inch, 2.98 pound-foot high-strength steel junior I-beam , or 4 inch formed, 11-gauge steel channel.

- 2.3.3. Hoist and Hoist Sub-frame:** Body shall be equipped with a full length hoist sub-frame of not less than 0.250 inch steel channel. The design of the hoist shall hydraulic and be one customarily offered to the commercial trade for the body and hoist specified here. Hydraulic hoist shall be double arm lift type and shall have a positive stop incorporated to prevent hoist lift arms from reversing or locking up, and shall be complete with automotive drive parts. May be equipped with a single cylinder, scissor type hoist in lieu of the double arm lift type.

NOTE: HOIST SUB-FRAME NOT REQUIRED WITH SCISSOR TYPE HOIST.

- 2.3.3.1.** The hoist shall have an anti-friction bearing pump with a minimum capacity of 12.7 GPM at 1,000 PSI (Sleeve-bearing pump is not acceptable) and a hoist cylinder bore of not less than 7 inches; or,
- 2.3.3.2.** The hoist shall have an anti-friction bearing pump with a minimum capacity of 10.9 GPM at 1,000 RPM and 3,000 PSI with hoist cylinder bore of not less than 5 inches.
- 2.3.3.3.** Power hoists shall have at least a 3-stage control valve to: (1) raise, (2) hold and, (3) lower the body.
- 2.3.3.4.** Power hoist shall be NTEA minimum Class 30 arm type or Class D scissor type on 144 inch body from current chart on classifications in effect.
- 2.3.3.5.** Hoist manufacturer's identification plate shall show the hoist model, class, and serial numbers..

NOTE: HOIST MUST BE REPAIRABLE TYPE HAVING REPLACEABLE BEARINGS, GASKETS, SEALS, AND OTHER LESS DURABLE PARTS.

- 2.3.4. Longitudinal Sills:** A minimum of 2 are required which shall be manufactured from minimum 5 inch, 6.7 pound-foot structural steel channel or 5 inch, 10 pound-foot steel I-beam.
- 2.3.5. Power-Take-Off (PTO):** PTO for dump operation shall be at least single speed. The output shaft shall have a speed (RPM) of not less than 50 percent or more than 80 percent of engine RPM. The output shaft shall have a speed (RPM) of approximately 110 percent on diesel engines.

NOTE: PTO MUST BE REPAIRABLE TYPE HAVING REPLACEABLE BEARINGS, GASKETS, SEALS, AND OTHER LESS DURABLE PARTS.

NOTE: Some light-duty trucks with automatic transmissions require an electric-powered PTO, if ordered. If furnished, it shall be equipped with in-cab push-button or cable controls.

- 2.3.6. Protector, Cab (Bulkhead Type):** Body shall be equipped with a bulkhead type cab protector. This protector shall be designed to prevent shifting of load and penetrating or crushing of the driver's compartment. It shall be constructed of minimum 11-gauge steel plate with a window to provide visibility. The window shall be made of minimum 11-gauge diamond-punched steel, or covered with minimum 9-gauge expanded metal diamond mesh. Cab protector dimensions shall be designed to fit the truck cab and shall not interfere with the driver's rearward visibility.

Cab protector shall be mounted using knee-brace style reinforcements welded to the bottom of the outer body rail. Top-mounted angle gusset type mounting is not acceptable.

- 2.3.7. Safety Strut (Brace):** Body shall be equipped with a "safety strut" designed to support the empty dump body in a raised position at an angle of approximately 45 degrees from the truck frame. The safety strut (brace) shall conform to OSHA. Regulations, Section 1926.601 Motor Vehicles (b) (10) Trucks with Dump Bodies.
- 2.3.8. Stake Pockets:** Body shall have a minimum of 5 stake pockets on each side and a minimum of 4 on each end.
- 2.3.9. Operating Lever Latch:** Body shall be equipped with a latch or other device which will prevent accidental starting or tripping of the mechanism.

2.3.10. Trip Handles: Trip handles for tailgates of dump bodies shall be so arranged that, in dumping, the operator will be in the clear.

F.3 STAKE TYPE DUMP BODY (See Options 161, 168, 176, and 186):

3.1. DIMENSIONS:

3.1.1. Length: Minimum 108 inches, unless otherwise specified in the Invitation for Bid.

3.1.2. Width:

3.1.2.1. Light-Duty Truck Bodies: Minimum 86 inches.

3.1.2.2. Medium-Duty Truck Bodies: Minimum 94 inches to maximum 96 inches.

3.1.2.3. Height of Stake Sides: Minimum 40 inches

3.2. CONSTRUCTION AND COMPONENT REQUIREMENTS: Body shall include, but not be limited to the following components:

3.2.1. Cross Members: Cross member spacing shall be the manufacturer's standard spacing. Body shall have a minimum of 5 cross members which shall be minimum 4 inch, 11-gauge formed steel channel.

3.2.2. Flooring:

3.2.2.1. Steel: Body (including floor) shall be constructed from 0.1345 inch high-strength low-alloy steel (minimum yield point of 50,000 PSI and minimum tensile strength of 70,000 PSI) conforming to ASTM standards A-606; or 0.1345 inch high carbon steel may be used. Standard AISI tolerances are allowed for the metal thickness specified.

3.2.2.2. Wood: Body (including floor) shall be constructed from 1-1/2 inch finished thickness, kiln-dried, Wolmanized or Penta-treated lumber, free from such defects as loose knots, knotholes, excessive warp, or edge splits. Each section shall be securely fastened to each cross member by recessed screws or bolts and installed flush with side rails.

3.2.3. Hoist: Body shall be equipped with a single cylinder scissor type conversion hoist mounted under the body.

3.2.3.1. The hoist pump shall have a capacity of not less than 6.75 GPM at 1,000 RPM and 1,000 PSI.

NOTE: PUMP SHALL BE REPAIRABLE TYPE WITH REPLACEABLE BEARINGS, GASKETS, SEALS AND OTHER LESS DURABLE PARTS.

3.2.3.2. The hoist cylinder shall have a nominal bore of 4.0 inches and a nominal 1-3/4 inch diameter piston rod.

3.2.3.3. Power hoists shall have at least a 3-stage control valve to: (1) raise, (2) hold and, (3) lower the body.

3.2.3.4. Power hoist on a Stake Dump Body shall be NTEA minimum Class B scissor type for light-duty trucks and minimum NTEA Class C scissor type for Medium-duty trucks, from current chart on classifications in effect.

3.2.3.5. Hoist manufacturer's identification plate shall show the hoist model, class, and serial numbers.

3.2.4. Longitudinal Sills: A minimum of 2 are required which shall be minimum 6 inch, 12-gauge formed steel channel.

3.2.5. Power-Take-Off (PTO): PTO for dump operation shall be at least single speed. The output shaft shall have a speed (RPM) of not less than 50 percent or more than 80 percent of engine RPM. The output shaft shall have a speed (RPM) of approximately 90 percent on diesel engines.

NOTE: PTO MUST BE REPAIRABLE TYPE HAVING REPLACEABLE BEARINGS, GASKETS, SEALS, AND OTHER LESS DURABLE PARTS.

NOTE: Some light-duty trucks with automatic or manual transmission require an electric-powered PTO, if ordered.

3.2.6. Protector, Cab (Bulkhead Type): Body shall be equipped with a bulkhead type cab protector, which shall be a part of the body. This protector shall be designed to prevent shifting of load and penetrating or crushing of the driver's compartment. It shall be constructed of minimum 11-gauge steel plate with a window to provide visibility. The window shall be made of minimum 11-gauge diamond-punched steel, or covered with minimum 9-gauge expanded metal diamond mesh. Cab protector dimensions shall be designed to fit the truck cab and shall not interfere with the driver's rearward visibility.

Cab protector shall be mounted using knee-brace style reinforcements welded to the bottom of the outer body rail. Top-mounted angle gusset type mounting is not acceptable.

3.2.7. Rails: The floor edges shall be enclosed with rails installed on both ends and on both sides as

follows:

3.2.7.1. End Rails: Minimum 12-gauge formed steel channel.

3.2.7.2. Side Rails: Minimum 14-gauge formed steel channel.

3.2.8. Safety Strut (Brace): Each body shall be equipped with a "safety strut" designed to support the empty dump body in a raised position at an angle of approximately 45 degrees from the truck frame. The safety strut (brace) shall conform to OSHA Regulations, Section 1926.601 Motor Vehicles, (b) (10) Trucks with Dump Bodies.

3.2.9. Stake Rack Sections: Body shall have removable stake rack sections at least 40 inches high measured from the top to the floor rail after installation. Each stake rack section shall be equipped with the necessary hardware to lock each section to adjacent sections. 2 rack sections shall be provided on each side, and 2 on the rear of each stake dump body. Each stake rack section shall have a minimum of 4 horizontal slats with no more than a 7 inch gap between them. The slats shall be constructed from minimum 18-gauge corrugated steel with rounded corners and smooth edges. Each slat shall be securely fastened to 2 steel stakes.

3.2.10. Stakes and Stake Pockets: Body shall be provided with the standard number of stake pockets for this size body. The stakes shall be constructed of minimum 16-gauge corrugated steel and the stakes shall be designed to fit snugly and rigidly inside the stake pockets. Readily accessible lock down or latching system mechanisms shall be provided.

F.4 INSTALLATION AND MOUNTING: The installation and mounting of each of these types of bodies shall be in accordance with the body and hoist manufacturer's instructions except for the requirements specified here and in Paragraphs A.4.4. through A.4.9.

NOTE: ALL LUBRICATION POINTS ON DUMP EQUIPMENT, INCLUDING DRIVE SHAFT ASSEMBLY FROM PTO TO HOIST PUMP, SHALL BE THOROUGHLY LUBRICATED BEFORE DELIVERY.

- 4.1. BODY-CAB CLEARANCE:** Body-cab clearance of the hydraulic hoist/dump body and the cab shall be a minimum of 2 inches and a maximum of 4 inches with a 3 inch clearance preferred.
- 4.2. DRIVE SHAFT HANGER BEARINGS:** Drive shaft from the center of the PTO U-joint to the center of the hoist pump U-joint longer than 45 inches shall be 2-piece and equipped with hanger bearings.
- 4.3. DRIVE SHAFT ANGULARITY:** Angularity of drive shaft from PTO output shaft to pump shall be no greater than 5 degrees between any 2 adjacent shafts to eliminate excessive U-joint wear..
- 4.4. CAB DUMP CONTROLS:** Cab dump controls for the contractor's and platform dump bodies shall be mounted through the floor unless otherwise specified in the Invitation for Bid. The size of the cut-out for the cab control levers shall be held to the absolute minimum required for proper operation. The cut-out shall be sealed watertight. The controls for the stake dump body shall be the cable type and mounted in the cab.
- 4.5. CAB DUMP CONTROL SAFETY DEVICE:** Trucks with lever- or cable-operated dump bodies shall be equipped with an enclosure or other safety device which will prevent accidental tripping of the dump body activation rods (controls) from outside the truck cab. The dump control safety device shall conform to OSHA Regulations, Section 1926.601 Motor Vehicles (b) (10) Trucks with Dump Bodies.
- 4.6. WIRING:** All electrical wiring for the dump body shall be insulated and shall be enclosed in a fibrous loom, plastic loom, or flexible conduit for protection from external damage and short circuits. Wiring shall be securely fastened to the frame at intervals sufficient to prevent sagging, dragging, and for clearance of any mechanical parts.
- 4.7. LAMPS, REFLECTORS, AND SIDE MARKER LAMPS:** Lamps, reflectors, and side markers shall be furnished as required by Paragraphs. A.4.8. and A.4.9., General Information and Requirements of this specification.
- 4.8. MUD FLAPS:** Mud flaps shall be furnished as required by Section C.8a.3.

F.5 PAINTING:

- 5.1. SURFACE PREPARATION:** All surfaces of each dump body, including cross members, stake racks, and longitudinal sills, shall be thoroughly prepared and cleaned to remove all dirt, oil, grease, rust, slag, scale, and other foreign matter prior to priming. The cleaned and prepared surfaces shall be given a shop coat of primer and then thoroughly dried. The primer used shall be compatible with the finish coat in order to insure proper adhesion of the finish coat. The finish coat shall be first quality air drying paint. The minimum dry film thickness of the finish coat shall be 1 mil. The final color shall match the chassis manufacturer's colors.
- 5.2. Color, Major Components:** The body shall be painted the same color as the truck chassis cab except for rubber and those metallic accessories or fixtures constructed of rust-resistant or plated material not normally painted.

F.6 MANUAL(S): Manual(s) shall be furnished which contain illustrated parts lists and operating and servicing instructions for the body and hoist. Manual(s) shall be delivered with each unit. The manual(s) shall be as detailed as possible, outlining all necessary servicing and operating instructions for each unit. Parts list(s) shall cover all components of the unit. Necessary warnings and safety precautions shall be included (See Sections A.4.5 and A.4.6.). The following information shall be provided by the vendor at the time of delivery, if it is not included in the above manual(s):

- 6.1. Manufacturer's recommended service/preventive maintenance intervals.
- 6.2. Recommended fluids, lubricants, and their SAE equivalents.
- 6.3. Installation instructions.
- 6.4. Hoist capacity information.

SECTION G - REQUIREMENTS FOR STATIONARY PLATFORM AND STAKE BODIES

(See Option 158-162, 167, 173-175, 185 and 221):

The following requirements cover the platform and stake type bodies. Each of these requirements apply to both types of bodies unless otherwise specified.

G.1 BODY DIMENSIONS: The dimensions of the platform and stake bodies shall be as follows:

1.1. LENGTH:

- 1.1.1. **Light-Duty Trucks:** Approximately 96 inches for Cab-to-Axle of 56 inches, and approximately 108 inches for Cab-to-Axle of 60 inches.
- 1.1.2. **Medium-Duty Trucks:** Approximately 108 inches for Cab-to-Axle of 60 inches, approximately 120 inches for Cab-to-Axle of 72 inches, and approximately 144 inches for Cab-to-Axle of 84 inches.

1.2. WIDTH:

- 1.2.1. **Light-Duty Trucks:** Minimum 80 inches or overall body width shall be sufficient to cover rear tires with not more than 2 inch overhang on each side.
- 1.2.2. **Medium-Duty Trucks:** Minimum 90 inches or overall body width shall be sufficient to cover rear tires.

1.3. HEIGHT, STAKE BODY: The height of the stake body shall be measured from the rail to the top of the rack section and shall be as follows:

- 1.3.1. **Light-Duty Trucks:** Minimum 26 inches.
- 1.3.2. **Medium-Duty Trucks:** Maximum 40 inches.

G.2 CONSTRUCTION AND COMPONENT REQUIREMENTS: These two bodies shall include, but not be limited to the following components:

2.1. CROSS MEMBERS: Cross members shall be spaced as uniformly as possible and shall be as follows:

- 2.1.1. **Light-Duty Trucks:** Minimum of 5 cross members of minimum 4 inch, 11-gauge formed steel.
- 2.1.2. **Medium-duty Trucks:** Minimum of 6 cross members of minimum 4 inch, 12-gauge formed steel channel.

2.2. FLOORING:

- 2.2.1. **Steel Body:** Flooring shall be minimum 3/16 inch safety tread plate steel flooring.
- 2.2.2. **Wood Body:** Flooring shall be minimum 1-1/2 inches finished thickness, kiln-dried, Wolmanized or Penta-treated lumber free from such defects as knots, knotholes, excessive warp, or edge splits. Each floor section shall be securely fastened to each cross member by recessed screws or bolts and installed flush with side rails.

2.3. LONGITUDINAL SILLS: A minimum of 2 are required on each body as follows:

- 2.3.1. **Light-Duty Trucks:** Longitudinal sills of bodies shall be minimum 6 inch, 12-gauge formed steel channel or 5 inch, 6.7 pound-foot structural steel channel.
- 2.3.2. **Medium-Duty Trucks:** Longitudinal sills of bodies shall be minimum 6 inch, 11-gauge formed steel channel of 5 inch, 6.7 pound-foot structural steel channel.

G.2 CONSTRUCTION AND COMPONENT REQUIREMENTS:

- 2.4. **PROTECTOR, CAB (Bulkhead Type):** Unless otherwise specified in the Invitation for Bid, each stationary platform body shall be equipped with a bulkhead type cab protector, in lieu of a front stake rack section. This protector shall be designed to prevent shifting of load and penetrating or crushing of the driver's compartment. It shall be constructed of minimum 11-gauge steel plate with a window to provide visibility. The window shall be made of minimum 11-gauge diamond-punched steel, or covered with minimum 9-gauge expanded metal diamond mesh. Cab protector dimensions shall be designed to fit the truck cab and shall not interfere with the driver's rearward visibility.

Cab protector shall be mounted using knee-brace style reinforcements welded to the bottom of the outer body rail. Top-mounted angle gusset type mounting is not acceptable.

- 2.5. RAILS:** The floor edges shall be enclosed with rails installed on both ends and on both sides as follows:
- 2.5.1. End Rails:**
- 2.5.1.1. Light-Duty Truck Bodies:** Minimum 12-gauge formed steel channel.
- 2.5.1.2. Medium-Duty Truck Bodies:** Minimum 11-gauge formed steel channel.
- 2.5.2. Side Rails:**
- 2.5.2.1. Light-Duty Truck Bodies:** Minimum 14-gauge formed steel channel.
- 2.5.2.2. Medium-Duty Truck Bodies:** Minimum 11-gauge formed steel channel.
- 2.6. STAKE RACK SECTIONS:** Each stake body shall have stake rack sections with horizontal slats having a maximum 7 inch gap between them. Each stake rack section shall be equipped with the necessary hardware to lock each section to adjacent sections. The slats shall be constructed of either minimum 0.75 inch thick Wolmanized or Penta-treated lumber free of warps, splits, or knotholes; or they may be made from minimum 16-gauge or minimum 18-gauge corrugated steel with rounded corners and smooth edges unless a preference is specified on the Invitation for Bids (See Note at the end of Section G.). Each slat shall be securely fastened to 2 steel stakes. The number of slats per section and the number of stake rack sections per body for the two body sizes shall be as follows:
- 2.6.1. 108 inch Bodies:** 108 inch bodies shall have 2 sections on each side and 2 at the rear. The number of slats per section for the two materials shall be as follows:
- 2.6.1.1. Lumber or 16-gauge Corrugated Steel:** Minimum 3 slats per section.
- 2.6.1.2. 18-gauge Corrugated Steel:** Minimum 4 slats per section.
- 2.6.2. 144 inch Bodies:** 144 inch bodies shall have 3 sections on each side and 2 at the rear. The number of slats per section for the two materials shall be as follows:
- 2.6.2.1. Lumber or 16-gauge Corrugated Steel:** Minimum 4 slats per section.
- 2.6.2.2. 18-gauge Corrugated Steel:** Minimum 5 slats per section.
- 2.7. STAKE AND STAKE POCKETS:** Stakes shall be steel and shall be designed to fit snugly and rigidly inside the stake pockets. Readily accessible lock-down mechanisms are required. The number of stake pockets required for the rear and side rails of the two body lengths are as follows:
- 2.7.1. 108 inch Bodies:**
- 2.7.1.1. Rear Rail:** Minimum 4 stake pockets.
- 2.7.1.2. Side Rails:** Minimum 4 stake pockets on each side.
- 2.7.2. 144 inch Bodies:**
- 2.7.2.1. Rear Rail:** Minimum 4 stake pockets.
- 2.7.2.2. Side Rails:** Minimum 6 stake pockets on each side.
- G.3 INSTALLATION AND MOUNTING:** The installation and mounting shall be in accordance with the body and vehicle manufacturer's instructions except for the requirements in Paragraphs A.4.4. through A.4.9.
- 3.1. LAMPS, REFLECTORS, AND SIDE MARKER LAMPS:** Lamps, reflectors, and side marker lamps shall be furnished as required by Paragraphs A.4.8. and A.4.9., General Information and Requirements.
- 3.2.** Mud flaps shall be furnished as required by Section C.8.a.3.
- G.4 PAINTING:**
- 4.1. STATIONARY BODIES (including Stake Rack Sections):** Requirements for stationary bodies (including stake rack sections) are the same as those for dump bodies, Section F.5., except the color shall be the manufacturer's standard unless the Invitation for Bid specified another color.
- 4.2. PAINTING, TEXAS DEPARTMENT OF TRANSPORTATION (TxDOT):** Complete units for TxDOT shall be painted as follows:
- 4.2.1. Colors, Major Components:** The body shall be painted the same color as the truck chassis (cab) except for rubber and those metallic accessories or fixtures constructed of rust-resistant or plated material that are not normally painted. Lead-free paint is acceptable if it matches the color of the truck chassis (cab).

NOTE TO ORDERING ENTITIES:

ORDERING ENTITIES SHOULD TAKE SPECIAL NOTE THAT THIS SPECIFICATION REQUIRES WOLMANIZED OR PENTA-TREATED LUMBER OR CORRUGATED STEEL STAKE RACKS FOR STAKE BODIES AT THE OPTION OF THE MANUFACTURER.

REFER TO PARAGRAPH G.2.5., IF THE ORDERING ENTITY HAS A PREFERENCE FOR

EITHER WOLMANIZED OR PENTA-TREATED LUMBER OR STEEL (OR HARDWOOD), THIS MUST BE STATED IN THE INVITATION FOR BID.

SECTION H - REQUIREMENTS FOR UTILITY BODIES (See Options 163 and 169)

Utility bodies for light-duty trucks, Series 870, 875, 881, 886, and 888 (Option No. 163) and medium-duty trucks, Series 930 through 961 (Option No. 169), shall be general purpose type bodies which meet or exceed the following requirements:

H.1 GENERAL REQUIREMENTS: Each utility body shall be provided with the following, regardless of whether it is mounted on a light-duty or a medium-duty truck: Overall mounted height of the utility body shall provide the lowest profile possible. Body shall not extend more than 4 inches above the bottom of the vehicle's rear window.

- 1.1. **BUMPER, REAR:** The rear bumper shall be made of heavy-duty safety tread plate steel with recessed type hitch plate for installation of a ball-type hitch.
- 1.2. **COMPARTMENT DOORS:** Each compartment shall have a door and the doors shall have automotive type neoprene weather stripping installed between the door and the compartment so as to make the compartment dust-proof and waterproof.
- 1.3. **HORIZONTAL STORAGE SPACE:** The horizontal storage space shall extend the full length of the utility body on both sides, but may be partitioned into several compartments either horizontally or vertically.
- 1.4. **RECESSED LATCHES:** Each compartment door shall have a recessed latch and handle. The handle shall be a lifetime guarantee stainless steel.
- 1.5. **LOCKS:** Compartments shall have locks on each door and every lock shall be keyed alike.
- 1.6. **MATERIAL, BODY:** Body shall be constructed of minimum 14-gauge automotive type cold-rolled or Galvan Neal steel. Compartment doors shall be constructed of minimum 16-gauge steel, where furnished as a single panel. Where doors are furnished in a double panel configuration, each panel shall be constructed of minimum 20-gauge steel.
- 1.7. **UNDERCOATING:** The entire exposed underside of the utility body shall be completely and thoroughly undercoated without skips, voids, or thin places with a high quality asphalt base underbody coating conforming to Federal Specification TT-C-520B, such as R-477-139 manufactured by Daubert Chemical Co., Chicago, Illinois 60638, or Lion Nokorode Emulsion 331 manufactured by Lion Oil Company, El Dorado, Arkansas 71730, or an Ordering Entity Approved Equal. The undercoating shall be applied in accordance with the undercoating manufacturer's instructions.

H.2 OPTIONAL REQUIREMENTS: When so specified in the Invitation for Bid, utility bodies shall be equipped with one or more of the following options:

- 2.1. **TELESCOPING TOP WITH TAILGATE ENCLOSURE (OPTIONS 164 AND 170):** A minimum two-piece top shall be installed as near flush as practicable with the tops of the side compartments. The top shall be complete with a folding and locking tailgate enclosure and/or a heightened tailgate to form a secure and weather-tight storage compartment. The lock shall be keyed alike with compartment door locks. The rear half shall slide forward to provide access to the rear of the body floor.
- 2.2. **TOP OPENING SMALL PARTS TRAY (OPTIONS 165 AND 171):** The top of the body shall be hinged to provide access to a full length parts bin with dividers set on approximately 5 inch centers. Bin shall be provided on both compartment sides. Device(s) shall be provided to hold the lid in the open position.
- 2.3. **THROUGH-COMPARTMENT WITH REAR ACCESS DOOR (OPTIONS 166 AND 172):** A full width and length shelf shall extend through all compartments on the curb (passenger) side of the utility body. An access door with handle and lock keyed in common with those provided on the other compartments shall be provided at the rear of the body. The access door shall be aligned with the shelf.

H.3 DIMENSIONS: The approximate dimensions of these utility bodies shall be as follows:

3.1. **LIGHT-DUTY TRUCKS (Series 870, 875, 881, 886, and 888):**

<u>Parameter</u>	<u>Series Number</u>				
	<u>870</u>	<u>875</u>	<u>881</u>	<u>886</u>	<u>888</u>
Width, Cargo Body, inches	51	49-54	51	54	54
Length, inches	96	108	96	96	96
Compartment Depth, inches	14-1/2	20	14-1/2	20	20

Utility Body Height, inches	36	36	36	36	36
Utility Body Overall Width, inches	80	94	80	94	94

NOTE: WIDTH BETWEEN WHEEL WELLS OF PICKUP CAB AND CHASSIS UNITS (SERIES 881 AND 886) WITH DUAL REAR WHEELS IS APPROXIMATELY 42 INCHES.

3.2. MEDIUM-DUTY TRUCKS (Series 930 through 961):

<u>Cab-to-Axle Dimensions</u>	<u>60 inches</u>	<u>84 inches</u>
Width, Cargo Body, inches	49-54 *	49-54 *
Length, inches	108	132
Compartment Depth, inches	20	18"-20"
Utility Body Height, inches	36	36"-40"
Utility Body Overall Width, inches	89-94 *	89-94 *

* Applicable for Series 930 only (See NOTE (following) referring to maximum overhang).

NOTE: BODY WIDTH SHALL BE SUFFICIENT TO ADEQUATELY COVER REAR TIRES WITH NO MORE THAN 2 INCH OVERHANG ON EACH SIDE. BODY SHALL BE PROPER SIZE FOR CHASSIS.

H.4 PAINTING:

- 4.1. **REQUIREMENTS:** Painting requirements for utility bodies are the same as those for dump bodies, Section F.5.
- 4.2. **Color, Major Components:** The utility body shall be painted the same color as the truck chassis (cab) except for rubber or those metallic accessories or fixtures constructed of rust-resistant or plated material that are not normally painted.

SECTION I – SPECIAL EQUIPMENT – PARA-TRANSIT BODY & WHEELCHAIR LIFT

1. GENERAL DESCRIPTION

The purpose of these specifications is to describe the conversion of a full size van or a cutaway chassis as manufactured by the vehicle OEM, equipped with a raised roof, wheelchair lift, provisions for stand-up entry and wheelchair passenger securement. Conversion must meet the requirements of the Americans with Disabilities Act, including but not limited to the provisions of the wheelchair lift, wheelchair entry and securement.

Unless otherwise specified, all units shall be furnished complete with standard equipment and factory-installed accessories as listed in the manufacturer's literature for the models specified herein. The following items are minimum requirements and shall be provided whether shown as optional or standard equipment by the manufacturer.

- 1.1 All Standard and Common Features Shall be Furnished
Standard and common features, some related to safety and others to driver and passenger convenience, which are generally provided in a para-transit vehicle without customer stipulation. Those features include but are not limited to: adjustable instrument lights, interior sun visors, exterior backup lamps, two-speed windshield wipers, windshield washers, windshield defroster, coolant recovery system, etc. Standard and other common features if not specifically stated shall not be interpreted as items that can be omitted to reduce price or to provide any other bidding advantage.

- 1.2 Certification of ISO 9001:2000 Compliance
The manufacturer of the vehicles shall have a proven, third-party certified quality control system in place and shall be ISO 9001:2000 certified at the facility that will produce the vehicles as bid. Written certification of ISO 9001:2000 compliance shall be included with the bid submission documents. A copy of the vehicle manufacturer's ISO-approved Quality Assurance Manual shall also be submitted with the Proposer's bid package.

2. GENERAL DIMENSIONS

Wheelbase..... 138" min.

Interior height from floor to ceiling.....	72" min.
Interior height from floor to ceiling at aisle.....	75" min.
Height at first step.....	12" max.
Height at passenger door entrance.....	78" min.
Aisle width.....	14" min.
Interior width at floor level.....	76" min.
Gross Vehicle Weight Rating.....	9,250 lbs. min.

3. BUMPERS

Chassis manufacturer's standard front chrome bumper and vehicle manufactured standard rear bumper. Rear bumper to be of sufficient strength to allow the vehicle to be pushed without damage.

4. ELECTRICAL

- 4.1 A minimum of 200 ampere alternators shall be provided.
- 4.2 Chassis manufacturer supplied batteries shall be mounted on a stainless steel roller mounted pull out tray with battery hold down secured with bolts. Inside of compartment should be covered with a durable insulating material to prevent shorts. Battery compartment should be vented and the battery shall be easily serviceable without removal from battery tray.
- 4.3 All wiring other than that provided with the OEM chassis shall be number and function coded every 6 inches and shall be color coded. The body manufacturer shall furnish a complete wiring diagram with integrated body and chassis marked to show the codes used.
- 4.4 Fast idle solenoid with manual switch, volt sensor and light shall be installed. Solenoid is to automatically shut off when transmission is in gear or brake is applied.

5. LIGHTING

- 5.1 Overhead entrance and stepwell lights shall provide no less than five foot-candles of illumination on the entrance step area with the door open. This system shall be illuminated automatically when the door is open. Overhead and stepwell lights shall be wired to and activated automatically by door control and by a separate dash mounted switch.
- 5.2 All exterior lights, with the exception of headlights, passenger entry door, lift door, curb light, and rear back-up lights shall be Light Emitting Diode (LED) lights. Lighting shall be in accordance with Federal Motor Carrier Safety Regulations 393.12. All lights shall have wire long enough to move the light at least six inches (6") from vehicle for service. Lights shall be grounded to body framing structure. All lights shall be sealed from moisture. Marker lights shall be armored, surface mounted. Center brake light shall be furnished.

6. AIR CONDITIONING

6.1 Air Conditioning Performance Specifications

The installed air conditioning system shall cool the interior of the vehicle to 80°F measured at a minimum of three points, located four feet above the floor at the longitudinal centerline of the vehicle. The three points shall be (1) near the driver's location; (2) at the mid-point of the body; and (3) two feet forward of the rear of the vehicle

6.2 Compressors

A chassis OEM supplied compressor and an engine mounted TM-16 compressor each rated @ 52,000-btu/hr (imaca) shall be provided. Each unit shall have a nominal ten (10) cubic-inch displacement, and is to be belt driven off of the vehicle's engine. The compressors are to be equipped with an electro-magnetic clutch controlling each of the system's (2) thermostats.

6.3 Condenser

Condenser shall be a under floor skirt mounted unit rated @ 76,000 btu/hr (imaca). This unit shall be capable of producing a total of 2,400 cfm of airflow (rated @ 13.5vdc / 0" static). This unit shall contain three (3) single speed permanent magnet four pole, four brush 10,000 hour design life sealed ball bearing motors. This unit's maximum amperage draw shall be 21 amps @ 13.5vdc. The unit's refrigerant connections shall be of a corrosion resistant brass, and shall be of the o-ring type to insure leak-free continuous operation. The unit's filter drier shall be a minimum sixteen (16) cubic inches of desiccant compatible with R-134A; equipped with o-ring connections to insure leak-free connections, and capable of maintaining a dry, non-acidic system.

6.4 Evaporators

Evaporators shall be a chassis OEM supplied 15,000 btu/hr drivers in dash air conditioning unit and a rear center ceiling mounted unit rated @ 52,000 btu/hr (imaca). This rear unit shall be capable of

producing 1,600 cfm of airflow on high speed (rated @ 13.5vdc/0" static). This unit shall contain two (2) three speed permanent magnet 10,000 hour design life sealed ball bearing motors. This unit's maximum amperage draw shall be 36 amps @ 13.5 vdc. The unit shall be equipped with an easily removable, cleanable filter element capable of filtering air to 10,000 ppm. The unit's expansion valve shall be equipped with o-ring fittings to insure leak-free continuous operation.

6.5 Controls

The vehicle's air conditioning system shall be controlled from the driver's seated position. The controls shall consist of (2) rotary fan speed switch (off/high/medium/low), and (2) rotary or slide type thermostat switches.

7. **HEATING AND DEFROSTING**

A rear hot water heater with blower fan shall have a BTU rating of at least thirty thousand (30,000) shall be installed under a seat near the rear of the vehicle. The controls shall be readily accessible to the driver. Heater hose connections shall be installed above the floor of the vehicle body and through the fire wall to the engine compartment. **Easily accessible** all brass gate valve(s) shall be furnished to cut off the flow of coolant water to the rear heater.

8. **SAFETY EQUIPMENT**

- 8.1 First Aid Kit; Will be the standard State of Texas School Bus First Aid Kit. Kit shall be securely mounted near the driver's seat.
- 8.2 Fire Extinguisher; One 5-pound dry type (BC rated), securely mounted near the driver's seat.
- 8.3 Reflectors; Three folding triangle reflectors with storage container(s).
- 8.4 Back up Alarm; Meeting the requirements of SAE J994B or the latest revision thereto.
- 8.5 Fresnel Lens; provided on the rear window of the vehicle.

9. **MIRRORS**

- 9.1 Exterior; Rearview mirror, manufacturer's exterior low mount type with extension arms (below eye level) wide view type mirror. Mirror shall be a minimum of 6 inches by 9 inches. Additionally minimum 5-inch convex mirrors to be mounted with brackets on top of the main mirrors on the left and right sides.
- 9.2 Interior; Day/night type, conforming to FMVSS No. 111 and affording a good view of the road to the rear as well as the passenger area. The mirror(s) shall be made of safety glass, having rounded corners and protective edges. If more than one interior mirror is installed, at least one of the mirrors shall have a minimum of 90 square inch of clear vision, reflective surface area.
- 9.3 Passenger Mirror; an additional minimum 6-inch by 10-inch interior mirror shall be furnished for the driver to view the passengers.

10. **WINDOWS**

Side windows to be provided for the full length of the vehicle. If the windows are transit type T-slider windows they shall be equipped with emergency release latches to provide emergency exits. Release instructions shall be provided at or near the release handles and an audible alarm shall be activated when any handle is released. Side windows, rear window(s) and glass in passenger entrance door shall be of uniform dark tint sufficient to permit no more than 31% light transmission. Tinted film is not acceptable.

11. **PASSENGER SEATS**

All frames shall be high quality heavy duty tube; jig welded, and utilizing a heavy duty wire mesh grid for seat support. The back rest shall have steel straps for back support. Standard seat cushion width shall be 17 1/2" (single) or 35" (double). Back cushion height shall be 22 1/2" from the top of the seat cushion and 36 13/16" from the top of the back cushion to the floor. Cushions shall be molded polyurethane to ensure maximum individual passenger comfort and durability. All seats shall provide lower lumbar and side bolster support. Upholstery shall be level 1 material and select by the agency. Seats shall be recessed track mounted with pedestal support legs and hardware. Seat tracks shall be welded to the body structure and shall not rely on screws alone. Floor anchorage shall be neat and of a non-tripable design. Seating and securement shall meet or exceed every applicable Federal Motor Vehicle Safety Standard.

- 11.1 Seat backs shall be high impact ABS material which is recessed to provide one and one half inches (1-1/2") of additional passenger hip to knee room.
- 11.2 A retractable seatbelt shall be provided for each seated passenger. The retractor shall be emergency locking with anti-cinch capability. The retractor must be attached to the seat structure. Passenger Seatbelts shall be "A" type one seat belt assembly conforming to current FMVSS 209 requirements.
- 11.3 Aisle seats shall include an energy absorbent grab bar three quarter inch (3/4"), twenty (20) gauge steel covered with custom molded, wear and vandal resistant eight (8) pound density, self-skinning polyurethane foam. Grab bar shall be located in the top of the seatback.

12. **BODY CONSTRUCTION**

Sides and roof shall be constructed of metal or fiberglass panels. Roof shall be of sufficient height to provide at least 75 inches headroom at the center aisle. Headroom may be reduced slightly in some areas of the vehicle to accommodate other specified equipment such as air conditioner components and the normal contour of the roof. The structure shall be watertight and shall meet the requirements of Federal Safety Standards as to school bus rollover protection, No. 220. Bus body consisting of steel cage construction with polystyrene insulation (or equal in performance) and exterior skin of galvanized steel, aluminum or FRP (fiberglass reinforced plastic). Side walls must be bonded together using the vacuum lamination process. Adhering sidewall skin to steel cage with double sided tape or any method other than vacuum lamination will not be accepted. A bus body consisting of a matrix of honeycomb composite material with steel reinforcement will not be accepted.

13. **ROOF LINER**

The roof liner shall be of molded fiberglass installed the full length so as to cover all protrusions.

14. **PASSENGER ENTRANCE DOOR AND STEPS**

Passenger entrance door shall be a transit type, and shall have a minimum horizontal opening of approximately 24 inches and a minimum vertical opening of approximately 78 inches. The door shall be operated from controls at or near the vehicle driver's seated position. The door shall be manually operated, and shall be designed to allow manual opening in case of an emergency. The steps shall be designed so that the top of the first step is no more than 12 inches above the ground with the vehicle unloaded. Steps of at least 24 inches in width, approximately eight (8) inches deep and a maximum riser of 10-1/2 inches shall be fabricated and installed inside of the body to meet this requirement. The surface of all entrance steps shall

have a non-skid material applied. A two inch white safety nosing shall be placed on each step edge.

15. STANCHIONS, GRAB RAILS, AND MODESTY PANELS

Vertical stanchions shall be provided at the aisle immediately behind the driver's seat and the stepwell; a horizontal grab rail shall extend from the wall to each stanchion. A modesty panel shall be attached to the stanchion behind the stepwell.

15.1 A smoked three eighths inch (3/8") thick panel Plexiglas panel shall be provided behind the driver's seat. Panels shall extend from the top of the horizontal grab rail to the ceiling and shall extend from the wall to the vertical stanchion. Stanchion and panel shall not impair driver's seat adjustment

15.2 An overhead handrail shall be installed in the roof of the vehicle on the driver and curb side and shall run the length of the seating area.

16. WHEELCHAIR LIFT DOOR

Side opening double outward opening doors shall be provided for the platform type wheelchair lift. Lift shall be mounted within the vehicle body on the curb side. The wheelchair doorframe structure shall consist of a minimum 12-gauge steel Door panel hinges shall be piano type with a minimum three sixteenth (3/16") inch diameter pivot pin. Each door panel shall have its own key lockable latch assembly which shall consist of a pistol grip style twist handle located at the inside center of the door panel. Door panel holders shall be gas shock type mounted at the top and shall allow door panels to open a minimum of one hundred degrees (100°) from the closed position. Wheelchair door clear opening dimensions shall be a minimum of forty (40") inches by sixty seven (67") inches. Lift doors shall be interlocked by a panel door switch controlling the transmission which requires the transmission to be in the "Park" position before lift can be operated. Door windows shall be installed with two (2) piece black ozone treated extruded rubber, lock and key of one (1) piece fixed design.

17. WHEELCHAIR LIFT

17.1 The wheelchair lift shall comply with all Federal ADA requirements.

17.2 The wheelchair lift shall be a fully automatic, including folding of platform and be electro-hydraulically powered with a minimum test-net load capacity of eight hundred (800) pounds. The lift shall be totally self-contained and installed without modifications to the vehicle body or frame inside of the curbside double service doors. The entire assembly shall be installed with adequate protection to prevent accidental injury to passengers.

17.3 The complete wheelchair lift assembly shall operate from the vehicle's electrical system, and shall have one hand-held lift control station with a minimum five foot (5') cable attached so lift may be operated from inside or outside of vehicle.

18. WHEELCHAIR SECUREMENT AND SEATBELTS

18.1 The vehicle shall have forward facing wheelchair positions. Each wheelchair position shall be provided with restraint devices that will secure the wheelchair and its passenger while in the wheelchair. These devices shall be adjustable to accommodate varying track widths of wheelchairs. Each wheelchair shall have a four (4) point securement (2 front, 2 back) in the vehicle with recessed anchor points of sufficient strength to secure a wheelchair and/or three wheel scooter. The entire securement system shall comply with all applicable regulations including ADA.

18.2 Floor mounted tracks shall be a series type "L" track floor plate. These plates shall be recessed mounted in the floor with three-eighths inch (3/8") diameter, SAE Grade 5 bolts, washers and self-locking nuts with National Fine Threads.

18.3 There shall be four (4) retractors assemblies for each wheelchair position in the vehicle to secure the wheelchair to the tracks. Example: Q' Strain QRT Deluxe (Q-8100-A1) System, or approved equal. Each retractor assembly shall consist of a heavy duty series "L" track fitting, the front left and right retractor shall be equipped with manual tension knobs for manual tightening and/or release. Each retractor assembly shall be equipped with a quick release, push-button buckle and buckle connector.

18.4 Two (2) seat belts shall be provided for each wheelchair passenger. The torso belts shall be two inches (2") wide, seventy-two inches (72") long, adjustable, with a strength rating of not less than three thousand pounds (3,000 lbs.). One end of the belt shall be secured to a female seat belt fitting and the other end shall have a male seat belt fitting. The seat belt assembly shall provide for a quick-release and also provide for a snap locking to connect both ends together.

18.5 A wall mounted height adjustable of approximately twelve inches (12") shoulder harness system shall be provided at each wheelchair securement location that is compatible with the specified restraints. The harness system shall be installed in accordance with all structural requirements established by the restraint supplier and all applicable regulations, including 49 CFR part 571.

18.6 All belts, straps, and harness assemblies in bundled sets and shall include a container in which to store them. Storage compartments shall be provided over the windshield and over the driver's door.

19. **EMERGENCY EXIT**
A combination roof ventilator and emergency escape hatch shall be provided towards the rear of the vehicle. A rear duty emergency door shall be provided at the rear of the vehicle.
20. **FLOOR AND FLOOR COVERING**
The vehicle floor assembly shall be a minimum five eighths of an inch (5/8"), seven (7) ply, exterior grade plywood which is pattern cut, edge sealed, and attached with quarter inch (1/4") diameter counter sunk Tek screws. The floor in the under-seat area shall be covered with smooth gray rubber floor covering having a minimum thickness of .125 inch (1/8"). Floor covering in aisle and on steps shall be non-skid, wear-resistant, and ribbed. Minimum overall thickness shall be .1875 inch (3/16") measured from top of ribs.
21. **PAINTING**
Exterior surfaces normally painted shall be thoroughly degreased, primed, and painted solid white. The base vehicle shall be Bright White in color. The area around the passenger windows shall be black.
22. **DELIVERY**
All vehicles must be serviced prior to delivery in accordance with the manufacturer's "New Vehicle Pre-delivery Service" requirements and with Part II, Paragraphs 3.3 and 3.4 of this specification.
23. **REGISTRATION**
Successful bidder shall provide necessary documents to enable the purchasing agency to register the vehicle in the State of Texas. Necessary fees and state taxes will be paid by the purchasing agency; do not include such fees and taxes in your bid price.
24. **MANUALS**
A line setting sheet and manual(s) containing operating and servicing instructions for the vehicle shall be provided with each unit. The manual(s) shall be as detailed as possible outlining all necessary operating and servicing instructions for each vehicle including the vehicle's driveline components. Necessary warnings and safety precautions shall be included. In addition, manual(s) containing illustrated parts lists, operating and servicing instructions for related and special equipment supplied with the vehicle shall be provided with the unit.
25. **WARRANTY**
The vehicle shall be warranted against defects in material and workmanship for a period of not less than 12 months or 12,000 miles, whichever comes first and shall cover 100 percent parts and labor for the unit. If the manufacturer's standard warranty exceeds 12 months then the standard warranty period shall be in effect. Successful bidder shall furnish manufacturer's warranty to the receiving agency at time of delivery. The vendor is ultimately responsible for the warranty. EXCLUSIONS: The using agency will assume the expense for replacement filters, fuel, cleaning, painting and other minor items normally consumed in day to day operations. The using agency will assume responsibility for cost of repairs resulting from collision, theft, vandalism, operator negligence and/or acts of God.
26. **PARTS AND SERVICE**
The manufacturer of the vehicle furnished shall have an **authorized dealer within the State of Texas**. The authorized dealer shall have factory-trained personnel available for warranty repairs and the performance of service. The dealer shall also maintain an inventory of high-usage parts and a quick source for low-usage parts. If the manufacturer offers a complimentary service contract with the purchase of a new vehicle, that service contract shall be included with all vehicles purchased under these contracts (071-072-A1).
27. **SAFETY DECAL(S)**
Safety decal(s) shall be furnished and shall be affixed at any applicable area (emergency exit, steps, etc.). The decals shall include necessary warnings and precautions. Permanent decals (plaques) are preferred.
28. **INSTRUCTION ON SAFETY, OPERATION AND PREVENTIVE MAINTENANCE**
The successful bidder shall provide the agency sufficient instruction on safety, operation and preventive maintenance of the vehicle after the unit has been delivered and is ready for operation but prior to payment.

SECTION I (a)–SPECIAL EQUIPMENT–PARA-TRANSIT LOW-FLOOR BODY & WHEELCHAIR RAMP

1. GENERAL DESCRIPTION

The purpose of these specifications is to describe the conversion of a steel cage, low floor, commercial bus designed for use in Shuttle and Transit applications that meets all the requirements of ADA and the FMVSS Safety Standards in effect at the time of manufacture.

The proposed bus must have been tested at the Federal Bus Testing Center at Altoona, PA in the 7-year/200,000 mile category. The bus must meet all the chassis specifications listed in the chassis section.

The bus will be of a "Steel Cage" type construction with FRP Composite Skin laminated to a moisture resistant (less than 1%) substrate (not Luan) attached to the steel cage with urethane adhesive. The roof will consist of

a single piece FRP skin laminated to the substrate and roof steel with urethane adhesive. The bus body is constructed of welded walls, sub floor, roof framing, and rear steel structure which are bonded and bolted together, forming an integrated steel cage around the passenger area.

Unless otherwise specified, all units shall be furnished complete with standard equipment and factory-installed accessories as listed in the manufacturer's literature for the models specified herein. The following items are minimum requirements and shall be provided whether shown as optional or standard equipment by the manufacturer.

1.1 All Standard and Common Features Shall be Furnished

Standard and common features, some related to safety and others to driver and passenger convenience, which are generally provided in a para-transit vehicle without customer stipulation. Those features include but are not limited to: adjustable instrument lights, interior sun visors, exterior backup lamps, two-speed windshield wipers, windshield washers, windshield defroster, coolant recovery system, etc. Standard and other common features if not specifically stated shall not be interpreted as items that can be omitted to reduce price or to provide any other bidding advantage.

1.2 Certification of ISO 9001:2000 Compliance

The manufacturer of the vehicles shall have a proven, third-party certified quality control system in place and shall be ISO 9001:2000 certified at the facility that will produce the vehicles as bid. Written certification of ISO 9001:2000 compliance shall be included with the bid submission documents. A copy of the vehicle manufacturer's ISO-approved Quality Assurance Manual shall also be submitted with the Proposer's bid package.

1.3 All Standard and Common Features Shall be Furnished

Standard and common features, some related to safety and others to driver and passenger convenience, which are generally provided in a para-transit vehicle without customer stipulation. Those features include but are not limited to: adjustable instrument lights, interior sun visors, exterior backup lamps, two-speed windshield wipers, windshield washers, windshield defroster, coolant recovery system, etc. Standard and other common features if not specifically stated shall not be interpreted as items that can be omitted to reduce price or to provide any other bidding advantage.

2. GENERAL DIMENSIONS

Wheelbase.....	165" min.
Interior height from floor to ceiling front.....	86" min.
Interior height from floor to ceiling at rear.....	76" min.
Height at first step.at ride height.....	14.5" max.
Height at first step.at ride height- bus knelt...	10.5" max.
Height at passenger door entrance.....	75" min.
Aisle width.....	14" min.
Interior width at floor level.....	91" min.
Exterior width	96" max
Gross Vehicle Weight Rating.....	14,200 lbs. min.

Axles and Suspension

- 2.1 Front axle capacity 4,600 #GAWR for 14,200 GVW vehicles. All chassis' will be equipped with air spring suspension including all electric air compressor. This air system shall be managed by an electronically controlled manifold that will control the height of the suspension. Note: SYNC – SYNCHRONIZED AIR-RIDE SUSPENSION SYSTEM WILL NOT BE ACCEPTED.
- 2.2 Heavy Duty Air Dryer required. Must be able handle 80% air compressor duty cycle. Midland Pure Air Dryer or approved equal
- 2.3 Wheel cut 45 degrees.
- 2.4 OEM DANA HD70 Rear Axle for 14,200 GVWR or UltraRide suspension by Link MFG (or Approved Equal)
- 2.5 Constant Ride Height Control with Three Electronic Height Sensors.
- 2.6 Front/Rear Air Suspension with Kneeling feature. (4" Kneel from Ride Height, 10.0" from ground, 4.0" to Curb.
- 2.7 Front tires must be completely vertical at all times. Vehicle must be able to be moved in full kneeling position in case of air ride failure. Rear Air Spring Suspension with ARBOC® 4-Bar linkage and Track Bar. Constant Ride Height Control with Three Electronic Height Sensors.
- 2.9 Front/Rear Electric Compressor Air Suspension with Kneeling feature. (3" Kneel from Ride Height, 10.25" from ground, 4.25" to Curb)

3. BUMPERS

Chassis manufacturer's standard front chrome bumper and vehicle manufactured standard rear bumper. Rear bumper must be of sufficient strength to allow the vehicle to be pushed without damage.

4. ELECTRICAL

- 4.1 Electrical box for the bus body shall be located inside above the driver in a compartment with a door. Fuse, relay and component location will be labeled on the inside of this door.
- 4.2 Automotive type fuses are required.
- 4.3 Wiring needs to be color coded, and labeled for function every 12" and meet all the requirements of the Society of Automotive Engineers (SAE Standards).
- 4.4 All body component circuits shall be protected in convoluted split loom tubing for protection and tied/anchored a minimum every 16".
- 4.5 The bus will be equipped and labeled with extra fuse protected circuits for the use of the customer (minimum of 4 extra circuits). Fuses to be located in electrical box described in section 15.1 all exterior loomed wire harnesses shall have waterproof connectors and sprayed with corrosion resistance spray.
- 4.6 Rotary disconnect switch located near the driver.
- 4.7 Pre-wired for 2 way radio with a minimum 6"X6" metal ground plane for the antenna. Wiring for radio will be designed for center console mounting.
- 4.8 A wiring diagram, "As Built" is required. The wiring diagram should indicate schematics and wire color, gauge, and location. There should be separate diagrams for each system i.e. Doors, heaters, lights etc. A master wiring diagram will also be included of the complete wiring system added to the chassis. An example of the wiring diagrams will need to be included with the bid.
- 4.9 A minimum of 200 ampere alternators shall be provided.
- 4.10 Chassis manufacturer supplied batteries shall be mounted on a stainless steel roller mounted pull out tray with battery hold down secured with bolts. Inside of compartment should be covered with a durable insulating material to prevent shorts. Battery compartment should be vented and the battery shall be easily serviceable without removal from battery tray.
- 4.11 All wiring other than that provided with the OEM chassis shall be number and function coded every 6 inches and shall be color coded. The body manufacturer shall furnish a complete wiring diagram with integrated body and chassis marked to show the codes used.
- 4.12 Inter-motive Gateway idle with manual switch, volt sensor and light shall be installed. Solenoid is to automatically shut off when transmission is in gear or brake is applied.

5. LIGHTING

- 5.1 Overhead entrance and step well lights shall be Light Emitting Diode (LED) and provide no less

than five foot-candles of illumination on the entrance step area with the door open. This system shall be illuminated automatically when the door is open. Overhead and step well lights shall be wired to and activated automatically by door control and by a separate dash mounted switch.

- 5.2 All exterior lights, with the exception of headlights, passenger entry door, lift door, curb light, and rear back-up lights shall be Light Emitting Diode (LED) lights. Lighting shall be in accordance with Federal Motor Carrier Safety Regulations 393.12. All lights shall have wire long enough to move the light at least six inches (6") from vehicle for service. Lights shall be grounded to body framing structure. All lights shall be sealed from moisture. Marker lights shall be armored, surface mounted. Center brake light shall be furnished.

6. AIR CONDITIONING

- 6.1 Air Conditioning Performance Specifications The installed air conditioning system shall be roof mounted and shall cool the interior of the vehicle to 80°F measured at a minimum of three points, located four feet above the floor at the longitudinal centerline of the vehicle. The three points shall be (1) near the driver's location; (2) at the mid-point of the body; and (3) two feet forward of the rear of the vehicle.

6.2 Compressors

A chassis OEM supplied compressor and an engine mounted TM-16 or larger compressor each rated @ 52,000-btu/hr (imaca) shall be provided. Each unit shall have a nominal ten (10) cubic-inch displacement, and is to be belt driven off of the vehicle's engine. The compressors are to be equipped with an electro-magnetic clutch controlling each of the system's (2) thermostats.

6.3 Condenser

Condenser shall be a under floor skirt mounted unit rated @ 76,000 btu/hr (imaca). This unit shall be capable of producing a total of 2,400 cfm of airflow (rated @ 13.5vdc / 0" static). This unit shall contain three (3) single speed permanent magnet four pole, four brush 10,000 hour design life sealed ball bearing motors. This unit's maximum amperage draw shall be 21 amps @ 13.5vdc.

The unit's refrigerant connections shall be of a corrosion resistant brass, and shall be of the o-ring type to insure leak-free continuous operation. The unit's filter drier shall be a minimum sixteen (16) cubic inches of desiccant compatible with R-134A; equipped with o-ring connections to insure leak-free connections, and capable of maintaining a dry, non-acidic system.

6.4 Evaporators

Evaporators shall be a chassis OEM supplied 15,000 btu/hr drivers in dash air conditioning unit and a rear center ceiling mounted unit rated @65,000 btu/hr (imaca). This rear unit shall be capable of producing 1,600 cfm of airflow on high speed (rated @ 13.5vdc/0" static). This unit shall contain two (2) three speed permanent magnet 10,000 hour design life sealed ball bearing motors. This unit's maximum amperage draw shall be 36 amps @ 13.5 vdc. The unit shall be equipped with an easily removable, cleanable filter element capable of filtering air to 10,000 ppm. The unit's expansion valve shall be equipped with o-ring fittings to insure leak-free continuous operation.

6.5 Controls

The vehicle's air conditioning system shall be controlled from the driver's seated position. The controls shall consist of (2) rotary fan speed switch (off/high/medium/low), and (2) rotary or slide type thermostat switches.

7. HEATING AND DEFROSTING

A rear hot water heater with blower fan shall have a BTU rating of at least thirty thousand (30,000) shall be installed under a seat near the rear of the vehicle. The controls shall be readily accessible to the driver. Heater hose connections shall be installed above the floor of the vehicle body and through: he fire wall to the engine compartment. **Easily accessible** all brass gate valve(s) shall be furnished to cut off the flow of coolant water to the rear heater.

8. SAFETY EQUIPMENT

- 8.1 First Aid Kit; Will be the standard State of Texas School Bus First Aid Kit. Kit shall be securely mounted near the driver's seat.
- 8.2 Fire Extinguisher; One 5-pound dry type (BC rated), securely mounted near the driver's seat.
- 8.3 Reflectors; Three folding triangle reflectors with storage container(s).
- 8.4 Back up Alarm; Meeting the requirements of SAE J994B or the latest revision thereto.
- 8.5 Fresnel Lens; provided on the rear window of the vehicle.

1. MIRRORS

- 9.1. Exterior; Rearview mirror, manufacturer's exterior low mount type with extension arms (below eye level) wide view type mirror. Mirror shall be a minimum of 6 inches by 9 inches. Additionally minimum 5-inch convex mirrors to be mounted with brackets on top of the main mirrors on the left and right sides.
- 9.2. Interior; Day/night type, conforming to FMVSS No. 111 and affording a good view of the road to the rear as well as the passenger area. The mirror(s) shall be made of safety glass, having rounded corners and protective edges. If more than one interior mirror is installed, at least one of the mirrors shall have a minimum of 90 square inch of clear vision, reflective surface area.
- 9.3. Passenger Mirror; an additional minimum 6-inch by 10-inch interior mirror shall be furnished for the driver to view the passengers.
- 9.4. OE Compliant mirror (GM and Ford tested for vibrations, door slams, UV testing, Salt spray testing, Thermal testing (temperatures of -40F to 212F) and shell load test (holds 225 lbs. max. load).

10. WINDOWS

- 10.1 One Double T – Slider window on each side of the bus will be standard. Option of all T slider windows is available.
- 10.2 Passenger windows shall be a minimum 18 ½”, 36” or 45” wide and 36” high (body length will dictate sizes).
- 10.3 Egress windows shall be provided in sufficient numbers and labeled to meet FMVSS and state minimum requirements (23 ½” x 60”). A minimum of one on each side and the rear is required.
- 10.4 Side windows to be provided the full length of the vehicle. If the windows are transit type T-slider windows they shall be equipped with emergency release latches to provide emergency exits. Release instructions shall be provided at or near the release handles and an audible alarm shall be activated when any handle is released. Side windows, rear window(s) and glass in passenger entrance door shall be of uniform dark tint sufficient to permit no more than 31% light transmission. Tinted film is not acceptable.

11. PASSENGER SEATS AND STOP REQUEST

All seating installed in this vehicle shall be in compliance with FMVSS 207 (Seating System) and any associated seat belt assemblies shall be in compliance with FMVSS 209, 210 (Seat Belt Assembly, Seat Belt Assembly Anchorage’s). Testing of the seats must have been performed in the bus. A level 5 fabric must be used.

- 11.7 Citi Seats w/Inserts
- 11.8 Single Flip Citi Seats
- 11.9 Citi Seat Back Grab Rails
- 11.10 USR Double (Under Seatbelts)
- 11.11 USR Single (Under Seat Belts)
- 11.12 Citi Seat Level 4 Inserts
- 11.13 Minimum Aisle: 18” Standard; (Optional wider seats will decrease aisle width).
- 11.14 Seating quantity shall be determined by the floor plan selected.
- 11.15 Stop request system will have a pull cord type activation and a large “Stop Request” display with an adjustable audible Chime. The display will need to be easily seen by the passengers and driver or have a second dash light in the driver’s area. Display will be reset to off with the opening of the passenger doors. The system will need a switch to reset false trip of pull cord other than the opening and closing of the doors. Activation strips or pull cords will need to be at an appropriate level for activation by riders in wheelchairs in the para-transit locations.

12. BODY CONSTRUCTION SIDE WALL AND REAR WALL CONSTRUCTION

Sides and roof shall be constructed of fiberglass panels. Roof shall be of sufficient height to provide at least 75 inches headroom at the center aisle. Headroom may be reduced slightly in some areas of the vehicle to accommodate other specified equipment such as air conditioner components and the normal contour of the roof. The structure shall be watertight and shall meet the requirements of Federal Safety Standards as to school bus rollover protection, No. 220, as well as FMVSS 214 Side Impact Protection

- 12.1 There is one 1 ½” X 1 ½” horizontal 16 gauge steel tube below the window line and one 1 ½” X 2 ½” 14 gauge tube at the floor level, or approved equal. There is one 1 ½” X 1 ½” horizontal 16 gauge steel tube at the top sidewall forming the top edge of the wall, or approved equal. Steel structure must extend to or below the floor level to the lowest point in the sidewall, or approved equal.

- 12.2 Vertical steel 16 gauge square tubing nominal dimensions 1 ½" X 1 ½". Vertical steel ribs consist of one (1) 1 ½" X 2" 16 gauge steel spaced at the sides of each window opening, or approved equal.
- 12.3 Two (2) 1½" X 1½" 16 gauge steel tubes are required at the front of the sidewall to form the front & rear of the door opening. One (1) 1 ½" X 1 ½" 16 gauge steel tube is welded vertically at the midpoint of each window with a width greater than 24 inches connecting the horizontal tube welded below the window line and the horizontal tube that is welded at the floor line, or approved equal.
- 12.4 Horizontal steel tubes are welded to the vertical steel tubes. The entire steel structure must be bonded and bolted together with Sikaflex 252 or Locktite H8600 adhesive and have a full E-Coat corrosion protection to prevent rust/corrosion.
- 12.5 Exterior skin is FRP composite skin laminated to a moisture resistant (less than 1% absorption) substrate (not Luan) attached to the steel cage with urethane adhesive.
- 12.6 No wood or Luan is permitted in the sidewalls or rear end wall of the bus. Laminated constructions with Luan or other wood materials are not allowed as they can lead to corrosion of the skin due to the wicking of moisture into the wood material.
- 12.7 Rear of the bus shall have vacuum formed caps bonded to a FRP Composite Skin laminated to a moisture resistant (less than 1% absorption) substrate (not Luan) attached to the steel cage with urethane adhesive or a full Fiberglass panel. The LED lights shall be mounted to the vacuum formed or Fiberglass caps.

13. ROOF LINER

The roof liner shall be of molded fiberglass installed the full length so as to cover all protrusions.

14. PASSENGER ENTRANCE DOOR AND STEPS

Passenger entrance door shall be a transit type, and shall have a minimum horizontal opening of approximately 24 inches and a minimum vertical opening of approximately 78 inches. The door shall be operated from controls at or near the vehicle driver's seated position. The door shall be manually operated, and shall be designed to allow manual opening in case of an emergency. The steps shall be designed so that the top of the first step is no more than 12 inches above the ground with the vehicle unloaded. Steps of at least 24 inches in width, approximately eight (8) inches deep and a maximum riser of 10-1/2 inches shall be fabricated and installed inside of the body to meet this requirement. The surface of all entrance steps shall have a non-skid material applied. A two inch white safety nosing shall be placed on each step edge.

15. STANCHIONS, GRAB RAILS, AND MODESTY PANELS

Vertical stanchions shall be provided at the aisle immediately behind the driver's seat and the stepwell; a horizontal grab rail shall extend from the wall to each stanchion. A modesty panel shall be attached to the stanchion behind the stepwell.

- 15.1 A smoked three eights inch (3/8") thick panel Plexiglas panel shall be provided behind the driver's seat. Panels shall extend from the top of the horizontal grab rail to the ceiling and shall extend from the wall to the vertical stanchion. Stanchion and panel shall not impair driver's seat adjustment
- 15.2 An overhead handrail shall be installed in the roof of the vehicle on the driver and curb side and shall run the length of the seating area.

16. PASSENGER AND WHEELCHAIR RAMP DOOR

Passenger entrance door shall be a transit type, and shall have a minimum horizontal opening of approximately 24 inches and a minimum vertical opening of approximately 75 inches. The door shall be operated from controls at or near the vehicle driver's seated position. The door shall be automatically operated by pressing a switch on the driver's console, and shall be designed to allow manual opening in case of an emergency. The entry ramp shall be designed so that the top of the first step is no more than 11.25 inches above the ground with the vehicle unloaded and bus fully kneeled. The entry ramp shall have a non-skid material applied.

The passenger entry door shall be angled at 12.5° so that wheel chairs need only to be turned 77.5° to proceed down the aisle.

17. WHEELCHAIR RAMP

- 17.1 The wheelchair ramp shall comply with all Federal ADA requirements.

- 17.2 The ramp shall be a power ramp that is designed to let wheelchair passengers enter the bus unassisted once the ramp is deployed. Ramps shall be rated at 800# minimum and have 34 inches clear width. Ramp length shall be 62 inches minimum. The use of exposed chains are not allowed.

18. WHEELCHAIR SECUREMENT AND SEATBELTS

- 18.1 The vehicle shall have forward facing wheelchair positions. Each wheelchair position shall be provided with restraint devices that will secure the wheelchair and its passenger while in the wheelchair. These devices shall be adjustable to accommodate varying track widths of wheelchairs. Each wheelchair shall have a four (4) point securement (2 front, 2 back) in the vehicle with recessed anchor points of sufficient strength to secure a wheelchair and/or three wheel scooter. The entire securement system shall comply with all applicable regulations including ADA.
- 18.2 Floor mounted tracks shall be a series type "L" track floor plate. These plates shall be recessed mounted in the floor with three-eighths inch (3/8") diameter, SAE Grade 5 bolts, washers and self-locking nuts with National Fine Threads.
- 18.3 There shall be four (4) retractors assemblies for each wheelchair position in the vehicle to secure the wheelchair to the tracks. Example: Q' Strain QRT Deluxe (Q-8100-A1) System, or approved equal. Each retractor assembly shall consist of a heavy duty series "L" track fitting, the front left and right retractor shall be equipped with manual tension knobs for manual tightening and/or release. Each retractor assembly shall be equipped with a quick release, push-button buckle and buckle connector.
- 18.4 Two (2) seat belts shall be provided for each wheelchair passenger. The torso belts shall be two inches (2") wide, seventy-two inches (72") long, adjustable, with a strength rating of not less than three thousand pounds (3,000 lbs.). One end of the belt shall be secured to a female seat belt fitting and the other end shall have a male seat belt fitting. The seat belt assembly shall provide for a quick-release and also provide for a snap locking to connect both ends together.
- 18.5 A wall mounted height adjustable of approximately twelve inches (12") shoulder harness system shall be provided at each wheelchair securement location that is compatible with the specified restraints. The harness system shall be installed in accordance with all structural requirements established by the restraint supplier and all applicable regulations, including 49 CFR part 571.
- 18.6 All belts, straps, and harness assemblies in bundled sets and shall include a container in which to store them. Storage compartments shall be provided over the windshield and over the driver's door.

19. EMERGENCY EXIT

A combination roof ventilator and emergency escape hatch shall be provided towards the rear of the vehicle. A rear duty emergency door shall be provided at the rear of the vehicle.

20. ROOF, FLOOR AND FLOOR COVERING

- 20.1 Steel sub floor cross members shall be 2" X 2", 14 Gauge steel tubing and coated to prevent rust and corrosion.
- 20.2 Body is mounted directly over the chassis frame to provide an integrated body chassis mounting, or approved equal.
- 20.3 Flooring shall be 5/8" thick single piece, engineered wood with moisture barrier laminated to upper surface, with moisture sealed edges. The underside of the flooring shall be sprayed with a Poly-Urea coating (material thickness of 40 mils), or approved equal.
- 20.4 A sealant shall be installed in body to floor corners to provide a water tight seal as an aid in floor cleaning. Interior floor/lower side wall covering shall be seamless sprayed-in Poly-Urea coating (material thickness of 50 mils), for durability and which will allow the floor to be cleaned with a hose if desired, or approved equal.

- 20.6 The floor will also cover the area around the ramp (but not the ramp platform itself). The cab floor shall be the General Motors OEM or approved equal insulated floor covering. Floor will have a removable fuel tank access panel for easy access to fuel pump and fuel gauge sending unit.
- 20.7 Steel 1 ½" x 1 ½", 18 gauge, (minimum) square tubing bent to the radius of the roof is required, or approved equal. Roof bows must be bent square steel tubing. All roof cross members shall be a minimum 18 gauge steel,(minimum) spaced no more than 24" apart or two (2) 1 ½" X 1 ½" tubing welded together. One (1) 1 ½" X 1 ½" tube installed to form the center longitudinal members front to rear of roof structure.
- 20.9 The outer edge of the roof structure shall consist of one (1) 1 ½" X 1 ½", 18 gauge (minimum) steel tube running the length of the roof welded to the roof bow steel tubes and bonded with Sikaflex® 252 or Loctite H8600 and four (4) weld studs to the 1 ½" X 1 ½" steel tube that forms the top of the sidewall structure.
- 20.10 Exterior roof surface shall be Fiberglas, in a single piece that extends across the roof from rain gutter to rain gutter. The roof surface base material is Azdel with FRP and will be attached to the roof bows using urethane adhesive.
- 20.11 Seams are allowed only at the junction of the front cap and the junction of the rear cap. Any other seams on the exterior of the roof are not permitted.

21. PAINTING

Exterior surfaces normally painted shall be thoroughly degreased, primed, and painted solid white. The base vehicle shall be Bright White in color. The area around the passenger windows shall be black.

- 21.1 All sections of the steel body cage are to be Electro-coated (Cathodic E-coating to 1500 hour salt spray test) after fabrication, prior to final assembly. Galvanized steel with "Gatorshield" is acceptable.
- 21.2 Custom painting and/or graphics are available and will be quoted separately. This includes optional paint schemes for the cab as well as the body.

22. DELIVERY

All vehicles must be serviced prior to delivery in accordance with the manufacturer's "New Vehicle Pre-delivery Service" requirements and with Part II, Paragraphs 3.3 and 3.4 of this specification.

23. REGISTRATION

Successful bidder shall provide necessary documents to enable the purchasing agency to register the vehicle in the State of Texas. Necessary fees and state taxes will be paid by the purchasing agency; do not include such fees and taxes in your bid price.

24. MANUALS

A line setting sheet and manual(s) containing operating and servicing instructions for the vehicle shall be provided with each unit. The manual(s) shall be as detailed as possible outlining all necessary operating and servicing instructions for each vehicle including the vehicle's driveline components. Necessary warnings and safety precautions shall be included. In addition, manual(s) containing illustrated parts lists, operating and servicing instructions for related and special equipment supplied with the vehicle shall be provided with the unit.

25. WARRANTY

The manufacturer of this vehicle will provide a warranty of 3 years or 36,000 miles parts and labor. The body structure shall be warranted for a period of five (5) years and 100,000 miles.

The major subcomponents, including but not limited to, the Wheelchair Ramp, the Wheelchair Tie Downs, and the optional rear Air Conditioning Systems are warranted by the manufacturer of that component. Detailed warranty coverage shall be provided with each bus. The Electric Air Ride Systems are warranted for 3 years and 100,000 miles, minimum.

The Electrical System will be warranted for a minimum of 3 Years or 36,000 miles parts and labor. LED Lights, Exterior/Interior, will be warranted for 7 years parts and labor (warranted by the manufacturer of those components)

Chassis warranty is provided for 3 years or 36,000 miles. Details of the Warranty shall be provided with every bus delivered. Drive train warranty shall be 5 yr. or 100,000 miles.

EXCLUSIONS: The using agency will assume the expense for replacement filters, fuel, cleaning, painting and other minor items normally consumed in day to day operations. The using agency will assume responsibility for cost of repairs resulting from collision, theft, vandalism, operator negligence and/or acts of God.

26. PARTS AND SERVICE

The manufacturer of the vehicle furnished shall have an **authorized dealer within the State of Texas**. The authorized dealer shall have factory-trained personnel available for warranty repairs and the performance of service. The dealer shall also maintain an inventory of high-usage parts and a quick source for low-usage parts. If the manufacturer offers a complimentary service contract with the purchase of a new vehicle, that service contract shall be included with all vehicles purchased under these contracts (071-072-A1).

27. SAFETY DECAL(S)

Safety decal(s) shall be furnished and shall be affixed at any applicable area (emergency exit, steps, etc.). The decals shall include necessary warnings and precautions. Permanent decals (plaques) are preferred.

28. INSTRUCTION ON SAFETY, OPERATION AND PREVENTIVE MAINTENANCE

The successful bidder shall provide the agency sufficient instruction on safety, operation and preventive maintenance of the vehicle after the unit has been delivered and is ready for operation but prior to payment.

SECTION J – PRE-ACCEPTANCE CHECKLISTS FOR NEW VEHICLES

Item No.	General Information & Requirements	Yes	No	Discrepancies From Specification
1.	Battery – Calcium hybrid type standard; permanently sealed batteries without antimony are acceptable. (See Para A.4.2,pg 4)			
2.	Safety Plaques or Decals are furnished and affixed at any hazardous area; describe the nature of the hazard, level of hazard seriousness, how to avoid the hazard, and the consequence of human interaction with the hazard. (See Para. A.4.6, pg 4)			
3.	License Plate Attachment furnished with means and adequate space for attaching the rear license plate without modification; illumination for the license plate provided to meet DPS requirements. (See Para. A.4.10, pg5)			
4.	Manuals – owner’s or operator’s; including all standard manufacturer literature normally furnished/required by law with the purchase of a new vehicle. (See Para.A.4.12, pg 5)			
5.	Odometer Statement complete, includes mileage accrued at the point of delivery, signature of seller certifying the odometer reading, both the dealership and name of agent is printed. (See Para.A4.15, pg 5)			
6.	Servicing and Equipping – completely assembled, serviced, adjusted, and all equipment including standard and optional equipment is installed and units made ready for continuous operation. (See Para. A.4.16, pg 5)			
7.	Wiring is insulated and enclosed in a fibrous loom, plastic loom, or flexible conduit for protection from external damage and short circuits; securely fastened at sufficient intervals to prevent sagging and to ensure clearance of mechanical parts; rubber grommets used whenever wires, hoses or harness pass through metal. (See Para.A.44.19, pg. 6)			
8.	Vehicle Inspection to meet DPS requirements with Texas Inspection Sticker attached. (See Para. A.6.1, pg.8)			
9.	Manufacturer’s Statement of Origin (MSO) furnished at time of delivery and is made out to agency/coop. Includes GVWR, Nominal Weight Rating (in tons), and Odometer Disclosure			

	Statement. (See Para. A.8, pg. 9)			
10.	Pre-Delivery Service (all fluid levels checked/maintained with the proper grade and type of fluids, pre-delivery inspection and service on chassis, and interior/exterior cleaned and washed) preformed prior to delivery. (See Para. A.9, pg. 10)			
	Standard Equipment	Yes	No	Discrepancies From Specifications
11.	Air Bags driver's side; dual (Refer to Specification)			
12.	Air conditioning – manufacturer's standard.			
13.	Arm Rests, Door Mounted – both right and left required.			
14.	AM/FM Radio – manufacturer's standard.			
15.	Automatic transmission.			
16.	Auxiliary Power Outlet – 12 volt			
17.	Brakes, ABS, Required – manufacturer's standard; front disc, 2 or 4 wheel.			
18.	Bumpers – manufacturer's standard front and rear.			
19.	Ground Ratings – As required for the GVWR certified.			
20.	Heater and Defroster			
21.	Jack, Handle, and Lug Wrench.			
22.	Power Steering.			
23.	Rearview Mirrors, Exterior			
24.	Seat Belts – installed for each passenger seat.			
25.	Spare Wheel and Tire – manufacturer's standard.			
26.	Sun Visors			
27.	Tinted Glass			
28.	Tires – steel belted radial type tubeless.			
29.	Windshield Wipers – dual electric 2-speed type with intermittent feature windshield washers.			
30.	Minimum Requirements – Refer to Specification <ul style="list-style-type: none"> • Wheelbase • Length, Overall • Approx. Payload Allowance • GVWR • Displacement, Engine • Engine Net HP • Engine Torque • Transmission; Automatic • Tire Size and Load Range • Rim Size 			
31.	Optional Equipment – Refer to Purchase Order			

SECTION K - AVAILABILITY OF SPECIFICATIONS:

The most current effective version of this specification document is available through the Agency's web site.

<http://comptroller.texas.gov/procurement/pub/specifications-library/>

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