



CITY OF CONCORD
CONCORD, NORTH CAROLINA

FOR

BID# 2212

ONE (1) 50 FOOT HYDRAULIC TELESCOPIC AERIAL TRUCK

FOR

ELECTIC DEPARTMENT

ANNOUNCED DATE: THURSDAY, APRIL 4, 2013

DUE DATE: TUESDAY, APRIL 16, 2013

TIME: 2:00 PM
IN CONFERENCE ROOM C
ALFRED M. BROWN OPERATIONS CENTER
850 WARREN C. COLEMAN BOULEVARD
P.O. BOX 308
CONCORD, NC 28025

REQUEST FOR BID

The City of Concord will receive sealed bids, on Tuesday, April 16, 2013 at 2:00 PM, in Conference Room C, Alfred M. Brown Operations Center, 850 Warren C. Coleman Boulevard, Concord, North Carolina 28025. Said proposals will be publicly opened and read for:

BID# 2212

ONE (1) 50 FOOT HYDRAULIC TELESCOPIC AERIAL TRUCK

Copies of the specifications if not included in the bid can be Obtained by contacting the Purchasing Department, Alfred M. Brown Operations Center, 850 Warren C. Coleman Blvd., P.O. Box 308, Concord, N.C. 28025. Telephone (704) 920-5441, Fax (704) 785-8856.

NC General Statutes, including G.S. §143-129, and the city of Concord, NC General Specifications and Instructions to bidders will govern the RFB and award of the contract.

The City of Concord reserves the right to reject any or all bids.

Sid Talbert
Purchasing Manager
City of Concord, N.C.

In accordance with state law (G.S. 143.129), the award shall be made to the lowest responsible, responsive bidder, taking into consideration quality, performance, the time specified in the bid. Prices should be quoted for each line as well as a price for the total award.

Each bid must be submitted in a sealed envelope, so marked as to indicate its contents when being opened. **All bids should be marked BID #2212 ONE (1) 50 FOOT HYDRAULIC TELESCOPIC AERIAL TRUCK**

An authorized official of the firm must sign the bid.

The vendor will be required to submit a written request for payment. Payment will depend on projected delivery date stated in the bid for items and certified acceptable by Daniel Nuckolls – Fleet Services Director, for City of Concord, P.O. Box 308, Concord, North Carolina 28025. Telephone (704) 920-5431. Questions concerning bid requirements or specifications should be directed to the Purchasing Manager, Alfred M. Brown Operations Center, 850 Warren C. Coleman Boulevard, P.O. Box 308, Concord, NC 28025. Any changes in specifications will be in writing in form of an addendum and furnished to all bidders. Verbal information obtained otherwise will not be considered in the awarding of bids. No changes to specifications will be permitted within (5) days to the bid opening.

Instructions for preparation and submission of a bid/proposal are contained in the attached packet. Please note that specific forms for submission may be required. Any changes to the conditions and specifications must be in the form of a written addendum to be valid; therefore, the Purchasing Department will issue a written addendum to document on all approved changes. Any bid submitted which does not acknowledge the receipt of an issued addendum will not be considered. Bidders should have no contact with elected officials or appointed officials except the Purchasing Manager during the bidding process. Any such contact will subject bidders to immediate disqualification. Questions regarding specifications should be directed to the Purchasing Manager. A bid proposal from your firm will be appreciated.

Bid Proposal

City of Concord
P.O. Box 308
Concord, North Carolina

Gentlemen/Ladies:

The undersigned, as bidder, hereby declares the proposal is made without connection with any other person, company, or parties making a similar bid or proposal, and that it is in all respects fair and in good faith without collusion or fraud. The Bidder has carefully examined the annexed form of the specifications and instructions to the bidder and hereby declares that he will furnish the material called for in a manner prescribed in the specifications and instructions to bidders for the following prices listed.

PRICE _____

DELIVERY DATE _____

COMPANY NAME _____

AUTHORIZED SIGNATURE _____

TYPE NAME AND TITLE _____

FEDERAL ID # _____

NC CONTRACTORS LICENSE # _____

TELEPHONE # _____

Note:
This signature page must be signed for your bid to be valid.

**SPECIFICATIONS FOR A 50 FOOT
HYDRAULIC TELESCOPIC AERIAL TRUCK**

This specification is to set forth the specific requirements for a 50 foot to bottom of platform, hydraulic operated, telescopic aerial device equipped with single platform and with an aluminum line service body mounted on an appropriate chassis/cab. These insulated aerial device requirements shall also include an insulated lower arm insert, insulated telescopic upper boom and a dielectrically tested insulated control handle, with upper control isolation system at the boom tip, offering an additional layer of secondary dielectric protection for the operator.

This aerial device shall be to the manufacturer's standard. It shall be equipped with the manufacturer's equipment and accessories which are included as standard in the advertised and published literature for the unit. No such item of equipment or accessories shall be removed or omitted for the reason that it was not specified in the bid.

If it is necessary to bid alternate equipment or to take exceptions to the specifications as set forth, this must be so stated in your bid. For each item, please place an X in the appropriate space (Yes__ No__) to signify whether or not you are in complete compliance with the specification. Failure to follow the format or answer the specification may cause your bid to be disqualified. If you need extra space to describe your product, please attach extra sheets. When doing this, be sure your description references the appropriate question number.

COMPLY

YES

NO

GENERAL SPECIFICATIONS

- | | | | |
|----|--|-------|-------|
| 1. | Telescopic articulating aerial device with an insulated lower arm, insulated telescopic upper boom and a dielectrically tested insulated control handle, with upper control isolation system at the boom tip, for installation behind chassis cab with a Transverse Mounted Single Elevator , built in accordance to standard specifications and to include the following features: | _____ | _____ |
| | A. <u>Ground to Bottom of Platform Height:</u> 49.8 feet at 15.2 feet from centerline of rotation (15.2 m at 4.6 m) | _____ | _____ |
| | B. <u>Working Height</u> – 54.8 feet (16.7 m) | _____ | _____ |
| | C. <u>Maximum Reach to Edge of Platform:</u> 34.3 feet at 25.2 foot platform height (10.5 m at 7.7 m) | _____ | _____ |
| | D. <u>Lower Boom Insulator:</u> Provides 55.0 inches (1397 mm) of isolation | _____ | _____ |
| | E. <u>Elevator Section:</u> Elevator link arm is mechanically compensated to provide 5 feet of directly vertical lift to the aerial device, with articulation of the elevator arm from stowed to 90 degrees. The | _____ | _____ |

COMPLY

YES

NO

GENERAL SPECIFICATIONS

elevator section is mounted transversely (perpendicular to the chassis frame rails) behind the cab and curbside of the chassis. This provides more side reach and open bed space than the standard longitudinal mount.

- F. Pedestal: Post type pedestal design with large service openings. Pedestal consists of fixture welded steel tubing 12.75 inch (324 mm) diameter. The 1.0 inch (25.4 mm) top plate of the pedestal is machined after welding to provide a rigid, flat mounting surface for the rotation bearing. This extends the life of the bearing and reduces life cycle cost. The pedestal is attached to the chassis frame utilizing a shear plate installation technique. _____

- G. Rotation: Continuous rotation is provided by worm gear drive, equipped with extended shaft for manual rotation, driving a shear ball bearing rotation gear. The fully adjustable rotation drive assembly includes an external eccentric ring adjustment of the gearbox pinion gear to the main rotation bearing, permitting the **ability to easily adjust backlash**, reduce boom side play and ensure proper tooth contact over the life of the unit. This reduces life cycle cost. All bearing attachment bolts are easily accessed from outside the pedestal and inside the turntable. _____

- H. Turntable: Steel fixture-welded structure with a 1.0 inch (25.4 mm) steel bottom plate. The bottom plate of the turntable is machined after welding to ensure a flat mounting surface for the rotation bearing. A steel ring is welded to the bottom plate to stiffen the plate and to protect the rotation bearing. For ease of maintenance, hydraulic valuing is located on the side of the turntable and protected by a metal guard. _____

- I. Articulating Arm: Tubular steel structure. The articulating arm is designed so that the articulating arm and lower boom are compensating. By raising the articulating arm only, the lower and upper boom maintain the same relative angle with the ground. By raising the articulating arm in conjunction with the lower boom, the operator is able to position himself more quickly and easily into the work area. _____

- J. Lift Cylinders: The rod eye is welded to the rod while the blind end of the cylinder is of cast steel, one piece design, which utilizes cartridge-type, bi-directional counter-balance holding valves. Non-lubricated type bushings are used at the trunnion pins. The rod end has a spherical-type bearing. _____

COMPLY

YES

NO

GENERAL SPECIFICATIONS

- K. Lower Boom: Fabricated, reinforced steel box structure. Ultra high molecular weight polyurethane slide pads are installed at the boom tip to guide the telescopic upper boom. These pads have a large contact area in order to reduce wear. The pads are shimmed and attached for ease of adjustment or replacement without disassembly of the booms. _____
- L. Lower Boom Pivot Pin: High strength chrome plated steel with self-lubricating, replaceable, non-metallic bearings. _____
- M. Telescopic Upper Boom: Centrifugally cast, round fiberglass, providing a minimum of 24.0 (610 mm) of isolation. The inner surface of the fiberglass boom is impregnated with a wax compound to provide a dry, smooth inner surface which will cause moisture to bead. The outer surface has a smooth gelcoat finish. _____
- N. Upper Boom Extension: The upper boom is extended and retracted by a double acting hydraulic cylinder installed within the booms. The boom extends and retracts over slide bearings located in the end of the lower boom. _____
- O. Platform Leveling System: The platform is leveled by hydraulic leveling means, contained within the upper boom and designed to **maintain the dielectric integrity of the aerial device**. Controls for leveling and tilting the platform are located at the platform. Leveling for the platform includes two double acting cylinders incorporating counterbalance load holding valves to lock the platform in the event of hydraulic line failure. Cylinders are located at the platform and at the end of the lower boom. The master-slave action of the cylinders maintains a level platform throughout the full range of boom articulation. _____
- P. Platform: Totally enclosed, single, two-man, side-mounted fiberglass platform, 24 x 48 x 42 inches. Includes 180 degree platform rotator. _____
- Q. Controls: Boom and articulating arm functions are controlled with a single handle control. Control, through non-metallic linkages, actuates the interlock section and four individual boom function valves. The control provides good metering capability at all boom speeds. The single handle control activates Lower Boom—**Up and Down**, Upper Boom—**Extend and Retract**, Rotation—**Clockwise/Counter-clockwise**, and _____

COMPLY

YES

NO

GENERAL SPECIFICATIONS

Articulating Arm—***Raise and Lower***. Unit rotation is accomplished by moving the control from side to side similar to a tiller while upper boom operation is accomplished by twisting the control handle clockwise to retract and counter clockwise to extend.

- Q. Lower Boom Lifting Eye: provides for 800 pounds (363 kg) of lifting capacity. _____
- R. Outriggers: One (1) set of A-frame outriggers with outrigger control valves and electro/hydraulic control switches at rear of tailshelf. _____
- S. Outrigger/Boom Interlock System: Helps prevent operator from using unit until all outriggers are lowered. _____
- T. Outrigger/Unit Selector Control: Located near the outrigger controls, allows operator to divert hydraulic oil from machine circuit for outrigger operation. This reduces the potential for inadvertent outrigger movement during machine operation if outrigger controls are bumped. _____
- U. Outrigger Motion Alarm: Provides audible alarm when any of the outriggers are in motion. _____
- V. Back-up Alarm, installed _____
- W. Hydraulic Tool Circuit: Control easily accessible to the operator activates the tool circuit which provides 8.0 gpm (30.3 lpm) at 2,000 psi (13 790 kPa). One set of HTMA quick disconnect couplings is located in a protected location on the control cover at the platform. In the "Off" position, the circuit is designed to relieve pressure from the quick disconnect couplings. _____
- X. Diagnostic Pressure Test Quick Disconnect Couplings: are located at the turntable to allow a mobile service technician to quickly and easily attach a test gauge to verify system and tool circuit pressure. This reduces life cycle cost. _____
- Y. ISO 9001: This aerial device is designed in a facility that is certified to meet ISO 9001 requirements. _____

COMPLY

YES

NO

GENERAL SPECIFICATIONS

Z.	<u>ANSI Category C, 46 kV and below</u> dielectric rating	_____	_____
AA.	<u>Manuals</u> : Two (2) Operator's and two (2) Maintenance/ Parts manuals.	_____	_____
BB.	<u>Paint</u> : Painted white with the Powder Coat Paint Process which provides a finish-painted surface that is highly resistant to chipping, scratching, abrasion and corrosion. Paint is electro-statically applied to the inside as well as outside of fabricated parts then high temperature cured prior to assembly ensuring maximum coverage and protection.	_____	_____
7.	Engine start/stop with secondary stowage system, 12 VDC electric powered. Includes pump and motor, operates from chassis battery. Control is captive air operated from the platform and toggle switch operated from the lower controls. This option allows the operator to completely stow the booms and platform in a situation wherein the primary hydraulic source fails.	_____	_____
8.	Throttle Control Interface for electronic engines, automatically increases engine speed when needed for proper hydraulic system operation	_____	_____
9.	Pump, pressure and flow compensated	_____	_____
10.	Power Distribution Module installed behind driver's seat	_____	_____

Power Distribution Module is a compact self-contained electronic system that provides a standardized interface with the chassis electrical system. The Power Distribution Module (PDM) is composed of a main board, approximately 12.0 x 13.0 inches (305 x 330 mm), designed to be mounted behind the driver's seat, inside the cab. Additional modules plug in to accommodate various options such as engine start/stop, variable throttle control, power take off, interface with Allison World transmission, and engine speed control module for specific engines and chassis. In addition to the above potential options, the PDM also provides up to 16 accessory circuits to be used for controlling other customer specified electrical components. The PDM includes built in test capabilities and diagnostic input, output and status LED's to quickly assess the PDM's performance. 

COMPLY

YES

NO

GENERAL SPECIFICATIONS

components are circuit board mounted to facilitate replacement and reduce repair time should it be required.

The PDM provides benefits to the customer by providing a standardized, centrally located box that greatly reduces troubleshooting time when evaluating ancillary electrical system malfunctions, thereby reducing maintenance costs.

- | | | | |
|-----|--|-------|-------|
| 11. | Fall Protection System to include one body harness and decelerating type lanyard. Harness has adjustable slide buckle on shoulder straps, Velcro chest strap, interlocking buckles on leg straps and nylon web loop fall arrest attachment on back. Lanyard has built in shock absorber that allows 28 inches (711 mm) of automatic adjustability. | _____ | _____ |
| 12. | Soft platform cover for platform. | _____ | _____ |
| 13. | Polyethylene platform liner for two-man platform. | _____ | _____ |

UNIT AND HYDRAULIC ACCESSORIES

- | | | | |
|-----|--|-------|-------|
| 14. | Hydraulic oil and lubricants | _____ | _____ |
| 15. | Power take-off to be installed in conjunction with transmission | _____ | _____ |
| 16. | Braden PD18 Hydraulic Front Winch And Bumper Package. 20,000 LB Planetary, Single-Speed Winch With Tool Box And RH Extended Shaft

Winch/Capstan Control, Air, Single Axis Control Lever (Semi-Meterable), 200ft of 1/2" cable, quick hook. Controls located in cab LH side of driver seat over switch panel and front winch with guard. | _____ | _____ |
| 17. | Spring Loaded Hose Reel Hydraulic hose outlets at ground plumbed to retractable hydraulic hose reel Hydraulic Hose Kit Two (2) 40' lengths of 1/2" | _____ | _____ |

COMPLY

YES

NO

GENERAL SPECIFICATIONS

hydraulic hose with hose stops.

ALUMINUM BODY

18. 148 Inch Aerial Service Line Body, suitable for installing on any chassis with an approximate usable CA dimension of 108 inches, built in accordance with the following specifications:

Body Fabricated From 3003 Grade Mill finish Aluminum

Type 304 stainless steel door latch and hardware

Rotary latch, stainless steel

Structural channel crossmembers

Two (2) wheel chock holders each side

A. Body Dimensions:

148 inch overall body length

93 inch outside width

46 inch body height

18 inch compartment depth

57 inch floor width

B. Compartmentation – Curb Side:

First Vertical – No compartment due to location of lift. Removable access cover for aerial lift

COMPLY

YES

NO

GENERAL SPECIFICATIONS

Second Vertical – Five (5) material swivel locking material hooks

Horizontal – Two (2) fixed shelves with removable dividers on 8 inch centers

Rear Vertical – Two (2) adjustable shelves with removable dividers on 4 inch centers

C. Compartmentation – Street Side:

First Vertical – Two (2) adjustable shelves with removable dividers on 4 inch centers. Vented inverter storage.

Second Vertical – Two (2) adjustable shelves with removable dividers on 4 inch centers

Third Vertical – Six (6) material hooks

Horizontal – One (1) fixed shelf with removable dividers on 8 inch centers

Rear Vertical – Six (6) material hooks

Through Shelf – full length with hotstick brackets and rear access door

19. 24 Inch Steel tailshelf installed at rear of body. Storage compartment with drop down door on each side under tailshelf including cross storage shelf. Storage to be adequate for shovels and hole diggers.

20. Grab handles, installed one each side at rear of tailshelf

21. Cable steps, installed one each side at rear of tailshelf

22. Grab handle, installed at side access

COMPLY

YES

NO

GENERAL SPECIFICATIONS

- | | | | |
|-----|--|-------|-------|
| 23. | Security door lock system with provisions for locking all compartments with central locking points, one each side at the front of the body to allow use of padlock | _____ | _____ |
| 24. | Compartment lights installed in each compartment. Wiring installed in loom with switch located in cab. Wired ignition hot. | _____ | _____ |
| 25. | Large diameter reel holder, (36" and 48" Diameter) Reel holder uprights to be removable and provide two size capacity. Spindle bar to come equipped with locking collar to secure different size reels. Holder uprights to be inserted into recessed sockets at end of tailshelf area. | _____ | _____ |
| 26. | Inverter Storage compartment located on curbside of frame rail under unit elevator. Storage compartment to be approx 35" L x 20" D x 12" H. Install divider to partition off inverter and provide additional storage area. | _____ | _____ |

BODY ACCESSORIES

- | | | | |
|-----|---|-------|-------|
| 27. | Heavy-duty boom support installed | _____ | _____ |
| 28. | Mud Flaps, installed | _____ | _____ |
| 29. | Triangular reflector kit | _____ | _____ |
| 30. | Five pound fire extinguisher with mounting bracket, shipped loose | _____ | _____ |
| 31. | Rubber wheel chocks, (pair) 10 inches long x 8 inches wide x 5-1/2 inches high (254 x 203 x 140 mm) | _____ | _____ |
| 32. | Cone holder, two (2) ring style holders mounted off front winch bumper. | _____ | _____ |

COMPLY

YES

NO

GENERAL SPECIFICATIONS

- | | | | |
|-----|--|-------|-------|
| 33. | T225 Pintle hook (50,000lb) with frame reinforcement and two safety chain rings installed at 28 inches (+/- 1 inch) from ground to center of eye | _____ | _____ |
| 34. | Glad hands for trailer air supply. Chassis supplied tractor package. | _____ | _____ |
| 35. | Dock bumper kit | | |
| 36. | Possum belly storage area, punched metal enclosure under tailself behind pintle hook. | | |

ELECTRICAL

- | | | | |
|-----|--|-------|-------|
| 37. | LED Lights and reflectors in accordance with FMVSS lighting package, installed | _____ | _____ |
| 38. | Four point LED strobe system | _____ | _____ |
| 39. | Wire compartment lights to dash mounted switch. | _____ | _____ |
| 40. | Trailer receptacle (7-Way Pin), installed at rear | _____ | _____ |
| 41. | Amber strobe light installed on post at left front of cargo area with switch on dash | _____ | _____ |
| 42. | Post mount spotlight installed one (1) each side of chassis | _____ | _____ |
| 43. | Outrigger Motion Alarm: Provides audible alarm when any of the outriggers are in motion. | _____ | _____ |

COMPLY

YES

NO

GENERAL SPECIFICATIONS

- | | | | |
|-----|---|-------|-------|
| 44. | Backup alarm, installed at rear | _____ | _____ |
| 45. | Hour meter installed to record PTO operating hours | _____ | _____ |
| 46. | 1800W Pure Sine Inverter, (Dimensions or approved equal) Installed in storage compartment under unit elevator. Include one 120V weatherproof outlet at rear of body. | _____ | _____ |
| 47. | Two (2) telescopic post-mount flood lights. (Tele-Lite or approved equal) Flood to be Rectangular Flood Light (Hella #90600B or approved equal). One installed each side of unit on outrigger frame. Low stow position to clear rotation of lower boom. | _____ | _____ |
| 48. | Hindsight 20/20 back up proximity warning system. | _____ | _____ |
| 49. | Switch panel for PTO and electrical accessories to be mounted on LH side of driver seat. Switches to be accessed from ground. | _____ | _____ |

INSTALLATION

- | | | | |
|-----|---|-------|-------|
| 50. | Mounting aerial device | _____ | _____ |
| 51. | Painted white with a Powder Coat Paint Process which provides a finish-painted surface that is highly resistant to chipping, scratching, abrasion and corrosion. Paint is electro-statically applied to the <i>inside</i> as well as outside of fabricated parts then high temperature cured prior to assembly ensuring maximum coverage and protection | _____ | _____ |
| 52. | Mounting body and accessories | _____ | _____ |
| 53. | Painting body and accessories white with urethane enamel | _____ | _____ |
| 54. | Non-Skid applied, all walking surfaces | _____ | _____ |
| 55. | Safety and Instructional signs, installed | _____ | _____ |

COMPLY

YES

NO

GENERAL SPECIFICATIONS

- | | | | |
|-----|---|-------|-------|
| 56. | Vehicle placard is to be placed in view of driver | _____ | _____ |
| 57. | Delivery of completed vehicle | _____ | _____ |

MISCELLANEOUS

- | | | | |
|-----|---|-------|-------|
| 58. | This aerial device is designed in a facility that is certified to meet ISO 9001 | _____ | _____ |
| 59. | Three (3) year parts warranty | _____ | _____ |
| 60. | Three (3) year labor warranty. | _____ | _____ |
| 61. | One (1) year warranty for travel charges. | _____ | _____ |
| 62. | Bidder is to supply a self-directed, computer based training (CBT) program. This program will provide basic instruction in the safe operation of this aerial device. This program will also include and explain ANSI and OSHA requirements related to the proper use and operation of this unit | _____ | _____ |
| 63. | Warranty on structural integrity of the following major components is to be warranted for so long as the initial purchaser owns the product: Booms, boom articulation links, hydraulic cylinder structures, outrigger weldments, pedestals, subbases and turntables | _____ | _____ |
| 64. | Supply copy of manufacturer's warranty with bid | _____ | _____ |
| 65. | One PATRIOT PAT46-18V battery actuated tool, 15 ton crimping Tool. Burndy's Y46 tool head or equal. | _____ | _____ |
| 66. | One PATRIOT PATMD6-LI 18V battery actuated tool, 6 ton | _____ | _____ |

OPTIONS:

Install Rearview Systems back up camera kit, auto-on when in reverse, with da mode, 5.6" LCD color monitor, 130 degree diagonal view angle and display mou place of rearview mirror. Installed in lieu of Hindsight 20/20 Backup alarm system

COMPLY

YES

NO

GENERAL SPECIFICATIONS

Completed unit is to be delivered to the following address, cleaned, with at least ¼ tank of fuel and ready to place in service:

**CITY OF CONCORD
Alfred Brown Operations Center
850 Warren C. Coleman Blvd.
Concord, NC 28026**

USE OF OTHER NAMES AND REFERENCES:

Unless otherwise stated, the use of manufacturer's name and product numbers are for descriptive purposes and establishing general quality levels only. They are not intended to be restrictive. Bidders are required to state exactly what they intend to furnish, otherwise, it is fully understood that they shall furnish all items stated.

BROCHURES AND LITERATURE:

Your proposal must be accompanied by descriptive literature (marked), indicating the exact items to be furnished. The term "as specified" will not be acceptable

CAB & CHASSIS

The cab & chassis shall be a **Freightliner M2-106** per the specifications below, and will include a **7-year extended engine warranty and a 5-year extended transmission warranty:**

COMPLY **YES** _____ **NO** _____

001-172	M2 106 CONVENTIONAL CHASSIS
004-214	2014 MODEL YEAR SPECIFIED
002-004	SET BACK AXLE - TRUCK
019-001	TRAILER TOWING PROVISION AT END OF FRAME FOR TRUCK
003-001	LH PRIMARY STEERING LOCATION
AA1-003	TRUCK/TRAILER CONFIGURATION
AA6-001	DOMICILED, USA 50 STATES (INCLUDING CALIFORNIA AND CARB OPT-IN STATES)
A85-010	UTILITY/REPAIR/MAINTENANCE SERVICE

A84-1UT	UTILITY BUSINESS SEGMENT
AA4-011	FIXED LOAD COMMODITY
AA5-006	TERRAIN/DUTY: 10% (SOME) OF THE TIME, IN TRANSIT, IS SPENT ON NON-PAVED ROADS
AB1-008	MAXIMUM 8% EXPECTED GRADE
AB5-003	MAINTAINED GRAVEL OR CRUSHED ROCK - MOST SEVERE IN-TRANSIT (BETWEEN SITES) ROAD SURFACE
995-091	MEDIUM TRUCK WARRANTY
A66-99D	EXPECTED FRONT AXLE(S) LOAD : 16000.0 lbs
A68-99D	EXPECTED REAR DRIVE AXLE(S) LOAD : 23000.0 lbs
A63-99D	EXPECTED GROSS VEHICLE WEIGHT CAPACITY : 39000.0 lbs
A70-99D	EXPECTED GROSS COMBINATION WEIGHT : 45000.0 lbs
AA3-030	FLATBED/PLATFORM BODY WITH LIFT/PULL DEVICE
AF7-99D	EXPECTED BODY/PAYLOAD CG HEIGHT ABOVE FRAME "XX" INCHES : 32.0 in
101-2XE	CUM ISL 300 HP @ 2000 RPM, 2200 GOV RPM, 860 LB/FT @ 1300 RPM
79A-073	73 MPH ROAD SPEED LIMIT
79B-000	CRUISE CONTROL SPEED LIMIT SAME AS ROAD SPEED LIMIT
79K-005	PTO MODE ENGINE RPM LIMIT - 900 RPM
79M-001	PTO MODE BRAKE OVERRIDE - SERVICE BRAKE ONLY ENABLED
79P-002	PTO RPM WITH CRUISE SET SWITCH - 700 RPM
79Q-002	PTO RPM WITH CRUISE RESUME SWITCH - 700 RPM
79S-001	PTO MODE CANCEL VEHICLE SPEED - 5 MPH
79U-007	PTO GOVERNOR RAMP RATE - 250 RPM PER SECOND
79W-001	ONE REMOTE PTO SPEED
79X-001	REMOTE PTO SPEED 1 SETTING - 700 RPM
80G-002	PTO MINIMUM RPM - 700
80J-001	REGEN INHIBIT SPEED THRESHOLD - 0 MPH
* 99C-013	2013 ONBOARD DIAGNOSTICS/2010 EPA/CARB/GHG14
99D-011	2008 CARB EMISSION CERTIFICATION - CLEAN IDLE (INCLUDES 6X4 INCH LABEL ON LOWER FORWARD CORNER OF DRIVER DOOR)
105-001	ENGINE MOUNTED OIL CHECK AND FILL
133-004	ONE PIECE VALVE COVER

014-099	SIDE OF HOOD AIR INTAKE WITH FIREWALL MOUNTED DONALDSON AIR CLEANER
124-1D7	DR 12V 160 AMP 28-SI QUADRAMOUNT PAD ALTERNATOR WITH REMOTE BATTERY VOLT SENSE
292-1D8	(2) ALLIANCE MODEL 1131, GROUP 31, 12 VOLT MAINTENANCE FREE 1850 CCA THREADED STUD BATTERIES
290-017	BATTERY BOX FRAME MOUNTED
281-001	STANDARD BATTERY JUMPERS
282-001	SINGLE BATTERY BOX FRAME MOUNTED LH SIDE UNDER CAB
291-017	WIRE GROUND RETURN FOR BATTERY CABLES WITH ADDITIONAL FRAME GROUND RETURN
289-001	NON-POLISHED BATTERY BOX COVER
295-029	POSITIVE AND NEGATIVE POSTS FOR JUMPSTART LOCATED ON FRAME NEXT TO STARTER
107-032	CUMMINS 18.7 CFM AIR COMPRESSOR WITH INTERNAL SAFETY VALVE
108-002	STANDARD AIR COMPRESSOR GOVERNOR
131-013	AIR COMPRESSOR DISCHARGE LINE
152-041	ELECTRONIC ENGINE INTEGRAL SHUTDOWN PROTECTION SYSTEM
128-076	CUMMINS EXHAUST BRAKE INTEGRAL WITH VARIABLE GEOMETRY TURBO WITH ON/OFF DASH SWITCH
016-1C3	RH OUTBOARD UNDER STEP MOUNTED HORIZONTAL AFTERTREATMENT SYSTEM ASSEMBLY WITH RH HORIZONTAL TAILPIPE
28F-007	ENGINE AFTERTREATMENT DEVICE, AUTOMATIC OVER THE ROAD ACTIVE REGENERATION AND DASH MOUNTED SINGLE REGENERATION REQUEST/INHIBIT SWITCH
239-001	STANDARD EXHAUST SYSTEM LENGTH
237-052	RH STANDARD HORIZONTAL TAILPIPE
23U-001	6 GALLON DIESEL EXHAUST FLUID TANK
23Y-001	STANDARD DIESEL EXHAUST FLUID PUMP MOUNTING
43X-002	LH MEDIUM DUTY STANDARD DIESEL EXHAUST FLUID TANK LOCATION
43Y-001	STANDARD DIESEL EXHAUST FLUID TANK CAP
* 273-018	HORTON DRIVEMASTER ON/OFF FAN DRIVE
276-001	AUTOMATIC FAN CONTROL WITHOUT DASH SWITCH, NON ENGINE MOUNTED
110-003	CUMMINS SPIN ON FUEL FILTER

118-008	COMBINATION FULL FLOW/BYPASS OIL FILTER
266-013	1100 SQUARE INCH ALUMINUM RADIATOR
103-036	ANTIFREEZE TO -34F, ETHYLENE GLYCOL PRE- CHARGED SCA HEAVY DUTY COOLANT
171-007	GATES BLUE STRIPE COOLANT HOSES OR EQUIVALENT
172-001	CONSTANT TENSION HOSE CLAMPS FOR COOLANT HOSES
270-016	RADIATOR DRAIN VALVE
168-002	LOWER RADIATOR GUARD
360-998	NO FRONT ENGINE PTO
138-011	PHILLIPS-TEMRO 1000 WATT/115 VOLT BLOCK HEATER
140-053	BLACK PLASTIC ENGINE HEATER RECEPTACLE MOUNTED UNDER LH DOOR
134-001	ALUMINUM FLYWHEEL HOUSING
132-004	ELECTRIC GRID AIR INTAKE WARMER
155-058	DELCO 12V 38MT HD STARTER WITH INTEGRATED MAGNETIC SWITCH
342-584	ALLISON 3500 RDS AUTOMATIC TRANSMISSION WITH PTO PROVISION
352-998	NO AUXILIARY TRANSMISSION
343-1AG	WTEC CALIBRATION - 6 SPEED WITH AUTO NEUTRAL RDS (PACKAGE 113)
353-027	VEHICLE INTERFACE WIRING AND PDM WITH BODY BUILDER CONNECTOR AT END OF FRAME
34C-001	ELECTRONIC TRANSMISSION CUSTOMER ACCESS CONNECTOR FIREWALL MOUNTED
362-035	CUSTOMER INSTALLED CHELSEA 277 SERIES PTO
363-001	PTO MOUNTING, LH SIDE OF MAIN TRANSMISSION
341-018	MAGNETIC PLUGS, ENGINE DRAIN, TRANSMISSION DRAIN, AXLE(S) FILL AND DRAIN
345-003	PUSH BUTTON ELECTRONIC SHIFT CONTROL, DASH MOUNTED
97G-004	TRANSMISSION PROGNOSTICS - ENABLED 2013
370-015	WATER TO OIL TRANSMISSION COOLER, IN RADIATOR END TANK
346-003	TRANSMISSION OIL CHECK AND FILL WITH ELECTRONIC OIL LEVEL CHECK

35T-001 SYNTHETIC TRANSMISSION FLUID (TES-295
COMPLIANT)

400-1A9 DETROIT DA-F-16.0-5 16,000# FL1 71.0
KPI/3.74 DROP SINGLE FRONT AXLE

402-030 MERITOR 16.5X6 Q+ CAST SPIDER CAM
FRONT BRAKES, DOUBLE ANCHOR,
FABRICATED SHOES

403-002 NON-ASBESTOS FRONT BRAKE LINING

419-023 CONMET CAST IRON FRONT BRAKE DRUMS

409-021 SKF SCOTSEAL PLUS XL FRONT OIL SEALS

408-001 VENTED FRONT HUB CAPS WITH WINDOW,
CENTER AND SIDE PLUGS - OIL

416-022 STANDARD SPINDLE NUTS FOR ALL AXLES

405-002 MERITOR AUTOMATIC FRONT SLACK
ADJUSTERS

536-012 TRW TAS-85 POWER STEERING

539-003 POWER STEERING PUMP

534-015 2 QUART SEE THROUGH POWER STEERING
RESERVOIR

40T-001 ORGANIC SAE 80/90 FRONT AXLE LUBE

620-004 16,000# FLAT LEAF FRONT SUSPENSION

619-004 GRAPHITE BRONZE BUSHINGS WITH SEALS -
FRONT SUSPENSION

410-001 FRONT SHOCK ABSORBERS

420-051 RS-23-160 23,000# R-SERIES SINGLE REAR
AXLE

421-563 5.63 REAR AXLE RATIO

424-001 IRON REAR AXLE CARRIER WITH STANDARD
AXLE HOUSING

386-073 MXL 17T MERITOR EXTENDED LUBE MAIN
DRIVELINE WITH HALF ROUND YOKES

452-001 DRIVER CONTROLLED TRACTION
DIFFERENTIAL - SINGLE REAR AXLE

878-018 (1) DRIVER CONTROLLED DIFFERENTIAL LOCK
REAR VALVE FOR SINGLE DRIVE AXLE

87B-004 BLINKING LAMP WITH EACH MODE SWITCH,
DIFFERENTIAL UNLOCK WITH IGNITION OFF,
ACTIVE <5 MPH

423-020 MERITOR 16.5X7 Q+ CAST SPIDER CAM REAR
BRAKES, DOUBLE ANCHOR, FABRICATED
SHOES

433-002 NON-ASBESTOS REAR BRAKE LINING

434-011 BRAKE CAMS AND CHAMBERS ON FORWARD
SIDE OF DRIVE AXLE(S)

451-023 CONMET CAST IRON REAR BRAKE DRUMS

440-021 SKF SCOTSEAL PLUS XL REAR OIL SEALS

426-074	HALDEX GOLDSEAL LONGSTROKE 1-DRIVE AXLE SPRING PARKING CHAMBERS
428-002	MERITOR AUTOMATIC REAR SLACK ADJUSTERS
41T-002	SYNTHETIC 75W-90 REAR AXLE LUBE
622-1MJ	23,000# 52 INCH VARIABLE RATE MULTI-LEAF SPRING REAR SUSPENSION WITH LEAF SPRING HELPER
621-001	SPRING SUSPENSION - NO AXLE SPACERS
431-001	STANDARD U-BOLT PAD
018-002	AIR BRAKE PACKAGE
490-100	WABCO 4S/4M ABS WITHOUT TRACTION CONTROL
871-001	REINFORCED NYLON, FABRIC BRAID AND WIRE BRAID CHASSIS AIR LINES
904-001	FIBER BRAID PARKING BRAKE HOSE
412-001	STANDARD BRAKE SYSTEM VALVES
46D-002	STANDARD AIR SYSTEM PRESSURE PROTECTION SYSTEM
413-002	STD U.S. FRONT BRAKE VALVE
432-003	RELAY VALVE WITH 5-8 PSI CRACK PRESSURE, NO REAR PROPORTIONING VALVE
480-083	WABCO SS-1200 PLUS AIR DRYER WITH INTEGRAL AIR GOVERNOR AND HEATER
479-003	AIR DRYER MOUNTED INBOARD ON LH RAIL
460-001	STEEL AIR BRAKE RESERVOIRS
477-004	PULL CABLES ON ALL AIR RESERVOIR(S)
* 914-009	AIR CONNECTIONS AT END OF FRAME ONLY WITH ANCHOR COUPLINGS FOR TRUCK
296-027	PRIMARY CONNECTOR/RECEPTACLE WIRED FOR COMBINATION STOP/TURN, CENTER PIN POWERED THROUGH IGNITION WITH STOP SIGNAL PREWIRE PACKAGE
297-001	SAE J560 7-WAY PRIMARY TRAILER CABLE RECEPTACLE MOUNTED END OF FRAME
335-004	UPGRADED CHASSIS MULTIPLEXING UNIT
32A-002	UPGRADED BULKHEAD MULTIPLEXING UNIT
331-001	SUPPLEMENTAL ISO 3731 7-WAY RECEPTACLE LOCATED WITH PRIMARY RECEPTACLE
545-387	3875MM (153 INCH) WHEELBASE
546-102	7/16X3-9/16X11-1/8 INCH STEEL FRAME (11.11MMX282.6MM/0.437X11.13 INCH) 120KSI
552-063	2550MM (100 INCH) REAR FRAME OVERHANG

55W-009 FRAME OVERHANG RANGE: 91 INCH TO 100 INCH

AC8-99D CALC'D BACK OF CAB TO REAR SUSP C/L (CA) : 87.45 in

AE8-99D CALCULATED EFFECTIVE BACK OF CAB TO REAR SUSPENSION C/L (CA) : 84.45 in

AE4-99D CALC'D FRAME LENGTH - OVERALL : 282.39

AM6-99D CALC'D SPACE AVAILABLE FOR DECKPLATE : 87.45 in

FSS-0LH FRAME SPACE LH SIDE : 34.81 in

FSS-0RH FRAME SPACE RH SIDE : 67.71 in

553-001 SQUARE END OF FRAME

550-001 FRONT CLOSING CROSSMEMBER

559-003 LIGHT WEIGHT HEAVY DUTY ALUMINUM ENGINE CROSSMEMBER

562-001 STANDARD MIDSHIP #1 CROSSMEMBER(S)

572-001 STANDARD REARMOST CROSSMEMBER

565-001 STANDARD SUSPENSION CROSSMEMBER

556-1AP THREE-PIECE 14 INCH PAINTED STEEL BUMPER WITH COLLAPSIBLE ENDS

558-001 FRONT TOW HOOKS - FRAME MOUNTED

574-001 BUMPER MOUNTING FOR SINGLE LICENSE PLATE

585-998 NO MUDFLAP BRACKETS

590-998 NO REAR MUDFLAPS

586-024 FENDER AND FRONT OF HOOD MOUNTED FRONT MUDFLAPS

607-001 CLEAR FRAME RAILS FROM BACK OF CAB TO FRONT REAR SUSPENSION BRACKET, BOTH RAILS OUTBOARD

551-007 GRADE 8 THREADED HEX HEADED FRAME FASTENERS

604-998 NO TIRE CARRIER

204-215 50 GALLON/189 LITER SHORT RECTANGULAR ALUMINUM FUEL TANK - LH

218-005 RECTANGULAR FUEL TANK(S)

215-005 PLAIN ALUMINUM/PAINTED STEEL FUEL/HYDRAULIC TANK(S) WITH PAINTED BANDS

212-007 FUEL TANK(S) FORWARD

664-001 PLAIN STEP FINISH

205-001 FUEL TANK CAP(S)

122-077 ALLIANCE FUEL FILTER/WATER SEPARATOR WITH HEATED BOWL AND PRIMER PUMP

216-020 EQUIFLO INBOARD FUEL SYSTEM

202-016	HIGH TEMPERATURE REINFORCED NYLON FUEL LINE
ADD	MICHELIN 315/80R22.5 XZY RADIAL FRONT TIRES
ADD	MICHELN 11R22.5 XDE M/S RADIAL REAR TIRES
418-045	CONMET PRE-SET BEARING IRON FRONT HUBS
450-045	CONMET PRE-SET BEARING IRON REAR HUBS
502-428	ACCURIDE 28828 22.5X8.25 10-HUB PILOT 2- HAND HD STEEL DISC FRONT WHEELS
505-524	HAYES LEMMERZ 90541 22.5X8.25 10-HUB PILOT 2-HAND STEEL DISC REAR WHEELS
496-011	FRONT WHEEL MOUNTING NUTS
497-011	REAR WHEEL MOUNTING NUTS
829-071	106 INCH BBC FLAT ROOF ALUMINUM CONVENTIONAL CAB
650-008	AIR CAB MOUNTS
646-009	PAINTED PLASTIC GRILLE
65X-001	ARGENT SILVER HOOD MOUNTED AIR INTAKE GRILLE
644-004	FIBERGLASS HOOD
727-1AF	SINGLE 14 INCH ROUND HADLEY AIR HORN UNDER LH DECK
726-001	SINGLE ELECTRIC HORN
728-001	SINGLE HORN SHIELD
657-001	DOOR LOCKS AND IGNITION SWITCH KEYED THE SAME
575-001	REAR LICENSE PLATE MOUNT END OF FRAME
312-043	INTEGRAL HEADLIGHT/MARKER ASSEMBLY
302-001	(5) AMBER MARKER LIGHTS
294-090	OMIT STOP/TAIL/BACKUP LIGHTS AND PROVIDE WIRING FOR COMBINED STOP/TURN LIGHTS TO FOUR FEET BEYOND END OF FRAME
300-015	STANDARD FRONT TURN SIGNAL LAMPS
744-1BH	DUAL WEST COAST MOLDED-IN COLOR MIRRORS
797-001	DOOR MOUNTED MIRRORS
796-001	102 INCH EQUIPMENT WIDTH
743-1AP	LH AND RH 8 INCH MOLDED-IN COLOR CONVEX MIRRORS MOUNTED UNDER PRIMARY MIRRORS
729-001	STANDARD SIDE/REAR REFLECTORS
677-998	NO CAB MOUNTED STEPS
768-043	63X14 INCH TINTED REAR WINDOW

661-003	TINTED DOOR GLASS LH AND RH WITH TINTED NON-OPERATING WING WINDOWS
654-003	ELECRIC DOOR WINDOW REGULATORS
663-013	TINTED WINDSHIELD
659-019	2 GALLON WINDSHIELD WASHER RESERVOIR WITHOUT FLUID LEVEL INDICATOR, FRAME MOUNTED
707-1AK	OPAL GRAY VINYL INTERIOR
706-013	MOLDED PLASTIC DOOR PANEL
708-013	MOLDED PLASTIC DOOR PANEL
772-006	BLACK MATS WITH SINGLE INSULATION
785-001	DASH MOUNTED ASH TRAYS AND LIGHTER
691-008	FORWARD ROOF MOUNTED CONSOLE WITH UPPER STORAGE COMPARTMENTS WITHOUT NETTING
694-010	IN DASH STORAGE BIN
742-007	(2) CUP HOLDERS LH AND RH DASH
680-006	GRAY/CHARCOAL FLAT DASH
700-002	HEATER, DEFROSTER AND AIR CONDITIONER
701-001	STANDARD HVAC DUCTING
703-005	MAIN HVAC CONTROLS WITH RECIRCULATION SWITCH
170-015	STANDARD HEATER PLUMBING
130-033	DENSO HEAVY DUTY AIR CONDITIONER COMPRESSOR
702-002	BINARY CONTROL, R-134A
739-033	STANDARD INSULATION
285-013	SOLID-STATE CIRCUIT PROTECTION AND FUSES
280-007	12V NEGATIVE GROUND ELECTRICAL SYSTEM
324-014	DOMES LIGHT WITH 3-WAY SWITCH ACTIVATED BY LH AND RH DOORS
655-001	CAB DOOR LATCHES WITH ELECRIC DOOR LOCKS
284-023	(1) 12 VOLT POWER SUPPLY IN DASH
756-1J3	BASIC HIGH BACK AIR SUSPENSION DRIVER SEAT WITH MECHANICAL LUMBAR AND INTEGRATED CUSHION EXTENSION
760-235	2 MAN TOOL BOX MID BACK NON SUSPENSION PASSENGER SEAT
711-004	LH AND RH INTEGRAL DOOR PANEL ARMRESTS
758-036	VINYL WITH VINYL INSERT DRIVER SEAT
761-036	VINYL WITH VINYL INSERT PASSENGER SEAT

763-006	3 POINT DRIVER AND PASSENGER AND 2 POINT CENTER FRONT SEAT BELT RETRACTORS
532-001	FIXED STEERING COLUMN
540-015	4-SPOKE 18 INCH (450MM) STEERING WHEEL
765-002	DRIVER AND PASSENGER INTERIOR SUN VISORS
732-004	GRAY DRIVER INSTRUMENT PANEL
734-004	GRAY CENTER INSTRUMENT PANEL
870-001	BLACK GAUGE BEZELS
486-001	LOW AIR PRESSURE LIGHT AND BUZZER
840-002	2 INCH-PRIMARY AND SECONDARY AIR PRESSURE GAUGES
198-025	INTAKE MOUNTED AIR RESTRICTION INDICATOR WITHOUT GRADUATIONS
149-013	ELECTRONIC CRUISE CONTROL WITH SWITCHES IN LH SWITCH PANEL
ADD	3 SETS OF KEYS
156-007	KEY OPERATED IGNITION SWITCH AND INTEGRAL START POSITION; 4 POSITION OFF/RUN/START/ACCESSORY
811-011	ODOMETER/TRIP/HOUR/DIAGNOSTIC/VOLTA GE DISPLAY: 1X7 CHARACTER, 26 WARNING LAMPS, DATA LINKED, ICU3
160-025	DIAGNOSTIC INTERFACE CONNECTOR, 9 PIN, SAE J1939, LOCATED BELOW DASH
844-001	2 INCH ELECTRIC FUEL GAUGE
148-003	PROGRAMMABLE RPM CONTROL - ELECTRONIC ENGINE
33U-998	NO CUSTOMER DEFINED WIRING FUNCTION
856-001	ELECTRICAL ENGINE COOLANT TEMPERATURE GAUGE
864-001	2 INCH TRANSMISSION OIL TEMPERATURE GAUGE
830-017	ENGINE AND TRIP HOUR METERS INTEGRAL WITHIN DRIVER DISPLAY
372-051	CUSTOMER FURNISHED AND INSTALLED PTO CONTROLS
852-002	ELECTRIC ENGINE OIL PRESSURE GAUGE
746-1A2	AM/FM/WB RADIO WITH FRONT AUXILIARY INPUT
747-001	DASH MOUNTED RADIO
750-002	(2) RADIO SPEAKERS IN CAB
753-001	AM/FM ANTENNA MOUNTED ON FORWARD LH ROOF

810-027	ELECTRONIC MPH SPEEDOMETER WITH SECONDARY KPH SCALE, WITHOUT ODOMETER
817-001	STANDARD VEHICLE SPEED SENSOR
812-001	ELECTRONIC 3000 RPM TACHOMETER
162-011	IDLE LIMITER, ELECTRONIC ENGINE
482-001	BW TRACTOR PROTECTION VALVE
883-001	TRAILER HAND CONTROL BRAKE VALVE
836-015	DIGITAL VOLTAGE DISPLAY INTEGRAL WITH DRIVER DISPLAY
660-008	SINGLE ELECTRIC WINDSHIELD WIPER MOTOR WITH DELAY
304-001	MARKER LIGHT SWITCH INTEGRAL WITH HEADLIGHT SWITCH
882-021	TWO VALVE PARK BRAKE SYSTEM WITH DASH VALVE CONTROL AUTONEUTRAL AND WARNING INDICATOR
299-013	SELF CANCELING TURN SIGNAL SWITCH WITH DIMMER, WASHER/WIPER AND HAZARD IN HANDLE
298-039	INTEGRAL ELECTRONIC TURN SIGNAL FLASHER WITH HAZARD LAMPS OVERRIDING STOP LAMPS
065-000	PAINT: ONE SOLID COLOR
980-5F6	CAB COLOR A: L0006EB WHITE ELITE BC
986-020	BLACK, HIGH SOLIDS POLYURETHANE CHASSIS PAINT
962-970	VENDOR WHITE FRONT WHEELS/RIMS (PW, TKWHT21, W, TW)
966-962	HAYES LEMMERZ W POWDER WHITE (N0006EA) REAR WHEELS/RIMS
964-6Z7	BUMPER PAINT: FP24812 ARGENT SILVER DUPONT FLEX

PRICING AND DELIVERY

Total Cost (includes extended warranties): _____

Delivery: _____ days