is in reverse gear or view may be manually selected. Cameras **shall** be protected by a stainless steel cage. System components **shall** be provided with a two (2) year extended warranty.

	, or equal, dual drive, tandem axle, cab, and chassis
truck, with a GVW of 64,0	00 pounds <u>minimum or equal.</u>
Quantity to be Purchased	Price each
6	s 134, 387. 00 (Eac.
2) Please provide warranty re	epair location for making repairs
	11 1 1 1 10 10 10
945 Handino	Blud Lexington Ky 40511
· · · · · · · · · · · · · · · · · · ·	

Worlwide Eguppent is the DNLY pertitied Common ISC-6 warranty Facility in Farette Country white will provide the LEUCG with Fast and Prompt. Service For ports + service and whatever is needed LEUCG will # | priorly when it shows up at the Shop.

INVITATION TO BID

Bid Invitation Number: #62-2013 Date of Issue: 05/02/2013

Sealed bids will be received in the office of the Division of Central Purchasing, 200 East Main Street, Lexington, Kentucky, until 2:00 PM, prevailing local time on 05/16/2013. Bids must be received by the above-mentioned date and time. Mailed bids should be sent to:

> **Division of Central Purchasing** 200 East Main Street, Rm 338 Lexington, KY 40507, (859) 258-3320

The Lexington-Fayette Urban County Government assumes no responsibility for bids that are not addressed and delivered as indicated above. Bids that are not delivered to the Division of Central

Purchasing by the stated i	ime and date will be rejected.	
All bids must have the co outside of the envelope.	mpany name and address, bid invita	tion number, and the commodity/service on the
Bids are to include all shipp	ing costs to the point of delivery locat	ed at: 200 E. Main Street, Lexington, KY 40507
	Yes <u>X_</u> No Performance Bid Bond (Personal checks and company chec	e Bond Required: _X_YesNo ks will not be acceptable).
Quantity	Commod	ity/Service
Price Contract CNG Cab & Chassis for Refuse Vehicles		
Bid Specifications Exceptions to Bid	Check One: Met Specifications. Exceptions shall ached to bid proposal submitted.	Proposed Delivery: 130 450 days after acceptance of bid.
	on-Fayette Urban County Government ods and services and also to make payr	will be using Procurement Cards to nents. Will you accept Procurement Cards?
Submitted by: Bid must be signed: (original signature)	Signature of Authorized Company State & Zip Signature of Authorized Company State & Zip Signature of Authorized Company Representative's Name (Typed or printed)	Representative - Title 859-253-4639 Fax # Howele people.com

The Affidavit in this bid must be completed before your firm can be considered for award of this contract.

I. GREEN PROCUREMENT

A. ENERGY

The Lexington-Fayette Urban County Government is committed to protecting our environment and being fiscally responsible to our citizens.

The Lexington-Fayette Urban County Government mandates the use of Energy Star compliant products if they are available in the marketplace (go to www.Energystar.gov). If these products are available, but not submitted in your pricing, your bid will be rejected as non-compliant.

ENERGY STAR is a government program that offers businesses and consumers energy-efficient solutions, making it easy to save money while protecting the environment for future generations.

Key Benefits

These products use 25 to 50% less energy Reduced energy costs without compromising quality or performance Reduced air pollution because fewer fossil fuels are burned Significant return on investment Extended product life and decreased maintenance

B. GREEN SEAL CERTIFIED PRODUCTS

No____

The Lexington-Fayette Urban County Government is also committed to using other environmentally friendly products that do not negatively impact our environment. Green Seal is a non-profit organization devoted to environmental standard setting, product certification, and public education.

Go to www.Greenseal.org to find available certified products. These products will have a reduced impact on the environment and on human health. The products to be used must be preapproved by the LFUCG prior to commencement of any work in any LFUCG facility. If a Green Seal product is not available, the LFUCG must provide a signed waiver to use an alternate product. Please provide information on the Green Seal products being used with your bid response.

C. GREEN COMMUNITY

The Lexington-Fayette Urban County Government (LFUCG) serves as a principal, along with the University of Kentucky and Fayette County Public Schools, in the Bluegrass Partnership for a Green Community. The Purchasing Team component of the Partnership collaborates on economy of scale purchasing that promotes and enhances environmental initiatives. Specifically, when applicable, each principal is interested in obtaining best value products and/or services which promote environment initiatives via solicitations and awards from the other principals.

If your company is	s the successful bidder on this Invitation For Bid, do you agree to extend
the same product/s	service pricing to the other principals of the Bluegrass Partnership for a
Green Community	(i.e. University of Kentucky and Fayette County Schools) if requested?
Yes V	No

<u>AFFIDAVIT</u>
Comes the Affiant,
1. His/her name is and he/she is the individual submitting the bid or is the authorized representative of
worldwide Egypnist,
the entity submitting the bid (hereinafter referred to as "Bidder").
2. Bidder will pay all taxes and fees, which are owed to the Lexington-Fayette Urban County Government at the time the bid is submitted, prior to award of the contract and will maintain a "current" status in regard to those taxes and fees during the life of the contract. 3. Bidder will obtain a Lexington-Fayette Urban County Government business license, if applicable, prior to award of the contract. 4. Bidder has authorized the Division of Central Purchasing to verify the abovementioned information with the Division of Revenue and to disclose to the Urban County Council that taxes and/or fees are delinquent or that a business license has not been obtained. 5. Bidder has not knowingly violated any provision of the campaign finance laws of the Commonwealth of Kentucky within the past five (5) years and the award of a contract to the Bidder will not violate any provision of the campaign finance laws of the Commonwealth. 6. Bidder has not knowingly violated any provision of Chapter 25 of the Lexington-Fayette Urban County Government Code of Ordinances, known as "Ethics Act." 7. Bidder acknowledges that "knowingly" for purposes of this Affidavit means, with respect to conduct or to circumstances described by a statute or ordinance defining an offense, that a person is aware or should have been aware that his conduct is of that nature or that the circumstance exists.
Further, Affiant sayeth naught.
STATE OF Lenney
COUNTY OF Fayette
The foregoing instrument was subscribed, sworn to and acknowledged before me
by Jim Ootsow on this the 14 day

Please refer to Section II. Bid Conditions, Item "U" prior to completing this form.

NOTARY PUBLIC, STATE ATLANGE

My Commission expires: _

EQUAL OPPORTUNITY AGREEMENT

The Law

- Title VII of the Civil Rights Act of 1964 (amended 1972) states that it is unlawful for an employer to discriminate in employment because of race, color, religion, sex, age (40-70 years) or national origin.
- Executive Order No. 11246 on Nondiscrimination under Federal contract prohibits employment discrimination by contractor and sub-contractor doing business with the Federal Government or recipients of Federal funds. This order was later amended by Executive Order No. 11375 to prohibit discrimination on the basis of sex.
- Section 503 of the Rehabilitation Act of 1973 states:

The Contractor will not discriminate against any employee or applicant for employment because of physical or mental handicap.

- Section 2012 of the Vietnam Era Veterans Readjustment Act of 1973 requires Affirmative Action on behalf of disabled veterans and veterans of the Vietnam Era by contractors having Federal contracts.
- Section 206(A) of Executive Order 12086, Consolidation of Contract Compliance Functions for Equal Employment Opportunity, states:

The Secretary of Labor may investigate the employment practices of any Government contractor or sub-contractor to determine whether or not the contractual provisions specified in Section 202 of this order have been violated.

The Lexington-Fayette Urban County Government practices Equal Opportunity in recruiting, hiring and promoting. It is the Government's intent to affirmatively provide employment opportunities for those individuals who have previously not been allowed to enter into the mainstream of society. Because of its importance to the local Government, this policy carries the full endorsement of the Mayor, Commissioners, Directors and all supervisory personnel. In following this commitment to Equal Employment Opportunity and because the Government is the benefactor of the Federal funds, it is both against the Urban County Government policy and illegal for the Government to let contracts to companies which knowingly or unknowingly practice discrimination in their employment practices. Violation of the above mentioned ordinances may cause a contract to be canceled and the contractors may be declared ineligible for future consideration.

Please sign this statement in the appropriate space acknowledging that you have read and understand the provisions contained herein. Return this document as part of your application packet.

Bidders

I/We agree to comply with the Civil Rights Laws listed above that govern employment rights of minorities, worked Vietnam veterans, handicapped and aged persons.

Signature

Name of Business

against the bidder before or by any court, governmental body or agency or other tribunal or authority which would, if adversely determined, have a materially adverse effect on the authority or ability of bidder to perform its obligations under this bid response or bid contract, or which question the legality, validity or enforceability hereof or thereof.

- 18. Bidder understands and agrees that its employees, agents, or subcontractors are not employees of LFUCG for any purpose whatsoever. Bidder is an independent contractor at all times related to the bid response or bid contract.
- 19. If any term or provision of this bid contract shall be found to be illegal or unenforceable, the remainder of the contract shall remain in full force and such term or provision shall be deemed stricken.

Signature

Date

EXCEPTION PAGE

2.7. 1-Le Par Cymmins 1201/1000 watt
2.7. 1-le Per Cummins 1201/1000 watt Block Heater only Avaiable
1
2.2.8. AD-IP is not ovail- per Mack Sales Prj. Menter/walka 1800
Mack Sales Prj. Mentor/wakes 1800
is standard w/Mad Terrapio Meet or exceeds, spacs
of Bendix AD-IP Not Avail on Made Chassis
nicause of the application and purging of 12513.
bendix is not recommended for this
bendix An-IP Not Avail on Made Chassis 13 himse of the application and puring JD5-15-13 bendix is not recommended for this application due to not enough air stored in the dryer as required for purge.
in the dryer as required for purge.
, 3

FOR INFORMATIONAL PURPOSES ONLY---HEIL PYTHON MULTIPACK SPECIFICATIONS

1.0 SCOPE---HEIL PYTHON MULTIPACK

1.1 This section describes the minimum requirements for an automated side loading high compaction refuse body with a rear loading tailgate. Heil Python MultiPack. The intent for establishing this price contract is to purchase six (6) Heil Python MultiPack bodies to be installed on CNG 2014 Mack LEU 633, dual drive, tandem axle, cab, and chassis truck, with a GVW of 64,000 pounds minimum or equal. Specifications associated with a CNG 2014 Mack LEU 633, dual drive, tandem axle, cab, and chassis truck, with a GVW of 64,000 pounds minimum or equal are enclosed for informational purposes only.

2.0 REQUIREMENTS --- Heil Python MultiPack

2.1 Body Construction

- 2.1.1 All steel used in construction of body **shall** have a 50,000 psi minimum yield strength unless otherwise noted. All body welds **shall** be continuous seam.
- 2.1.2 Payload Capacity: Body shall have a net usable capacity of not less than 24 cubic yards (less hoppers). Minimum 3 yd rear hopper capacity and a minimum 4 yd front hopper capacity.

2.2 Tailgate/Hopper

- 2.2.1 The rear opening shall be covered by a top hinged tailgate which shall be constructed to house the rear packing mechanism and form a minimum 3 cubic yard hopper.
- 2.2.2 Tailgate: Tailgate shall be one piece, hinged at top of body. Raising, lowering, and latching of tailgate shall be done hydraulically. Tailgate opening shall include a rubber seal to prevent liquid seepage.
- 2.2.3 A rider platform with safety handrails shall be provided on each side of the tailgate. The platform shall be constructed of self-cleaning, non skid steel grate. Measurements shall be 20 inches maximum from ground level, 10 inches wide, and 41 inches long.
- 2.2.4 The operator **shall** activate the packing mechanism into an automatic cycle or have complete manual control to stop and resume cycle or when a short cycle is desired.

2.3 Automated Lifting Arm

- 2.3.1 Body **shall** be equipped with an automated container lifting mechanism capable of handling 30-110 gallon universal style roll carts as well as square, 90-110 gallon curb side containers. Lifting mechanism **shall** be mounted to service containers on the right (curb) side of truck by a single operator in the right side driver's station.
- 2.3.2 Lifting mechanism shall extend, clamp, raise, dump, and return container to original position. Minimum reach (horizontal extension) of 108 inches. All arm functions shall operate at advertised speed with the truck in gear, engine idling.
- 2.3.3 Lifting mechanism **shall** be hydraulically operated, with a lifting capacity of not less than 625 lbs. at maximum reach, and **shall** incorporate a self leveling feature to keep the container in a level position when in operation.

2.4 Hydraulic System

- 2.4.1 Controls: Automated arm mechanism shall be controlled via an electric stick type control operable from inside the right side of truck cab. No push-pull cable controls will be accepted. Push button controls for packing mechanism function shall be provided inside the truck cab. Controls shall be clearly marked as to their function. A warning light shall be provided to indicate when the tailgate is not down and latched.
- 2.4.2 Power Take Off: Cab and chassis **shall** be equipped for front mounted, engine driven PTO operation.
- 2.4.3 Overspeed Protection: Each unit **shall** be protected through the transmission. **Electronic overspeed devices will not be accepted**. If hydraulic pump is certified for operation up to the governed RPM of engine an overspeed device is not required provided that a letter of certification from pump manufacturer is included in bid.
- 2.4.4 Hydraulic Pump: Dixon brand hydraulic pump shall have sufficient capacity to provide full automated arm functions at engine idle speed as well as the ability to provide a pack-on-the-run feature. Hydraulic pump shall be warranted by its manufacturer for a period of not less than three (3) years. No clutches shall be used in PTO/pump system. Pump shall be mounted to allow for ease of maintenance and removal. Removal of entire front bumper to gain access to pump is not acceptable.
- 2.4.5 Oil reservoir: Hydraulic oil reservoir shall be of sufficient capacity to prevent overheating of oil during normal operation. Reservoir shall be mounted behind the cab. Oil reservoir shall have appropriate baffling, drain plug, fill port, and sight gauge. A ball valve shall be installed to allow removal of plumbing without draining reservoir. Oil reservoir shall be equipped with a Pall Reservoir Air Breather part number HC7400SKN4H. No unfiltered venting of the hydraulic system will be permitted. Exterior surface of reservoir shall have a black powder coated finish. Paint finishes will not be accepted.

- 2.4.6 Filters: Unit shall be equipped with a Pall return line filter assembly using cartridge part number HC8800FKN16H. A pressure differential monitor with "change filter" light shall be installed in cab.
- 2.4.7 Valve Bank: Hydraulic system **shall** have adjustable main relief valve. A pressure gauge measuring main system pressure **shall** be permanently installed in close proximity to main relief adjustment. There also **shall** be manual controls on valves in case of electrical failure.
- 2.4.8 Hydraulic Plumbing: Stainless steel tubing shall be used wherever possible secured by cushioned clamps. All hydraulic hose shall meet or exceed SAE 100R2 Type AT requirements. All hose end fittings shall be attached by crimped ferrule type. With exception to the main suction hose, no hose clamp connections will be accepted.
- 2.4.9 Controls: Controls for rear packing mechanism **shall** be located curbside near hopper opening. Controls for ejector system and tailgate lift **shall** be located street side at front of body. A weatherproof pushbutton **shall** be located near packing mechanism controls which activates a buzzer in truck cab.

2.5 Roll Cart Dump Units

- 2.5.1 Each unit **shall** have two (2) **Bayne Machine Works Inc. Thinline model TL 1116** roll cart lifter units mounted. The units **shall** operate semi-automatically and be mounted so that the entire contents of the roll cart can be dumped into the rear hopper.
- 2.5.2 Each dump unit shall be painted bright yellow.
- 2.5.3 Dump units shall be totally hydraulic, utilizing the refuse body hydraulic system as a power source. The amount of hydraulic flow to the dump units shall be mechanically limited to only that which is required to achieve the proper cycle time. It shall not be necessary to speed up truck engine to achieve the desired cycle time. No electrically actuated diverter valves will be accepted.
- 2.5.4 Each dump unit **shall** have its own manual control valve mounted adjacent to the hopper. Bayne hand valve assembly number **6083-1025 shall** be used for each flipper. Dump units **shall** be able to operate individually or simultaneously while maintaining proper cycle times.
- 2.5.5 Complete cycle time of 8-10 seconds. It must be possible to stop the cycle at any point and reverse direction.

2.6 Miscellaneous

2.6.1 The frame rails of the truck **shall** not be drilled, cut, or altered in any way other than that approved by the chassis manufacturer.

- 2.6.2 Anti-sail mud flaps **shall** be installed behind rear wheels. A fixed mud guard **shall** be installed in front of the rear wheels.
- 2.6.3 Lighting: All lighting required by the Federal Motor Vehicle Safety Standard #108, shall be installed. All rear facing stop, turn, or tail lamps shall be flush mounted, sealed LED units (such as Grote 53252, or Truck Lite 44982R). All clearance lamps shall be 2 ½ inches, grommet mounted, sealed LED units (such as Grote 47122 or Truck Lite 10250R). License plate lamp shall be a sealed LED unit (such as Grote 60381 or Truck Lite 15226). Backup lamps shall be sealed LED units (such as Truck-Lite 44806C). One (1) Truck Lite 81360 shall be used to illuminate the hopper area(s), and one (1) Truck Lite 81360 shall be mounted to illuminate the area in front of the ejector panel. Both lights shall be controlled by separate switches in truck cab.
- 2.6.4 Strobe Lights: Two (2) rear facing 4 inches round, grommet mounted, amber strobe lights shall be mounted on the tailgate in a manner consistent with other rear facing lights. Strobe lights shall be self contained LED units (such as Truck Lite 44212Y or Grote 77353). Strobe box supplied systems will not be accepted.
- 2.6.5 Wiring: Any circuit added to the truck shall be wired through the truck's fuse panel and protected by fuse or circuit breaker. All connections to a component shall be made with a molded plug or otherwise environmentally sealed connector. Individual wires shall be terminated with a terminal which is crimped, soldered, and covered with heat shrink tubing. Splices should be avoided. If a spliced wire cannot be avoided, the splice shall be soldered and covered with heat shrink tubing. Under no circumstances will the use of the following items or methods be accepted: crimp-type butt connectors, Scotch-Lok's, solderless terminals, electrical tape, wire nuts, or in-line fuses.
- 2.6.6 Painting: Entire body shall be thoroughly cleaned of dirt, oil, grease, and welding slag. Cleaned bare metal shall be prepped and coated prior to paint finish. Other painting processes may be employed only if expressly approved by the Division of Fleet Services. No electrical wire, hydraulic hose, or fitting shall be painted. Body to be metallic gray (DuPont 44400U) with eight inch blue (DuPont 44426U) stripe. Paint diagram will be provided by LFUCG.
- 2.6.7 Safety Equipment: A 10 lb. fully rechargeable, A-B-C fire extinguisher **shall** be mounted on the outside of the driver's side of packer body in a convenient location. A set of reflecting safety triangles **shall** be provided.
- 2.6.8 All switches and controls shall be clearly marked as to their function.
- 2.6.9 Back-Up Vision System: "Safety Vision Brand" closed circuit rear/side vision system number SV-CLCD70B utilizing four (4) color cameras shall be installed with a multi-input seven inch (7") color LCD monitor positioned for convenient viewing by driver. Cameras shall provide a view of the area immediately behind the vehicle to aid in backing, a view of the automated arm action, inside hopper, and a view of traffic on the left side of the vehicle. System shall automatically switch to the rear view when truck

Lexington Fayette Urban County Government

Division of Central Purchasing



Lexington Kentucky

Horse Capital of the World

INVITATION TO BID #62-2013

CNG Cab & Chassis for Refuse Vehicles

NOTICE TO BIDDERS

Bid Opening Date: May 16, 2013

Bid Opening Time: 2:00 PM

Address: 200 East Main Street

3rd Floor, Room 338

Pre Bid Meeting: N/A

Pre Bid Time: N/A

Address: N/A

II. Bid Conditions

- A. No bid may be withdrawn for a period of sixty (60) days after the date and time set for opening.
- B. No bid may be altered after the date and time set for opening. In the case of obvious errors, the Division of Central Purchasing may permit the withdrawal of a bid. The decision as to whether a bid may be withdrawn shall be that of the Division of Central Purchasing.
- C. Acceptance of this proposal shall be enactment of an Ordinance by the Urban County Council.
- D. The bidder agrees that the Urban County Government reserves the right to reject <u>any</u> and <u>all</u> bids for either fiscal or technical reasons, and to award each part of the bid separately or all parts to one vendor.
- E. Minor exceptions may not eliminate the bidder. The decision as to whether any exception is minor shall be entirely that of the head of the requisitioning Department or Division and the Director of the Division of Central Purchasing. The Urban County Government may waive technicalities and informalities where such waiver would best serve the interests of the Urban County Government.
- F. Manufacturer's catalogue numbers, trade names, etc., where shown herein are for descriptive purposes and are to guide the bidder in interpreting the standard of quality, design, and performance desired, and shall not be construed to exclude proposals based on furnishing other types of materials and/or services. However, any substitution or departure proposed by the bidder must be clearly noted and described; otherwise, it will be assumed that the bidder intends to supply items specifically mentioned in this Invitation for Bids.
- G. The Urban County Government may require demonstrations of the materials proposed herein prior to acceptance of this proposal.
- H. Bids must be submitted on this form and must be signed by the bidder or his authorized representative. Unsigned bids will not be considered.
- I. Bids must be submitted prior to the date and time indicated for opening. Bids submitted after this time will not be considered.
- J. All bids mailed must be marked on the face of the envelope:

"Bid on #62-2013 CNG Cab & Chassis for Refuse Vehicles"

and addressed to: Division of Central Purchasing

200 East Main Street, Room 338 Lexington, Kentucky 40507

The Lexington-Fayette Urban County Government assumes no responsibility for bids that are not addressed and delivered as indicated above. Bids that are not delivered to the Division of Central Purchasing by the stated time and date will be rejected.

- K. Bidder is requested to show both unit prices and lot prices. In the event of error, the unit price shall prevail.
- L. A certified check or Bid Bond in the amount of XX percent of the bid price must be attached hereto. This check must be made payable to the Lexington-Fayette Urban County Government, and will be returned when the material and/or services specified herein have been delivered in accordance with specifications. In the event of failure to perform within the time period set forth

in this bid, it is agreed the certified check may be cashed and the funds retained by the Lexington-Fayette Urban County Government as liquidated damages. Checks of unsuccessful bidders will be returned when the bid has been awarded.

- M. The delivery dates specified by bidder may be a factor in the determination of the successful bidder.
- N. Tabulations of bids received may be mailed to bidders. Bidders requesting tabulations must enclose a stamped, self-addressed envelope with the bid.
- O. The Lexington-Fayette Urban County Government is exempt from Kentucky Sales Tax and Federal Excise Tax on materials purchased from this bid invitation. Materials purchased by the bidder for construction projects are not tax exempt and are the sole responsibility of the bidder.
- P. All material furnished hereunder must be in full compliance with OSHA regulations.
- Q. If more than one bid is offered by one party, or by any person or persons representing a party, all such bids shall be rejected.
- R. Signature on the face of this bid by the Bidder or his authorized representative shall be construed as acceptance of and compliance with all terms and conditions contained herein.
- S. The Entity (regardless of whether construction contractor, non-construction contractor or supplier) agrees to provide equal opportunity in employment for all qualified persons, to prohibit discrimination in employment because of race, color, creed, national origin, sex or age, and to promote equal employment through a positive, continuing program from itself and each of its sub-contracting agents. This program of equal employment opportunity shall apply to every aspect of its employment policies and practices.
- T. The Kentucky Equal Employment Opportunity Act of 1978 (KRS 45.560-45.640) requires that any county, city, town, school district, water district, hospital district, or other political subdivision of the state shall include in directly or indirectly publicly funded contracts for supplies, materials, services, or equipment hereinafter entered into the following provisions:

During the performance of this contract, the contractor agrees as follows:

- (1) The contractor will not discriminate against any employee or applicant for employment because of race, color, religion, sex, age or national origin;
- (2) The contractor will state in all solicitations or advertisements for employees placed by or on behalf of the contractors that all qualified applicants will receive consideration for employment without regard to race, color, religion, sex, age or national origin;
- (3) The contractor will post notices in conspicuous places, available to employees and applicants for employment, setting forth the provisions of the non-discrimination clauses required by this section; and
- (4) The contractor will send a notice to each labor union or representative of workers with which he has a collective bargaining agreement or other contract or understanding advising the labor union or workers' representative of the contractor's commitments under the nondiscrimination clauses.

The Act further provides:

KRS 45.610. Hiring minorities - Information required

(1) For the length of the contract, each contractor shall hire minorities from other sources

within the drawing area, should the union with which he has collective bargaining agreements be unwilling to supply sufficient minorities to satisfy the agreed upon goals and timetable.

(2) Each contractor shall, for the length of the contract, furnish such information as required by KRS 45.560 to KRS 45.640 and by such rules, regulations and orders issued pursuant thereto and will permit access to all books and records pertaining to his employment practices and work sites by the contracting agency and the department for purposes of investigation to ascertain compliance with KRS 45.560 to 45.640 and such rules, regulations and orders issued pursuant thereto.

KRS 45.620. Action against contractor - Hiring of minority contractor or subcontractor

- (1) If any contractor is found by the department to have engaged in an unlawful practice under this chapter during the course of performing under a contract or subcontract covered under KRS 45.560 to 45.640, the department shall so certify to the contracting agency and such certification shall be binding upon the contracting agency unless it is reversed in the course of judicial review.
- (2) If the contractor is found to have committed an unlawful practice under KRS 45.560 to 45.640, the contracting agency may cancel or terminate the contract, conditioned upon a program for future compliance approved by the contracting agency and the department. The contracting agency may declare such a contractor ineligible to bid on further contracts with that agency until such time as the contractor complies in full with the requirements of KRS 45.560 to 45.640.
- (3) The equal employment provisions of KRS 45.560 to 45.640 may be met in part by a contractor by subcontracting to a minority contractor or subcontractor. For the provisions of KRS 45.560 to 45.640, a minority contractor or subcontractor shall mean a business that is owned and controlled by one or more persons disadvantaged by racial or ethnic circumstances.

KRS 45.630 Termination of existing employee not required, when

Any provision of KRS 45.560 to 45.640 notwithstanding, no contractor shall be required to terminate an existing employee upon proof that that employee was employed prior to the date of the contract.

KRS 45.640 Minimum skills

Nothing in KRS 45.560 to 45.640 shall require a contractor to hire anyone who fails to demonstrate the minimum skills required to perform a particular job.

It is recommended that all of the provisions above quoted to be included as <u>special conditions</u> in each contract. In the case of a contract exceeding \$250,000, the contractor is required to furnish evidence that his work-force in Kentucky is representative of the available work-force in the area from which he draws employees, or to supply an Affirmative Action plan which will achieve such representation during the life of the contract.

U. Any party, firm or individual submitting a proposal pursuant to this invitation must be in compliance with the requirements of the Lexington-Fayette Urban County Government regarding taxes and fees before they can be considered for award of this invitation and must maintain a "current" status with regard to those taxes and fees throughout the term of the contract. The contractor must be in compliance with Chapter 13 from the Code of Ordinances

of the Lexington-Fayette Urban County Government. The contractor must be in compliance with Ordinance 35-2000 pursuant to contractor registration with the Division of Building Inspection. If applicable, said business must have a Fayette County business license.

Pursuant to KRS 45A.343 and KRS 45A.345, the contractor shall

- (1) Reveal any final determination of a violation by the contractor within the previous five year period pursuant to KRS Chapters 136 (corporation and utility taxes), 139 (sales and use taxes), 141 (income taxes), 337 (wages and hours), 338 (occupational safety and health of employees), 341 (unemployment and compensation) and 342 (labor and human rights) that apply to the contractor; and
- (2) Be in continuous compliance with the above-mentioned KRS provisions that apply to the contractor for the duration of the contract.

A contractor's failure to reveal the above or to comply with such provisions for the duration of the contract shall be grounds for cancellation of the contract and disqualification of the contractor from eligibility for future contracts for a period of two (2) years.

V. Vendors who respond to this invitation have the right to file a notice of contention associated with the bid process or to file a notice of appeal of the recommendation made by the Director of Central Purchasing resulting from this invitation.

Notice of contention with the bid process must be filed within 3 business days of the bid/proposal opening by (1) sending a written notice, including sufficient documentation to support contention, to the Director of the Division of Central Purchasing or (2) submitting a written request for a meeting with the Director of Central Purchasing to explain his/her contention with the bid process. After consulting with the Commissioner of Finance the Chief Administrative Officer and reviewing the documentation and/or hearing the vendor, the Director of Central Purchasing shall promptly respond in writing findings as to the compliance with bid processes. If, based on this review, a bid process irregularity is deemed to have occurred the Director of Central Purchasing will consult with the Commissioner of Finance, the Chief Administrative Officer and the Department of Law as to the appropriate remedy.

Notice of appeal of a bid recommendation must be filed within 3 business days of the bid recommendation by (1) sending a written notice, including sufficient documentation to support appeal, to the Director, Division of Central Purchasing or (2) submitting a written request for a meeting with the Director of Central Purchasing to explain his appeal. After reviewing the documentation and/or hearing the vendor and consulting with the Commissioner of Finance and the Chief Administrative Officer, the Director of Central Purchasing shall in writing, affirm or withdraw the recommendation.

III. Procurement Contract Bid Conditions

A. The terms of this agreement shall be for <u>1</u> year from the date of acceptance of this contract by the Lexington-Fayette Urban County Government. This agreement may be extended for an additional <u>1</u> year renewal upon the written agreement of the bidder and the Lexington-Fayette Urban County Government. Said agreement must be in writing and must be executed prior to the expiration of the current agreement.

B. Price Changes (Space Checked Applies)

- (XXX) 1. Prices quoted in response to the Invitation shall be firm prices for the first 180 days of the Procurement Contract. After 180 days, prices may be subject to revision and such changes shall be based on general industry changes. Revision may be either increases or decreases and may be requested by either party. There will be no more than one (1) price adjustment per six month period. Requests for price changes shall be received in writing at least twenty (20) days prior to the effective date and are subject to written acceptance before becoming effective. Proof of the validity of a request for revision shall be responsibility of the requesting party. The Lexington-Fayette Urban County Government shall receive the benefit of any decline that the seller shall offer his other accounts.
 - () 2. No provision for price change is made herein. Prices are to be firm for the term of this contract.
 - () 3. Procurement Level Contract
- C. If any contract item is not available from the vendor, the Lexington-Fayette Urban County Government, at its option, may permit the item to be back-ordered or may procure the item on the open market.
- D. All invoices must bear reference to the Lexington-Fayette Urban County Government Purchasing document numbers which are being billed.
- E. This contract may be canceled by either party thirty (30) days after delivery by canceling party of written notice of intent to cancel to the other contracting party.
- F. This contract may be canceled by the Lexington-Fayette Urban County Government if it is determined that the Bidder has failed to perform under the terms of this agreement, such cancellation to be effective upon receipt of written notice of cancellation by the Bidder.
- G. No substitutions for articles specified herein may be made without prior approval of the Division of Central Purchasing.

GENERAL PROVISIONS OF BID CONTRACT

By signing the below, bidder acknowledges that it understands and agrees with the following provisions related to its bid response and the provision of any goods or services to LFUCG upon selection by LFUCG pursuant to the bid request:

- 1. Bidder shall comply with all Federal, State & Local regulations concerning this type of service or good.
- 2. Failure to submit ALL forms and information required by LFUCG may be grounds for disqualification.
- 3. Addenda: All addenda, if any, must be considered by the bidder in making its response, and such addenda shall be made a part of the requirements of the bid contract. Before submitting a bid response, it is incumbent upon bidder to be informed as to whether any addenda have been issued, and the failure of the bidder to cover any such addenda may result in disqualification of that response.
- 4. Bid Reservations: LFUCG reserves the right to reject any or all bid responses, to award in whole or part, and to waive minor immaterial defects in proposals. LFUCG may consider any alternative proposal that meets its basic needs.
- 5. Liability: LFUCG is not responsible for any cost incurred by bidder in the preparation of its response.
- 6. Changes/Alterations: Bidder may change or withdraw a proposal at any time prior to the opening; however, no oral modifications will be allowed. Only letters, or other formal written requests for modifications or corrections of a previously submitted proposal which is addressed in the same manner as the bid response, and received by LFUCG prior to the scheduled closing time for receipt of bids, will be accepted. The bid response when opened, will then be corrected in accordance with such written request(s), provided that the written request is contained in a sealed envelope which is plainly marked "modifications of bid response".
- 7. Clarification of Submittal: LFUCG reserves the right to obtain clarification of any point in a bid or to obtain additional information from any bidder.
- 8. Bribery Clause: By his/her signature on its response, bidder certifies that no employee of his/hers, any affiliate or subcontractor, has bribed or attempted to bribe an officer or employee of the LFUCG.
- 9. Additional Information: While not necessary, the bidder may include any product brochures, software documentation, sample reports, or other documentation that may assist LFUCG in better understanding and evaluating the bid response. Additional documentation shall not serve as a substitute for other documentation which is required by the LFUCG to be submitted with the bid response.
- 10. Ambiguity, Conflict or other Errors: If a bidder discovers any ambiguity, conflict, discrepancy, omission or other error in the bid request of LFUCG, it shall immediately notify LFUCG of such error in writing and request modification or clarification of the document if allowable by the LFUCG.

- 11. Agreement to Bid Terms: In submitting its bid response, the bidder agrees that it has carefully examined the specifications and all provisions relating to LFUCG's bid request, including but not limited to the bid contract. By submission of its bid response, bidder states that it understands the meaning, intent and requirements of LFUCG's bid request and agrees to the same. The successful bidder shall warrant that it is familiar with and understands all provisions herein and shall warrant that it can comply with them. No additional compensation to bidder shall be authorized for services, expenses, or goods reasonably covered under these provisions that the bidder omits from its bid response.
- 12. Cancellation: LFUCG may unilaterally terminate the bid contract with the selected bidder(s) at any time, with or without cause, by providing at least thirty (30) days advance written notice unless a different advance written notice period is negotiated prior to contract approval. Payment for services or goods received prior to termination shall be made by the LFUCG provided these goods or services were provided in a manner acceptable to the LFUCG. Payment for those goods and services shall not be unreasonably withheld.
- 13. Assignment of Contract: The selected bidder(s) shall not assign or subcontract any portion of the bid contract with LFUCG without the express written consent of LFUCG. Any purported assignment or subcontract in violation hereof shall be void. It is expressly acknowledged that LFUCG shall never be required or obligated to consent to any request for assignment or subcontract; and further that such refusal to consent can be for any or no reason, fully within the sole discretion of LFUCG.
- 14. No Waiver: No failure or delay by LFUCG in exercising any right, remedy, power or privilege hereunder, nor any single or partial exercise thereof, nor the exercise of any other right, remedy, power or privilege shall operate as a waiver hereof or thereof. No failure or delay by LFUCG in exercising any right, remedy, power or privilege under or in respect of this bid proposal or bid contract shall affect the rights, remedies, powers or privileges of LFUCG hereunder or shall operate as a waiver thereof.
- 15. Authority to do Business: Each bidder must be authorized to do business under the laws of the Commonwealth of Kentucky and must be in good standing and have full legal capacity to provide the goods or services specified in the bid proposal. Each bidder must have all necessary right and lawful authority to submit the bid response and enter into the bid contract for the full term hereof including any necessary corporate or other action authorizing the bidder to submit the bid response and enter into this bid contract. If requested, the bidder will provide LFUCG with a copy of a corporate resolution authorizing this action and/or a letter from an attorney confirming that the proposer is authorized to do business in the Commonwealth of Kentucky. All bid responses must be signed by a duly authorized officer, agent or employee of the bidder.
- 16. Governing Law: This bid request and bid contract shall be governed by and construed in accordance with the laws of the Commonwealth of Kentucky. In the event of any proceedings regarding this matter, the bidder agrees that the venue shall be the Fayette County Circuit Court or the U.S. District Court for the Eastern District of Kentucky, Lexington Division and that the bidder expressly consents to personal jurisdiction and venue in such Court for the limited and sole purpose of proceedings relating to these matters or any rights or obligations arising thereunder.
- 17. Ability to Meet Obligations: Bidder affirmatively states that there are no actions, suits or proceedings of any kind pending against bidder or, to the knowledge of the bidder, threatened



CHASSIS SPECIFICATIONS SUMMARY

May 16, 2013

2014 MACK LEU633

REFUSE SEMI-AUTO SIDE LOADER On/Off Hwy STRAIGHT TRUCK WITHOUT TRAILER

CUMMINS ISL-G 320HP	Transmissior Clutch	1 4500-RDS-6
20,000# FXL20 n 20,000#	Rear Axle Suspension	46,000# S462 Ratio 5.66 46,000# SS462
Front: 315/80R22.5 Rear: 12R22.5	Wheels	22.5x9.0 STEEL DISC (10-HOLE) 22.5x8.25 STEEL DISC (10 HOLE)
GVW: 66,000#	Fuel Tanks	
l	Sleeper	
	320HP 20,000# FXL20 n 20,000# Front: 315/80R22.5 Rear: 12R22.5 GVW: 66,000#	320HP Clutch 20,000# FXL20 Rear Axle n 20,000# Suspension Front: 315/80R22.5 Rear: 12R22.5 GVW: 66,000# Fuel Tanks

Total Quantity: 11 Estimated Total Weight: 18,061# Reference#: AGBX004714A

X

Prepared For: Customer Signature Date Presented By: Jim Dotson

City of Lexington Date Date

City of Lexington

Phone: --Fax: -- Lexington, Kentucky 40511 859-797-1434 jim.dotson@thetruckpeople.com

Worldwide Equipment



Prepared For:

City of Lexington

Presented By:

Worldwide Equipment 945 Nandino Blvd Lexington, Kentucky 40511 859-797-1434

jim.dotson@thetruckpeople.com

Page 1

May 16, 2013 2014 LEU633 Ref#: AGBX004714A

		rtein. 7 t	3000047146
Description		Front Wt	Rear Wt.
ORDER/CUSTOMER/VEHICLE INFORMATION			
INITIAL REGISTRATION LOCATION, UNITED STATES, KENTUCKY	Opt		
IDLE EMISSION CERTIFICATION, IDLE EMISSION CERTIFICATION - BASIC	Std		
TYPE OF SERVICE, MUNICIPAL	Opt		
VEHICLE APPLICATION CLASS, HEAVY VOCATIONAL - Unlimited operation on concrete,	Opt		
asphalt, or maintained gravel/packed dirt with a maximum 3% grade; limited operation on			
unmaintained surfaces with maximum 5% grade; limited operation on concrete, asphalt, or			
maintained gravel/packed dirt with maximum 10% grade. (3 AXLES) 78,000 lbs (35,281 kg)			
MAX GVW. (4 AXLES) 80,000 lbs (36,288 kg) MAX GVW.			
CARRIER APPLICATION, WITH CRD150-151, Unlimited miles on 3% grade maintained	Std		
gravel/packed dirt or paved, Max 15% miles on 10% grade maintained gravel/packed dirt or			
paved, Max 10% miles on 5% unmaintained, maintained gravel, packed dirt, or paved. 90000#			
(41000 kg) MAX GCW. (Carrier Code USA-V1)			
VEHICLE TYPE, STRAIGHT TRUCK WITHOUT TRAILER	Std		
VEHICLE USE AND BODY/TRAILER TYPE, REFUSE SEMI-AUTO SIDE LOADER On/Off Hwy			
COMMODITIES, REFUSE			
FILE STATUS, QUOTE			
PRICE BOOK LEVEL, 2014A PRICE BOOK LEVEL	Std		
PRODUCT TYPE, PRODUCT TYPE - OL64R TRUCK	Opt		
PRODUCT CLASS, PRODUCT CLASS 29	Opt		
BACK OFFICE PROCESS, BACK OFFICE PROCESS	Std		
BVS/WHEELBASE/PLATFORM			
CHASSIS (BASE MODEL), LEU633 6-WHEEL TRUCK	Std	10533	6997
SPECIAL SALES PACKAGE, DUAL SIT DOWN DRIVE PACKAGE W/BOSTROM SEATS	Opt	300	
FRAME RAILS, 13.375" x 3.25" x .375" (340 x 83 x 10mm) STEEL Section Modulus 23.49 cu	Std		
in/RBM 2,818,800 in lbs per rail.			
WHEELBASE, 210" (5334 mm) WB 219" CA (5563 mm)	Inc		
PLATFORM, 286" LP (7264 mm) 67" AF (1694 mm) USED WITH 210" WB	Opt		
FRAME REINFORCEMENT - INSIDE, 1/4" STEEL INSIDE CHANNEL REINFORCEMENT	Opt		
ENGINE/TRANSMISSION/CLUTCH			
ENGINE, CUMMINS ISL-G 320 HP @2000 RPM (PEAK) 1000 LB FT. MAX TORQUE @ 1300 RPM	Std		
TRANSMISSION, 6 SPEED AUTOMATIC, ALLISON 4500-RDS-6 (4.70/0.67) RUGGED DUTY	Std		
SERIES GEN 4 INCLUDES DIRECT MOUNT OIL COOLER, EXTERNAL OIL COOLER,			
INTERNAL FILTER, AND OIL LEVEL SENSOR			
EXHAUST/EMISSIONS			
EXHAUST, NO MUFFLER, SINGLE (R/S) VERTICAL STRAIGHT EXHAUST STACK PLAIN	Std		
END, SIDE OUTLET DIFFUSER, OUTBOARD			
ENGINE EQUIPMENT			
AIR COMPRESSOR, CUMMINS TWIN 30.4 CFM	Std		
PRE-CLEANER (DRY TYPE CLEANER)	Std		
ALTERNATOR, DELCO 12V 160A (24SI)	Std		
BATTERIES, (3) MACK 12V 1000/3000 CCA THREADED STUD	Opt	17	4
TEXACO EXTENDED LIFE COOLANT #7998 W/NITRITES (50/50 MIX) TO -34 DEG	Std		

Description		Front Wt	Rear Wt
COOLING PERFORMANCE, AUX COOLER	USR	0	0
ENGINE BLOCK HEATER, CUMMINS 120V/1000W	Std		
ENGINE HOSES AND TUBING, SILICONE (DOES NOT INCLUDE HEATER & RADIATOR	Std		
HOSES)			
FAN DRIVE, HORTON DM 2 SPEED FAN	Std		
FLYWHEEL HOUSING, ALUMINUM	Std		
FUEL-WATER SEPARATOR, CUMMINS CNG COALESCING FUEL FILTER, STANCHION MTD	Std		
ON FRAME			
HOSES - RADIATOR/HEATER, SILICONE	Std		
STARTER, 12 VOLT DELCO 39MT-MXT	Std		
ELECTRONIC STARTER INTERLOCK	Std		
TETHER DEVICE, PLASTIC COATED CABLE, MOUNTED FRONT OF EACH BATTERY BOX	Std		
LENGTH TO ALLOW COVER TO SET ON GROUND			
CLUTCH/TRANS EQUIPMENT/DRIVELINES			
REMOTE MTD OIL COLLER FURNISH FOR ALLISON TRANSMISSION	Std		
SYNTHETIC LUBRICANT - TRANSMISSION, TRANSYND SYNTHETIC LUBE FOR ALLISON	Std		
TRANS			
VOCATIONAL PACKAGE - ALLISON, ALLISON VOCATIONAL PKG. #105183 RUGGED DUTY	Inc		
SERIES (RDS) - (AG) - DUAL SELECTOR W/O GEAR SP LIMITS BOTH SIDES			
W/O DRIVESHAFT GUARD	Std		
DRIVELINE - MAIN, MERITOR 17 MXL "XTENDED LUBE"	Std		
DRIVELINE - INTERAXLE, MERITOR 17 MXL "XTENDED LUBE"	Std		
CAB (A thru G)			
AIR CONDITIONING, ROOF MOUNTED A/C AND INTEGRAL CAB HEATER DEFROSTER	Opt	93	
WITH SANDEN ROTARY COMPRESSOR			
AIR CONDITIONING COMPRESSOR, SANDEN ROTARY	Inc		
AIR RESTRICTION MONITOR (INTAKE), GRADUATED LOCK UP (AIR CLEANER INTAKE	Std		
MOUNTED)			
ASH TRAY, (1) WIHINGED COVER (LOCATED ON TOP OF CONSOLE)	Std		
CAB, RH & LH SIT DOWN, DRIVING POSITION	Inc		
CAB MOUNTING, FOUR POINT FIXED TYPE REAR MOUNTED	Std		
CAB LIFT/TILT, LOCATED IN STD LOCATION	Std		
CERTIFIED WEIGHT	Opt		
COAT HOOK (1)	Std		
ENGINE RUNNING ACTIVATED	Std		
DOME LIGHTS, (2) W/SELF-CONTAINED SWITCH (ONE EACH SIDE)	Std		
"LE" LH & RH ROLL-UP WINDOWS; FRT HINGE DOORS	Inc		
ENGINE SHUTOFF, KEY TYPE	Std		
GAUGE, DUAL AIR PRESSURE	Std		
GAUGE, VOLTMETER	Std		
GAUGE, ENGINE COOLANT TEMPERATURE	Std		
GAUGE, ENGINE OIL PRESSURE	Std		
OMIT FUEL GAUGE	Std		
GAUGES, ENGLISH DISPLAY	Std		
GAUGE, ELECTRONIC SPEEDOMETER/ODOMETER PROXIMITY PICK-UP, AND MAGNETIC	Std		
SENSOR			

Description		Front Wt	Rear Wt
GAUGE, TACHOMETER	Std		
TRANSMISSION GAUGE AND TRANS. OIL HIGH TEMPERATURE LIGHT	Std		
GEAR SHIFT, WITH NEUTRAL-TO-RANGE INHIBIT	Std		
GLASS - CAB WINDOW, SAFETY TINTED WINDSHIELD SIDE AND REAR WINDOWS	Std		
EXTERIOR GRAB HANDLES, ALUMINUM, RH & LH, BEHIND DOOR AND INTERIOR RH AND	Std		
LH ON WINDSHIELD POST AND RH ON INSTRUMENT PANEL			
GRILLE, STANDARD FINISH	Std		
CAB (H thru R)			
HEATER WITH INTEGRAL DEFROSTER	Std		
HORN - AIR, (1) TWIN-UNDER CAB TRUMPET W/DUAL LANYARD CONTROL	Std		
HORN - ELECTRIC, DUAL TONE (TWO HORNS)	Opt	1	
IDENTIFICATION/CLEARANCE LIGHTS, (7) MARKER AND CLEARANCE	Std		
INTERIOR TRIM - (SILVER GRAY VINYL)	Std		
CHASSIS KEYED AT RANDOM - 2 KEYS	Std		
LOW AIR PRESSURE INDICATOR LIGHT AND BUZZER	Std		
MIRRORS - EXTERIOR, MOTO MIRROR, RH/LH MOTORIZED AND HTD (S.S) RETRACTABLE	Inc		
ARMS AND BRACKETS RH/LH DOOR MTD			
MIRRORS - CONVEX TYPE, BRIGHT FINISH, LH & RH 8.0" DIA. MOUNTED BELOW LOWER	Opt	2	
ARM OF WEST COAST MIRROR			
MUD FLAPS, 12" FRONT FENDER MOUNTED	Std		
PARKING BRAKE CONTROL W/WARNING LIGHT	Std		
AM/FM STEREO CD W/WEATHERBAND	Std		
RADIO ANTENNA, CH STYLE COWL MOUNTED ON LH SIDE	Std		
5-WAY BINDING POSTS FOR CB	Std		
REAR WINDOW (FIXED TYPE)	Std		
CAB (S thru Z)			
SEAT - DRIVER, (2) BOSTROM TALLADEGA 910 (MID-BACK) AIR SUSPENSION	Inc		
SEAT - RIDER, OMIT RIDER SEAT	Inc		
SEAT COVERING, ALL CLOTH, BLACK, DRIVER SEATS	Inc		
LAP & SHOULDER BELTS FOR (2) DRIVER SEATS, TO BE ORANGE IN COLOR	Inc		
DRIVER'S SEAT ONLY	Inc		
SIDE MARKERS, LAMPS AND REFLECTORS TO MEET OR EXCEED FEDERAL	Std		
REGULATIONS			
STARTER SWITCH, KEY TYPE	Std		
STEERING COLUMN, FIXED	Std		
SUN VISOR - INTERIOR, BOTH SIDES	Std		
TURN SIGNALS, FRONT	Std		
TURN SIGNAL SWITCH, MANUAL CANCELLING TURN SIGNALS	Std		
VENTILATION - CAB, FURNISH LH & RH DOOR VENTS	Inc		
WINDSHIELD PROTECTOR, FURNISH	Opt	15	
WINDSHIELD WASHERS, ELECTRIC, WIPER MOUNTED W/7 QT (6.6 L) RESERVOIR	Std		
WINDSHIELD WIPERS, SPRAGUE-2 SPD ELECTRIC MOTOR W/INTERMITTENT FEATURE	Std		
FRAME EQUIPMENT/FUEL TANKS			
BUMPER - FRONT, PAINTED STEEL FLUSH MTD 59"/1488 mm BBC (CORP 94" x 15.5")	Std		
CROSSMEMBERS, STEEL 1/2" PL BOLTED BOC & INTERMDT 1/8" BELOW RAIL, 1ST XMBR	Std		
BOC RR 38.17" FROM AL LINE			

Description		Front Wt	Rear Wt
CROSSMEMBER (BEHIND REAR AXLE), W/O OPTIONAL CROSSMEMBERS BEHIND REAR AXLE/BOGIE	Opt	19	-77
FRAME RAIL CLEARANCE, RIGHT-HAND	Inc		
TOWING DEVICE - FRONT, TOW PIN	Inc Std		
TOWING DEVICE - REAR, WO REAR TOWING DEVICE	Std		
FUEL TANK - LH, DELETE LH FUEL DIESEL TANK - FOR LOCAL COMPLETION &	Std		
CERTIFICATION OF CNG SYSTEM	Old		
FUEL TANK - RH, DELETE RH DIESEL TANK - FOR LOCAL COMPLETION & CERTIFICATION	Std		
OF CNG SYSTEM			
FUEL DRAW/RETURN SYSTEM, FLEXIBLE HOSE FOR NATURAL GAS	Std		
RELOCATE FUEL TANK, W/O RELOCATED FUEL TANK(S)	Std		
FRONT AXLE/EQUIPMENT/TIRES			
FRONT AXLES, 20000# (9072kg) MACK FXL20 WIDE PIVOT CENTER	Std		
TIRES BRAND/TYPE - FRONT, MICHELIN - TUBELESS RADIAL PLY, (2) 315/80R22.5 20 L	Opt	6	
XZUS2 (ALL POSITION)			
WHEELS - FRONT, STEEL DISC (10-HOLE)	Std		
(2) 22.5x9.0 (228 mm) HAYES LEMMERZ 10-HOLE HUB PILOTED (11 1/4"/286mm BC)(FIVE	Std		
HAND HOLE)(6.42" INSET)			
BRAKES - FRONT, MERITOR "S" CAM TYPE 16.5" x 6" Q+	Opt	1	
BRAKE DRUMS - FRONT, CAST OUTBOARD MOUNTED	Std		
DUST SHIELDS - FRONT BRAKE, OMIT	Std		
HUBS - FRONT, FERROUS	Std		
WITHOUT SHOCK ABSORBERS	Opt		
SLACK ADJUSTERS - FRONT, HALDEX - AUTOMATIC	Opt		
SPRINGS - FRONT, 23,000 FRONT MACK SUSPENSION	USR	0	0
STATIC LOAD CUSHIONS	Std		
STEERING, M100P PLUS RIGHT SIDE ASSIST CYLINDER	Std		
REAR AXLE/EQUIPMENT/TIRES/RATIOS			
REAR AXLE/SUSPENSION, 46000# (20866kg) MACK S462 (268 1020) CAST DUCTILE IRON	Std		
HOUSING, SS462 MACK MULTILEAF (CAMELBACK) 46000#			
4S/4M SYSTEM REAR WHEEL END SENSORS	Std		
TIRES BRAND/TYPE - REAR, GOODYEAR - TUBELESS RADIAL PLY, (8) 12R22.5 16 H	Opt		168
G287MSA (ALL POS)			
CARRIER/RATIO - REAR AXLE, CRDP150/151, 5.66 RATIO	Opt		
WHEELS - REAR, STEEL DISC (10 HOLE)	Std		
(8) 22.5x8.25 (210 mm) HAYES LEMMERZ 10-HOLE HUB PILOTED (11 1/4"/286 mm BC) (TWO HAND HOLE)	Std		
BRAKES - REAR, MERITOR "S" CAM 16.5"x7" Q+	Opt		-18
BRAKE DIAPHRAGMS, W/O BRAKE DIAPHRAGM OPTION	Std		
BRAKE DRUMS - REAR, CAST OUTBOARD MOUNTED	Std		
DUST SHIELDS - REAR BRAKE, OMIT	Std		
HUBS - REAR, FERROUS	Inc		
OIL SEALS, STEMCO (VOYAGER)	Std		
HIGH MOUNT REAR BRAKE CHAMBERS (REAR REAR AXLE ONLY)	Std		
SHOCK INSULATORS, HEAVY DUTY URETHANE	Std		
SLACK ADJUSTERS - REAR, HALDEX - AUTOMATIC	Opt		

Description		Front Wt	Rear Wt
SUSPENSION - AXLE SPACING, 50" AXLE SPACING (BOGIE WHEELBASE)	Std		
W/O ANTI-SPRINGS	Std		
SPRING BRAKE CHAMBERS - QUANTITY, (4) CHAMBERS	Std		
SPRING BRAKE CHAMBERS - VENDOR, MGM MODEL TR-T (TAMPER RESISTANT)	Std		
SPRING BRAKE CHAMBERS, TYPE 30/30 REAR	Std		
TRANSVERSE TORQUE ROD (REAR AXLE ONLY)	Std		
BRONZE TRUNNION BUSHING	Inc		
AIR/BRAKE			
AIR LINES (CHASSIS), EXTRUDED NYLON TUBING (1/8" & 1/4" LINES ARE SINGLE	Std		
EXTRUSION; 3/8" AND LARGER HAVE POLYESTER REINFORCED CENTER)			
AIR BRAKE SYSTEM, DUAL	Std		
AIR DRYER, MERITOR/WABCO AIR DRYER, 1800 HEATED W/COALESCING OIL FILTER	Std		
AIR RESERVOIRS, STEEL	Std		
ANTI-LOCK BRAKE SYSTEM, BENDIX ABS	Std		
AIR CONTROL VALVES - VENDOR, BENDIX SWITCHES AND VALVES WHERE POSSIBLE	Inc		
DRAIN VALVES, AUTOMATIC DRAIN VALVE, HEATED ON SUPPLY TANK, MANUAL	Std		
(PETCOCK) ON ALL OTHER TANKS			
ELECTRICAL			
BACK-UP ALARM, PRECO, MODEL 1059	Std		
BATTERY BOX(ES), STEEL BASE	Std		
BATTERY BOX COVERS, MOLDED PLASTIC	Std		
BATTERY BOX - MOUNTING, SINGLE BOX 3 BATTERY MAX. PERP TO FRAME 11" FROM NTOF	Std		
FLAMING RIVER BIG SWITCH WIRED ON POSITIVE SIDE	Std		
BATTERY SWITCH WARNING LIGHT, FURNISH ON OR NEAR BATTERY BOX (LIGHT ON IN	Std		
RUN POSITION)	0.0		
COMPUTER AND 2-WAY RADIO DEDICATED CIRCUIT	Std		
ELECTRIC CIRCUIT PROTECTION PACKAGE, 12 VOLT W/CIRCUIT BREAKERS (HEADLAMP	Std		
CIRCUIT: SAE TYPE I; ALL OTHER CIRCUITS SAE TYPE II) NEGATIVE GROUND SYSTEM			
WATERPROOF ELECTRICAL CONNECTIONS SPRAYED W/PROTECTIVE COATING	Std		
CONTROL LINK II REFUSE BODYBUILDER ELECTRICAL CONNECTION SYSTEM	Std		
HEADLIGHTS, (2) SINGLE ROUND HALOGEN LAMPS	Std		
REAR LIGHTING, BRAKE LIGHTS CIRCUIT ACTIVATED WHEN SPRING BRAKES ARE	Std		
APPLIED AND KEY IN RUN POSITION-NO TAIL LIGHTS			
SIGNAL FLASHER TYPE, KYSOR #1039-07732-10 W/PACKARD 3 PIN SEALED CONNECTOR	Std		
MOUNTED ON STEERING COLUMN NEAR BOTTOM OF DASH			
W/O PWR TERMINAL-STROBE LIGHT OPTION	Std		
PAINT			
PAINT - CAB EXTERIOR, SINGLE COLOR, BRIGHT BLUE METALLIC [PPG: P3182]			
PAINT - CAB, URETHANE CLEAR COAT	Inc		
PAINT CHARGE FOR METALLIC TYPE PAINT	Opt		
PAINT - CHASSIS RUNNING GEAR, MACK BLACK (URETHANE)	Std		
PAINT - BUMPER, SAME AS CHASSIS RUNNING GEAR	Inc		
PAINT - FRONT SPOKE WHEELS, WITHOUT OPTIONAL SPOKE WHEEL PAINT	Std		
WITHOUT OPTIONAL SPOKE WHEEL PAINT	Inc		
FRONT WHEELS PRE-FINISHED WHITE	Std		

Description		Front Wt	Rear Wt
REAR WHEELS PRE-FINISHED WHITE	Std		
PAINT PROCESS CODES			
SAME COLOR AS CHASSIS RUNNING GEAR (5ZB-A1X)	Inc		
CHASSIS RUNNING GEAR - STD COLOR (MACK BLACK) (6AB-Z1X)	Inc		
W/O PAINT FOR FUEL TANK (7HB-Z1X)	Inc		
W/O CUSTOM PAINT FOR HUB&DRUM/SPOKES (5YB-Z1X)	Inc		
W/O CUSTOM PAINTED FRONT/REAR RIM/WHEEL (6BB-Z1X)	Inc		
PTO/SPECIALTY/ADDITIONAL EQUIPMENT			
PTO - CRANKSHAFT ADAPTER, CRANKSHAFT ADAPTER	USR	0	0
FURNISH TC521 FOR USE W/ALLISON (HD, RDS) TRANSMISSION	Std		
W/O WORK BRAKE	inc		
PUMP MOUNTING BRACKES		0	0
V-MAC IV PROGRAMMABLE PARAMETERS			
CUSTOMER VEHICLE LIMITING SPEED (MPH) 65 mph			
PEDAL ROAD SPEED LIMITER (MPH) 65 mph			
LGVLS FEATURE ACTIVATION Omit			
LOWER GEAR VEHICLE LIMITING SPEED (MPH) 00 mph			
SOFT RSL Omit			
PDLO ENGAGED VLS FEATURE Furnish			
PDLO ENGAGED VEHICLE LIMITING SPEED 00 rpm			
CRUISE CONTROL SETTINGS WITH ALLISON TRANS	Std		
CRUISE CONTROL MAX SET SPEED (MPH) 65 mph			
CRUISE CONTROL MIN SET SPEED (MPH) 20 mph			
CRUISE CONTROL AUTORESUME W/CLUTCH Omit			
CRUISE'N BRAKE ENGAGEMENT DELAY (MPH) 0 mph			
ENGINE OVERSPEED COMPANY LIMIT (RPM) 2200 rpm			
FUELED ENGINE OVERSPEED COMPANY LIMIT (RPM) 2100 rpm			
VEHICLE OVERSPEED COMPANY LIMIT (MPH) 75 mph			
FUELED VEHICLE OVERSPEED COMPANY LIMIT (MPH) 70 mph			
IDLE LOGGING DELAY (MIN) 2			
Monthly Trip Summary			
PERIODIC TRIP HOUR OF DAY 0 (disable)			
PERIODIC TRIP DAY OF WEEK 0 (disable)			
PERIODIC TRIP DAY OF MONTH 1			
EHT MAX ENGINE SET SPEED (RPM)			
2100 rpm			
EHT MIN ENGINE SET SPEED (RPM) 700 rpm			
EHT VEHICLE SPEED RANGE LIMIT (MPH) 10 mph			
EHT RAMP RATE (RPM/Sec)			
EHT SINGLE SPEED CONTROL ACTIVATION Omit			
EHT SINGLE SPEED CONTROL SET SPEED (RPM) 0000 rpm			
EHT JUMP-TO-MIN SET SPEED Omit			
EHT HOLD TO NEAREST RPM 00 rpm			
EHT ACCEL-DECEL BUMP-UP RPM 00 rpm			
EHT ACCEL-DECEL BUMP-DOWN RPM 00 rpm			
ENGINE PROTECTION - OIL PRESSURE SHUTDOWN Furnish			

Description Front Wt Rear Wt

ENGINE PROTECTION - COOLANT LEVEL SHUTDOWN Omit

ENGINE PROTECTION - COOLANT TEMP SHUTDOWN Furnish

ENGINE PROTECTION - ENGINE OIL TEMP SHUTDOWN Furnish

ENGINE PROTECTION TRANS OIL TEMP SHUTDOWN Furnish

GOVERNOR TYPE Min-Max Governor

ENGINE RPM LIMIT IN UPPER GEARS 0000

ENGINE HIGH IDLE SPEED IF STOPPED 0000

ENGINE LOW IDLE SET SPEED (RPM) 700 rpm

DRIVER LOW IDLE ADJUST FEATURE ACTIVATION Omit

SMART IDLE FEATURE ACTIVATION Omit

SMART IDLE ELEVATED IDLE RPM TIME (MINS) 10

IDLE S/D ABS TAMPER CHECK Omit

IDLE COOLDOWN FEATURE ACTIVATION Omit

IDLE SHUTDOWN FEATURE ACTIVATION Omit

IDLE SHUTDOWN TIME (MINS) 10

IDLE SHUTDOWN WARNING TIME (SECS) 30

IDLE SHUTDOWN WARM-UP TEMPERATURE (DEG F) 100

IDLE SHUTDOWN WARM-UP TIMER (MINS) 5

IDLE S/D OVERRIDE W/EHT Omit

IDLE S/D OVERRIDE W/PTO Furnish

IDLE S/D OVERRIDE W/ENGINE LOAD Furnish

IDLÉ S/D OVERRIDE % ENGINE LOAD THRESHOLD 00

IDLE S/D CONTROL W/O Idle Shutdown

IDLE S/D OVERRIDE LOWER TEMP. THRESHOLD (DEG F) 00

IDLE S/D OVERRIDE UPPER TEMP. THRESHOLD (DEG F) 00

MAINTENANCE MONITOR FEATURE ACTIVATION Furnish

MAINTENANCE MONITOR OEM DEFAULT INTERVALS MP Vocational

MAINTENANCE DUE WARNING PERCENT 90

PTO 1 MAX ENGINE SET SPEED (RPM) 2100 rpm

PTO 1 MIN ENGINE SET SPEED (RPM) 600 rpm

PTO 1 VEHICLE SPEED RANGE LIMIT (MPH) 10 mph

PTO 1 RAMP RATE (RPM/Sec) 100

PTO 1 SINGLE SPEED CONTROL ACTIVATION Omit

PTO 1 SINGLE SPEED CONTROL SET SPEED (RPM) 1000 rpm

PTO 1 SINGLE SPEED CONTROL AUTOSET Omit

PTO 1 JUMP-TO-MIN SET SPEED Omit

PTO 1 VEHICLE LIMITING SPEED (MPH) 60 mph

PTO 1 HOLD TO NEAREST RPM 00 rpm

PTO 1 ACCEL-DECEL BUMP-UP RPM 00 rpm

PTO 1 ACCEL-DECEL BUMP-DOWN RPM 00 rpm

PTO 2 MAX ENGINE SET SPEED (RPM) 2100 rpm

PTO 2 MIN ENGINE SET SPEED (RPM) 600 rpm

PTO 2 VEHICLE SPEED RANGE LIMIT (MPH) 10 mph

PTO 2 RAMP RATE (RPM/Sec) 100

PTO 2 SINGLE SPEED CONTROL ACTIVATION Omit

PTO 2 SINGLE SPEED CONTROL SET SPEED (RPM) 1000 rpm

City of Lexington Ref#: AGBX004714A Page 8

Description Front Wt Rear Wt PTO 2 SINGLE SPEED CONTROL AUTOSET Omit PTO 2 JUMP-TO-MIN SET SPEED Omit PTO 2 VEHICLE LIMITING SPEED (MPH) 60 mph PTO 2 HOLD TO NEAREST RPM 00 rpm PTO 2 ACCEL-DECEL BUMP-UP RPM PTO 2 ACCEL-DECEL BUMP-DOWN RPM 00 rpm SPEED SENSOR TAMPER DETECTION SYSTEM ACTIVATION Furnish SPEED SENSOR TAMPER DETECTION TORQUE LIMIT (%) 50 **DEALER INFORMATION** MANUALS, PEDIGREED PROTECTION PLAN TECH. SERVICE MANUAL PROVIDED Std PILOT INSPECTION, REQUESTED Opt ALLISON EXTENDED WARRANTY **FACTORY** MANUALS **ENGINE EXT WARRANTY** REAR BRAKE CHAMBERS MODIFICATIONS STANDARD SHIPPING INSTRUCTIONS Std PERFORMANCE/GRAPHICS/TECH DATA AMBIENT TEMPERATURE, 77F (25.0C) Std BACK OF CAB INTERFERENCES, VERTICAL EXHAUST, 34" (762mm) FROM BACK OF CAB Std SOFT PRODUCTS/BULLDOG PROTECTION

WARRANTY CERTIFICATE



For detailed **WARRANTY CERTIFICATE** coverage refer to the Trucks Dealer Portal or contact the Warranty Department.

http://www.trucksdealerportal.com/tdp/master/mastr/warranty/mack/Pages/mackwarranty.aspx



PERFORMANCE DATA UPPER GEAR DATA ..Engine CUMMINS ISL-G Gear Ratio % Grade **MPH** RPM ...Max HP 320 4 1.00 4.6% 28.6 1300 .. Max Torque 1000 4 1.00 2.2% 2000 44.0 Transmission 4500-RDS-6 5 0.76 3.1% 1300 37.6 5 2000 0.76 0.8% 57.9 ..Ratio..... 5.66 6 0.67 2.4% 42.7 1300 .Rear Tire Size. 12R22.5 2000 6 0.67 0.2% 65.7 Revolutions per mile. . . . 482 GVW Rating 66,000# 0.0 68.4 Level Road 2084 GCW Rating # Cruise Control 0.3% 65.0 1980 Road Surface MACADAM/ASPHALT .Altitude 1000 ft Starting Grade @ 1st Gear: 14.5% Frontal Height. 13.0 ft @ 2nd Gear: 6.3% Frontal Width 96.0 in Required Grade 3% Minimum 1.5% grade recommended Measurement English in top gear at peak torque RPM.

Calculated @ 5.66 Rear Axle Ratio									
Gear	Transmiss	ion Ratios	Gear		Gradeability	RPM After	Opera	ating	
##	Reverse	Forward	Reduction	% Split	Start	Shift	Range	MPH	
1	5.55	4.70	26.60		16.1%			9.4	
2		2.21	12.51	112.7	7.0%	940	9.4	19.9	
3		1.53	8.66	44.4	4.4%	1385	19.9	28.7	
		1.00	5.66	53.0	2.2%	1307	28.7	44.0	
4 5		0.76	4.30	31.6	0.8%	1520	44.0	57.9	
6		0.67	3.79	13.4	0.2%	1763	57.9	65.7	
7									
8									
9									
10									
11									
12									
13									
14									
15									
16									
17									
18									

PERFORMANCE DATA IS FOR COMPARATIVE ANALYSIS AND MAY NOT REPRESENT ACTUAL PERFORMANCE.



Lexington, Kentucky 40511 859-797-1434 jim.dotson@thetruckpeople.com May 16, 2013 14A 1.0 Ref#: AGBX004714A

GVW RATING - 66,000#

Max Front GAWR	20,000#	Max Rear GAWR	46,000#
Front Axle	20,000#	Rear Axle	46,000#
Front Springs	23,000#	Rear Suspension	46,000#
Front Tires	20,000#	Rear Tires	59,120#
Front Wheels/Rims	20,000#	Rear Wheels/Rims	62,400#



DAVID BROCK

Has demonstrated skill & knowledge competencies for :

ISLG CM2180 / 2007-28Q

May 2, 2013

let 1

Steve Bonney, Trainer, Cummins Crosspoint

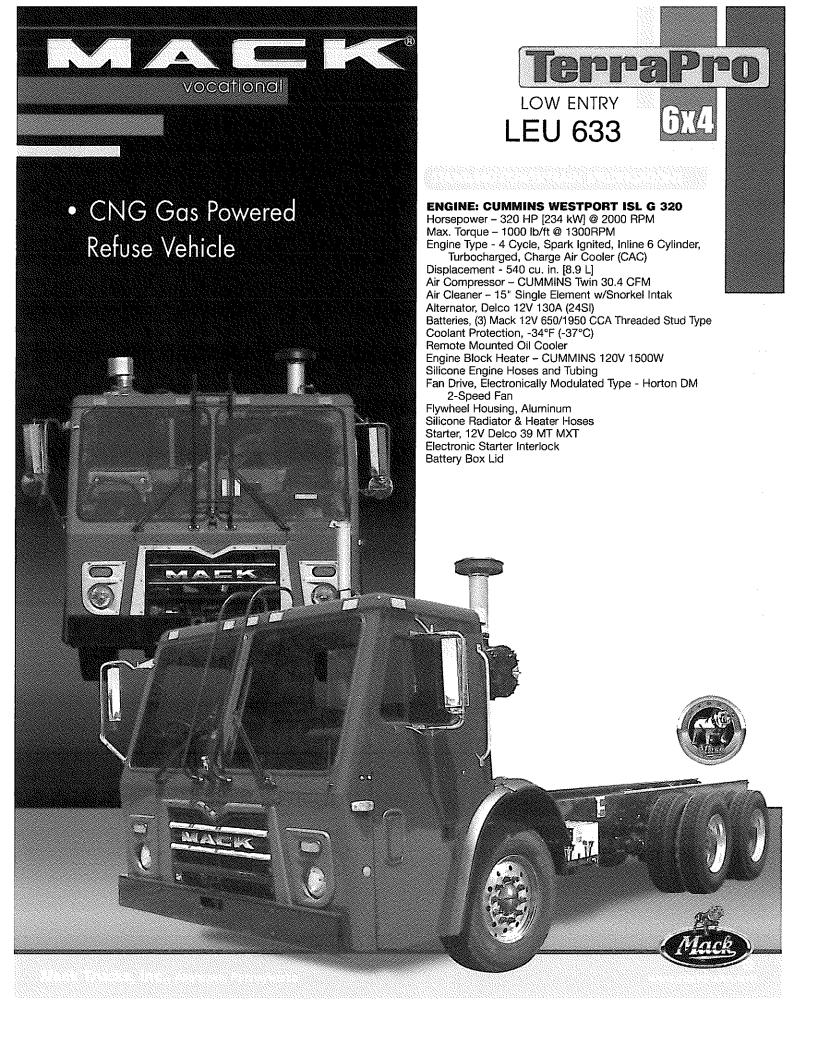
DAVID BROCK

Has demonstrated skill & knowledge competencies for :

ISX12G CIVI2180 EJ 2012-35Q

May 2, 2013

Steve Bonney, Trainer, Cummins Crosspoint





TRANSMISSION: ALLISON 4500-RDS-6

6-Speed Automatic, Ratios: 4.70 Low – 0.67 High Includes: Direct Mount Oil Cooler, External Oil Cooler, Internal Filter and Oil Level Sensor Main Driveline: Meritor 17 MXL "Xtended Lube"

Interaxle Driveline: Meritor 17 MXL "Xtended Lube"

TC521 Torque Converter

REAR AXLE: MACK S462

46,000 lb Capacity Tires - 11R22.5 Duals Carrier - CRDP150/151

Wheels – Steel Disc (8) 22.5 x 8.25 10-Hole Hub Piloted Brakes: Meritor "S" Cam 16.5" x 7" Q-Plus w/o Dust

Shields

Brake Drums Cast Outborad Mounted

Rear Wheel Seals

Raised Rear Brake Chambers

Shock Insulators
Slack Adjusters - Automatic
Suspension - SS462 Mack Multileaf 46,000 lb Capacity
Spring Brake Chambers - (4) 30/30 Double Diaphragm Type
Mechanical Spring Release
Transverse Torque Rod (Rear Axle Only)
Trunnion Bushing

FRONT AXLE: MACK FXL20

20,000 lb. Capacity Tires - 315/80R22.5

Wheels - Steel Disc (2) 22.5" x 9.0" 10-Hole Hub Piloted Brakes: Meritor "S" Cam 16.5" x 6" Q-Plus w/o Dust Shields

Brake Drums Cast Outborad Mounted

Slack Adjusters - Automatic

Suspension - Mack Taperleaf 20,000 lb. Ground Load Rating

Static Load Cushions

Steering - M100P Plus Right Side Assist Cylinder

CAB: LOW ENTRY LH DRIVE w/RH Operating Position

Air Restriction Monitor, Graduated Lock Up Type (Air Cleaner Intake Mounted)

Ash Tray w/Hinged Cover

Cab Mounting, Four Point Fixed Type

Cab Tilt, Mounted on RH Fender Bracket

Cigar Lighter

Coat Hook

Dome Lights - 2 w/Self-contained Switch

Doors – RH Rear Opening Fold Up Door and LH Door w/Rollup Window

Engine Shutoff - Key Type Control

Gauges – Dual Air Pressure, Voltmeter, Engine Coolant Temperature, Engine Oil Pressure, Fuel Level,

Speedometer, Tachometer, Transmission Oil Temperature

Gear Shift w/Neutral-to-Range Inhibit

Grab Handles, Aluminum RH & LH Behind Door

Heater w/Integral Defroster

Horn – (1) Twin Trumpet Mounted Under Cab Single Tone w/Snow Shield

Identification and Clearance Lights (7)

Interior Trim - Silver Gray Vinyl

Keys, 2 - Keyed at Random

Low Pressure Indicator Light and Buzzer

Exterior Mirrors – LH and RH Motorized w/Heated Retractable Arms and Brackets

Front Fender Mounted Mud Flaps
Parking Brake Control w/Warning Light

AM/FM Stereo CD w/Weather Band

CB - 5 way Binding Post

Rear Window, Fixed

Driver Seat – Sears Seating C-2 with Fabriform Cushions (Mid-Back with Air Suspension) with Black Cloth

Rider Seat - Mack Fold Up w/ Black Dupont Covering

Seat Belts - Orange, Lap and

Shoulder for Driver/Lap for Fold Up Rider Seat

Side Markers - Lamps and

Reflectors

Key Type Starter Switch

Steering Column, Fixed

Sun Visor, Interior Both Sides

Turn Signal Switch, Manual

Cancelling

Ventilation - LH Door Vent

Windshield Protector

Windshield Washers - Wiper Mounted with 7qt Reservoir

Windshield Wipers – 2 Speed Electric Motor w/Intermittent Feature

Safety Tinted Windshield w/Non-Tinted Side and Rear Windows

Paint - Mack White (Cab), Mack Black (Chassis Running Gear)

AIR/BRAKE

Air Lines Chassis – Extruded Nylon Tubing Dual Air Brake System Air Dryer - Heated 1800 w/Coalescing Filter Air Reservoirs – Steel Bendix Anti-Lock Brake System Automatic Drain Valve, Heated

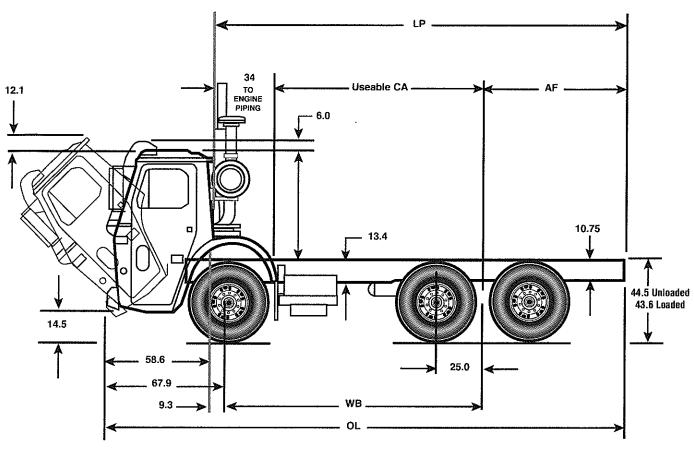
SPECIALITY EQUIPMENT

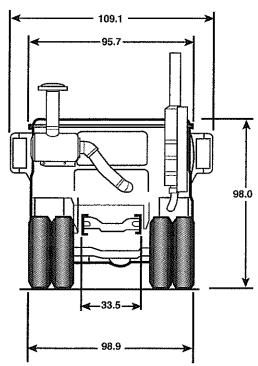
Work Brake

ELECTRICAL

12 Volt Electrical System
Backup Alarm – Preco Model 1059
Battery Box – Painted Steel w/Locking Tab
Battery Disconnect Switch, Mtd. RH Side of Battery Box
Battery Switch Warning Light
Daytime Running Lights
Electric Circuit Protection Package
Waterproof Electrical Connections
Control Link II
Headlights – (2) Single Round Halogen Lamps
Rear Lighting
Single Flasher, Kysor

(All measurements are in inches)





FRAME

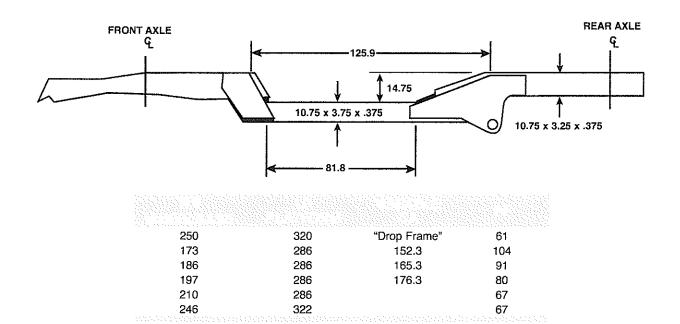
Frame Rails – 13.38" x 3.25" x .38" Steel Section Modulus, 23.49 in.³
RBM (per rail) – 2,818,800 lb. in.
Bumper – Painted Steel Flush Mounted Bumper to Back of Cab (BBC) – 59"

Crossmembers - 1/2" Plate Type Bolted Back of CabIntermediate 1/8" Below Rail

Front Tow Pin

STANDARD WHEELBASE/LOAD PLATFORM

For standard wheelbase and load platform information refer to your current version of MACKTRAQ"



MODEL	SPEEDS	RATIOS (LOW/HIGH)
	ALLISON	
4500 RDS	5	4.70/0.76
4500 RDS	6	4.70/0.67

- Banawaanan	
MODEL	HORSEPOWER
	CUMMINS
ISL G 320	320 HP [239 kW] @ 2000

CAPACITY	MAKE	MODEL
G.	RONT AXLE	S
20,000 lb. [9 072 kg]	MACK	FXL20
	REAR AXLES	5
38,000 lb. [17 237 kg]	MACK	S38R
46,000 lb.	MACK	S462
[20 866kg]	MERITOR	RT46-160
52,000 lb. [23 600kg]	MACK	S522



Engine Performance Curve Cummins Inc

Columbus, Indiana 47202-3005 http://www.cummins.com

ISL G 320

Aspiration:

320 BHP (239 kW) @ 2000 RPM 1000 Lb-Ft. (1356 N-m) @ 1300 RPM Automotive Pg. No.

Curve Number FR93276

CPL Code 3297

Date 20-Mar-2009

Compression Ratio: 12:1

Fuel System: Cylinders:

Bore:

Stroke:

6

4.49 in (114 mm) 5.69 in (145 mm)

Displacement:

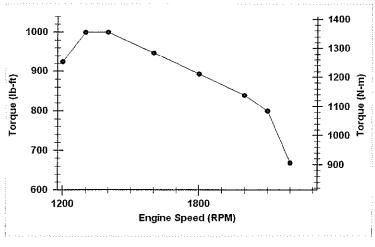
Engine Configuration: D883002BX03 **Emission Certification:**

CARB 2010

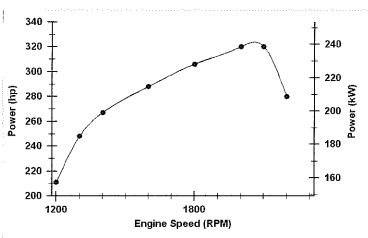
Turbocharged and Charge Air Cooled

543 in3 (8.9 L)

Automotive Applications



	Torque Output	
RPM	lb-ft	N-m
1,200	925	1,254
1,300	1,000	1,356
1,400	1,000	1,356
1,600	947	1,284
1,800	893	1,211
2,000	840	1,139
2,100	800	1,085
2,200	668	906



	Power Output							
RPM	hp	kW						
1,200	211	157						
1,300	248	185						
1,400	267	199						
1,600	288	215						
1,800	306	228						
2,000	320	239						
2,100	320	239						
2,200	280	209						

Curves shown above represent mature gross engine performance capabilities obtained and corrected in accordance with SAE J1995 conditions and 100 kPa (29.61 in Hg) barometric pressure [90 m (300ft) altitude], 25 deg C (77 deg F) inlet air temperature, and 1kPa (0.30 in Hg) water vapor pressure with Natural Gas meeting Cummins Engineering Standard 14608.

Rick D Mason, Steven J Beem **Customer Engineering**

Certified within 5%

Final-(Estimated data)



Engine Performance Curve Cummins Inc

Columbus, Indiana 47202-3005 http://www.cummins.com

ISL G 320

320 BHP (239 kW) @ 2000 RPM 1000 Lb-Ft. (1356 N-m) @ 1300 RPM

CPL Code

Date

Pg. No.

Compression Ratio:

12:1

Engine Configuration:

3297

900 RPM 700 RPM 2,400 RPM

FR93276

20-Mar-2009

Fuel System:

Emission Certification:

D883002BX03 **CARB 2010**

Curve Number

2

Automotive

6

Aspiration:

Turbocharged and Charge Air Cooled

Bore: Stroke:

Cylinders:

4.49 in (114 mm) 5.69 in (145 mm) Displacement:

543 in 3 (8.9 L)

General Performance Data

Maximum low idle speed	
Minimum low idle speed	
Nominal no load governed speed	
Maximum overspeed capability	
Torque available at clutch engagement	

3,150 RPM 746 N-m 550 lb-ft

Air Induction System

Maximum temperature rise between ambient air and engine air inlet

20 delta deg F

11.1 delta deg C

Exhaust System

Maximum back pressure imposed by complete exhaust system
Minimum exhaust back pressure:

67.9 in H2O 17 kPa 0 in H2O 0 mm H2O

Cooling System

Maximum coolant temperature - engine out
Maximum coolant pressure (exclusive of pressure cap; closed thermostat at maximum
no load speed)

41 psi 283 kPa

Minimum cooling capability @ nominal fuel rate [Level II] with 20 mile/hr (32 km/hr) ram air speed and 50/50 E.G. coolant:

Maximum allowable pressure drop across charge air cooler and OEM CAC piping

106 delta deg F 115 delta deg F

58.9 delta deg C 63.9 delta deg C

100 deg C

Engine out coolant to ambient @ 2,000 RPM Engine out coolant to ambient @ 1,300 RPM Charge air cooler to ambient @ 2,000 RPM

38 delta deg F

21.1 delta deg C

(CACDP) Maximum coolant temperature for engine protection controls

4 in-Hg 220 deg F

212 deg F

13.5 kPa 104 deg C

Maximum Rating Performance Data

		Governed Speed			Maximum Power			Peak Torque				
Engine Speed	2,200	RPM			2,000	RPM			1,300	RPM		
Output Power	280	hp	209	kW	320	hp	239	kW	248	hp	185	kW
Torque	668	lb-ft	906	N-m	840	lb-ft	1,139	N-m	1,000	lb-ft	1,356	N-m
Inlet Air Flow	388	ft3/min	183	L/s	455	ft3/min	215	L/s	316	ft3/min	149	L/s
Charge Air Fłow	28.3	lb/min	12.8	kg/min	32	lb/min	14	kg/min	22	lb/min	10	kg/min
Exhaust Gas Flow	1,158	ft3/min	547	L/s	1,314	ft3/min	620	L/s	956	ft3/min	451	L/s
Exhaust Gas Temperature	1,169	deg F	632	deg C	1,176	deg F	636	deg C	1,126	deg F	608	deg C
leat Rejection to Coolant	10,160	BTU/min	179	kW	10,450	BTU/min	184	kW	6,800	BTU/min	120	kW
Radiator Coolant Flow *	97	gpm	6.1	L/s	88	gpm	5.6	L/s	57	gpm	3.6	Ųs
Furbo Comp. Outlet Pressure	38	in-Hg	128	kPa	55	in-Hg	186	kPa	49	in-Hg	165	kPa
urbo Comp. Outlet Temperature	280	deg F	138	deg C	357	deg F	181	deg C	355	deg F	179	deg C
Fuel Consumption	106	lb/hr	48.1	kg/hr	116	lb/hr	52.6	kg/hr	82	lb/hr	37.2	kg/hr
Brake Mean Effective Pressure	187	psi	1,289	k₽a	235	psi	1,620	kPa	279	psi	1,924	kPa

^{* -} Radiator Coolant Flow is approximately 5% less with a continuously deaerating system. Coolant: 50/50 - Ethylene Glycol/Water by volume. Values are within +/- 5%.

Change Log

7/25/2008

Date Author

Jim A Cole

Change Description

CREATED RATING FROM FR92424 FOR 2008HH.

End of Report

Bold entries revised after 1-Dec-2008

Cummins Confidential

HEAVY DUTY WARRANTY CERTIFICATE



Mack Trucks, Inc. warrants certain individual components of the new Mack truck to be free from defects in material and workmanship under normal use and service up to the periods as specified, provided all Mack Trucks, Inc. maintenance and inspection requirements found in the Operator's Manuals and service manual/instructions are followed. All warranty periods are calculated from date in service. All coverage is 100% for parts and labor except as noted.

LIMITATIONS AND EXCLUSIONS TO THIS WARRANTY APPEAR ON THE REVERSE SIDE OF THIS CERTIFICATE. THESE LIMITATIONS AND EXCLUSIONS ARE IMPORTANT AND MUST BE READ AND UNDERSTOOD.

This warranty applies to Model Year 2013 and newer models manufactured by Mack Trucks, Inc. with EPA'10 Engine Emissions operated in the United States and Canada. Specific coverage is based on the application and weight class as described in the following chart:

CHASSIS BI	JILT WITH EPA'10 EMISSION ENGINES				123	
VEHICLE AF	PPLICATION: HEAVY DUTY	Hours	Months	Miles	Kilometers	
SCHEDULE 1.	BASIC VEHICLE*		12	100,000	161 000	
**Roadside Assisten	ce and Towing on warrantable failures are covered for 3 Months/5,000 Miles/8,050 Kilometers					
	ivered for 12 months or 25,000 maes/40 000 kilometers only					
SCHEDULE 2.	MACK DIESEL ENGINE	l				
Standard Warrarty	· · · · • · · · · · · · · · · · · · · ·	6,250	24	250,000	402 500	
**Standard Warranty	Includes: Roadside Assistance and Towing on warrantable engine failures	0,230	24	250,000	*02 500	
Major Components	Block Stiffener (Ladder Frame) Engine Gears (Rear Mounted)	12.500	60	500 000	805 000	
i i	Cemehert Forging Exhaust Manifold Casting	.12,000		333,330	800 000	
İ	Carnshaft Caps & Boits Flywhool Housing					
	Connecting Rod & Cap Forging Intake Manifold Casting					
	Coolant Pump Housing Main Bearing Bolls & Caps					
	Crankshaft Forging Oil Pump Drive & Driven Gears					
	Cylinder Block Costing Thermostat Housing					
Coverson pien santa	Cylindar Hoad Casting & Bolts. Trining Gear Cover & Mounting Plate					
neccentage engine a	s to consumishes such as lubricant, artifreeze, filter elements, belts, hoses and similar maintenance tem arrier or transmission failure	s noi reusable	and replaced	directly as a r	esult of a	
Composeds art med	ufactured by Mack Trucks, fix:, but used on MACK diesel engine assembles are excluded from the cover					
component manufact	urer's warrarry in effect at the time of delivery. Consult your local MACK service facility for dotals	iage in Sched	une 2 These o	components a	re covered by the	
SCHEDULE 3.	MACK TRANSMISSIONS			W.111.W	-	
····	T300 and TM300 Transmissions					
	Towing on warrantable failures for Mack, T300 and TM300 Transmissions		36 24	400,000 250,000	644 000 402 500	
	Mack mDrive Transmissions	6.250	36	250,000		
	mDrive Chitch	6,250 6,250	36 36	250,000	402 500	
	Towing on warrantable failures for Mack mDrive Transmissions	0,2.0	24	250,000	402 500 402 500	
SCHEDULE 4.	DPF SYSTEM COMPONENTS (OEM WARRANTY)	0.000				
	DPF/SCR SYSTEM COMPONENTS (EMISSION WARRANTY)	6,250	24	253,000	402 500	
Rosdaide Assistante	and Towing on warrandable OPF/6CR featres	3,250	60	100,000	161 000	
SCHEDULE 5	MACK CARRIER / AXLE HOUSING / FRONT AXLE	6,250	24	250,000	402 500	
Rea: Carriers and No	· · · · · · · · · · · · · · · · · · ·					
Front I-Bream, Steenn	• =	****	36	300,000	483 000	
Vear Cerrier Seals, G			36	300,000	483 000	
	Regardless of Camer Model	Fittin	12	100,000	161 000	
SCHEDULE 6.			‡2	100,000	151 000	
SCHEDULE 7.	TRUNNION BRACKET & SPINDLE, SUSPENSION TRUNNION (except bushings)		36	300,000	453 000	
SCHEDULE /.	FRAMES: SIDE RAILS AND CROSSMEMBERS	*****	36	300,000	483 000	
POUCOIN C a	Extended Warrenty for GU Model Chassis		60	500,000	805 000	
SCHEDULE 8.	CAB STRUCTURE		24	200,000	322 000	
CHEDULE 9.	CAB CORROSION		60	500,000	805 000	
	enforation (an actual hole in the cab princil) due to corrosion.			1		
	ply to corrosion caused by damage to paint finish.			ľ		
CHEDULE 10	Components not manufactured by Mack Trucks, Inc. may have warranty coverage different from the abo	NG BS				

^{**}Roadside Assistance and Towing coverage does not apply to vandor angites, transmissions and exten

Allison Transmission Coverage For 54rs gooted in Bid

Jim Dotson

*	
From:	brian.d.wallace@cummins.com
Sent:	Wednesday, April 17, 2013 9:33 AM
То:	Jim Dotson
Subject:	Re:
Attachments:	CWI ISL G Protection Plan Ldocx
Jim,	
Attached is the warranty matrix for offer. The 5yr/200K mile warrant	or the ISL-G. With the items specified in the bid, Protection Plan 1 is the plan that we will be a second or the ISL-G.
Brian D Wallace Cummins Crosspoint, LLC	
office: (502) 491-4263 ext118 cell: (502) 727-6668	
From Jim Dotson jim.dotson@thetruck To "BRIAN WALLACE (brian.d.wallace) Cc Jim Dotson jim.dotson@thetruckpe Date. O4/17/2013 09:10 AM Subject.	<u> </u>
Brian,	
Need your help, the bid for the natur asking for. Will you look over this an with Cummins Westport Engine.	al gas trucks are out for the City of Lexington. Attached is the extended warranty that they are diet me know what the cost will be on this extended warranty. It will be on a Mack LEU 633
Thanks	
Jim	
information, & may be used on not the intended recipient or au	nail, including attachments, may include confidential and/or proprietary ly by the person or entity to which it is addressed. If the reader of this email is thorized agent, the reader is hereby notified that any dissemination, distribution ibited. If you have received this email in error, please delete it immediately.
This email has been scanned by For more information please vision	the Symantec Email Security.cloud service. sit http://www.symanteccloud.com
2012.00.02.61.43410: 1.11	[attachment "04-17-
2013 UY:UZ;STAM.pdf" deleted	by Brian D Wallace/Distributors/Cummins]