



SPECIFICATIONS

FOR

9.0L Engine

Lake Land College District Number 517
Mattoon, Illinois 61938

PROJECT NO. 2025-022

Bid Date: October 7, 2025

SECTION 000101

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ADVERTISEMENT FOR BIDS

Advertisement for Bids
Bids: October 7, 2025
LAKE LAND COLLEGE DISTRICT #517
MATTOON, ILLINOIS
Project No. 2025-022

The Lake Land College District Number 517 Board of Trustees will receive sealed bids for the purchase of a 9.0L Engine.

Bids will be received until 1:00 PM Central Standard Time on Tuesday, October 7, 2025 in the office of the Vice President for Business Services, in the Board and Administration Center on the campus of Lake Land College, 5001 Lake Land Boulevard, Mattoon, IL. Bids received after this time will not be accepted. Bids will be opened and publicly read immediately after the specified closing time. All interested parties are invited to attend. Obtain bidding documents/requirements at the office of the Vice President for Business Services, phone (217) 234-5223, ccompton@lakelandcollege.edu.

The Board of Trustees reserves the right to waive irregularities and reject all bids or parts of bids.

Successful Bidders shall have the sole responsibility of complying with all aspects of existing Prevailing Wage Policies.

Tom Wright
Chairperson - Lake Land College Board of Trustees

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INSTRUCTIONS TO BIDDERS

PART 1 GENERAL

1.01 DEFINITIONS

- A. Lake Land College Board of Trustees will be hereafter referred to in this Specification as “Owners” and all correspondence shall be addressed to: Office of the Vice President for Business Services, Lake Land College, 5001 Lake Land Blvd., Mattoon, IL 61938.
- B. A Bidder is a person or entity who submits a Bid to the Owner.
- C. Bidding Documents include the Advertisement for Bid, Instructions to Bidders, Bid Forms and supplements, and Addenda.
- D. Contract Documents include any Contract forms, Specifications, Drawings, Addenda, and modifications.
- E. An Agreement is a written agreement between the Owner and Contractor setting forth the obligations of the parties thereunder, including but not limited to the provision of the specified goods and materials, the basis of payment and the contract time.
- F. A Bid is a complete and properly signed proposal to provide the goods and services for the sums stipulated therein, submitted in accordance with the Bidding Documents.
- G. The Base Bid is the sum stated in the Bid for which the Bidder offers to provide the goods and services described in the Bidding Documents as the base, to which items may be added or from which items may be deleted for sums stated in Alternate Bids.
- H. An Alternate Bid is an amount stated in the Bid to be added to or deducted from the amount of the Base Bid if the corresponding changes in the items, as described in the Bidding Documents, are executed.
- I. A Unit Price is an amount stated in the Bid as a price per unit of measurement for goods or services as described in the Bidding Documents or in the proposed Contract Documents.

1.02 DOCUMENTS

- A. Copies of the Bidding Documents may be obtained at the Office of the Vice President for Business Services, 5001 Lake Land Boulevard, Mattoon, Illinois 61938, (217) 234-5223, ccompton@lakelandcollege.edu.

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1.03 EXAMINATION OF DOCUMENTS

- A. Bidders shall examine all documents. Failure to do so will not relieve a successful bidder of his obligation to provide all labor and materials necessary to carry out the provision of his contract for the sum stated thereon.
- B. Each Bidder, by submitting his bid represents that he has read and understands the bidding documents.

1.04 INTERPRETATIONS DURING BIDDING

- A. If any Bidder is in doubt as to the meaning of any part of the Bidding Documents, they may submit a written request to: Office of the Vice President for Business Services, 5001 Lake Land Boulevard, Mattoon, Illinois 61938, ccompton@lakelandcollege.edu; for an interpretation of that part.
- B. Written requests for interpretations or clarifications must be made no later than five (5) working days prior to the Bid Date specified in the Advertisement for Bids.
- C. Any interpretation or change will be made only by Addenda numbered, dated, and issued by the Owner to each Bidder on record as having received a set of Bidding Documents and will be available for inspection wherever the Bidding Documents are kept available for that purpose. Lake Land College will not be responsible for any other explanations or interpretations of the Bidding Documents.

1.05 SUBSTITUTION OF PRODUCTS

- A. **MANUFACTURER'S TRADE NAMES ARE USED IN SPECIFICATIONS FOR THE EXPRESS PURPOSE OF ESTABLISHING A STANDARD OF QUALITY AND COORDINATION OF DESIGN, NOT FOR THE PURPOSE OF LIMITING COMPETITION.**
- B. All sizes of equipment must be as specified, and all pieces of equipment must include or have those features which are set forth in the specifications.
- C. No substitution will be considered unless a written request has been submitted with their bid.
- D. Bidders proposing substitutions in writing must submit detailed specifications with catalog cuts or manufacturer's literature, pictorially portraying that on which they are bidding for comparison to specified items by the Owner.
- E. Any additional explanation or statement which the Bidder wishes to make must be placed in the same envelope and attached to the proposal. Unless the Bidder so indicates, it is understood that the Bidder has bid in strict accordance with the specifications and drawings and has made no substitutions, modifications or additional stipulations.

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- F. Bids shall not contain any recapitulation of the work to be done and no oral, telephone, facsimile or email proposals or modifications will be considered.

1.06 QUALIFICATION OF BIDDERS

- A. Bidders may be disqualified and their Bids not considered for any of the following specific reasons:
 - 1. Reason to believe collusion exists among Bidders.
 - 2. The Bidder being interested in any litigation against the Owner.
 - 3. The Bidder being in arrears on any existing contract or having defaulted on a previous contract.
 - 4. Lack of competency as revealed by the financial statement, experience, and equipment, questionnaires, or qualification statement.
 - 5. Uncompleted work, which in the judgment of the Owner will prevent or hinder the prompt completion of additional work if awarded.
- B. If requested, a Bidder shall submit to the Owner a confidential Financial Statement in a sealed envelope.

1.07 PREPARATION OF BID:

- A. All bids must be submitted on the bid form contained herein. (see Section 004146) Oral, telephone, facsimile, electronic mail, or telegraph bids will not be accepted.
- B. The Bidder shall base the bid on materials complying with the Bidding Documents, and shall list all information where the bid form requires.
- C. The blank spaces in the bid form shall be filled in correctly with ink or typewritten. A bid form containing an alteration or erasure of any price contained in the bid which is used in determining the lowest responsible bid shall be rejected unless the alteration or erasure is corrected as herein provided:
 - 1. An alteration or erasure must be crossed out and the correction printed in ink or typewritten adjacent to the alteration or erasure.
 - 2. The person signing the bid must initial the correction in ink.
 - 3. In the event that any price used in determining the lowest responsible bid is expressed by the Bidder in both written and numerical form, the written representation shall govern in all cases.
- D. If the bid form includes alternates, each Bidder shall bid on each alternate. Failure to comply may be cause for rejection.

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- E. If an individual submits Bid, he or his duly authorized agent must sign his name. If a firm, association or partnership submits the Bid, the name, address and title of each member must be given, and an official or duly authorized agent must sign the Bid. Powers of attorney authorizing agents or others to sign Bids must be properly certified and must be in writing and submitted with the Bid.
- F. Bids from individuals or partnerships, if signed by an attorney-in-fact, shall have attached to the bid the power of attorney, evidencing the authority to sign the bid. If the bid is signed by any other legal entity, the authority of the person signing shall be attached to the bid.
- G. A W-9 Form is required with each bid submittal.

1.08 EXEMPTION FROM SALES TAX ON MATERIALS

- A. The Owner is exempted by Section Three of the Illinois Use Tax Act (Sec 3, House Bill 1610 approved July 31, 1961. IL. Rev. Stat. 1961, Chap. 120 Sec 439.3) from paying any of the taxes imposed by that act and sales to the Owner are exempt by Section Two of the Illinois Retailer's Occupation Tax Act (Section 2, House Bill 1609, Approved July 31, 1961 IL. Rev. Stat. 1961, Chap. 120 Sec. 441) from any of the taxes imposed by that Act.

1.09 IDENTIFICATION AND SUBMITTAL OF BID

- A. Each bid and all papers bound and attached to it shall be placed in an envelope and securely sealed therein. The envelope shall be plainly marked with the following:
 - 1. The word "BID"
 - 2. Name and address of the Bidder.
- B. The envelope of the bid shall be addressed to:

Lake Land College
C/O Office of Vice President for Business Services
9.0L Engine, Project # 2025-022
5001 Lake Land Boulevard
Mattoon, Illinois, 61938
- C. Bids shall be delivered before the time set for the opening of the bids. Bids arriving by mail or otherwise after the time designated for the opening of bids will be returned unopened. Oral, telephone, facsimile, electronic mail, or telegraph bids shall not be accepted.

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1.10 MODIFICATION OR WITHDRAWAL OF BID

- A. A bid may not be modified after submittal. Bidders may withdraw a bid at any time before opening. A Withdrawal of a Bid must be made in writing or in person by a bidder or his duly authorized agent. If a firm, association or partnership wishes to withdraw a bid, an official or duly authorized agent must sign the written request or appear in person.
- B. Once withdrawn, the bidder must submit a new bid prior to the opening in order to be considered.
- C. No Bid may be withdrawn or modified after the Bid opening except where the award of the Contract has been delayed beyond 60 days after date of Bid.

1.11 OPENING OF BIDS

- A. The Bids submitted will be opened at the time and place stated in the Advertisement for Bids and publicly read aloud and thereafter shall remain on file with the Owner.
- B. After Bids are opened, the Bids will be tabulated for comparison on the basis of the Bid prices and quantities shown on the Bids.
- C. The Owner reserves the right to withhold the award of the Contract for a period of 60 days from the date of the opening of Bids and no award will be made until the Owner is satisfied as to the responsibilities of the low Bidders.
- D. Until final award of the Contract, the Owner reserves the right to reject any or all Bids or proceed to do the work otherwise in the best interest of the Owner.

1.12 EVALUATION AND CONSIDERATION OF BIDS

- A. The Owner reserves the right to reject all bids or parts of bids, and to waive informalities therein.
- B. For the purpose of determining the lowest responsible bidder in the consideration of all bids submitted, the Owner reserves the right to accept or reject any or all alternates in the numerical order in which they appear on the bid form.

1.13 DISQUALIFICATION OF BIDDERS

- A. Bids will not be considered if they show any omissions, additions, alterations of form, conditions not requested unauthorized alternate Bids or irregularities of any kind. However, the Owner reserves the right to waive any irregularities and to make the award in the best interest of the Owner.
- B. The Bidder acknowledges the right of the Owner to reject any or all Bids and to waive any informality or irregularity in any Bid received. In addition, the Bidder recognizes the right of the Owner to reject a Bid if the Bidder fails to submit the data required by the Bidding Documents.

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- C. For the purpose of determining the lowest responsible bidder in the consideration of all bids submitted, the Owner reserves the right to accept or reject any or all alternates in the numerical order in which they appear on the bid form.

1.14 APPLICABLE LAWS

- A. All applicable state laws, municipal ordinances, and the rules and regulations of all authorities having jurisdiction over the Work shall apply to the Contract throughout, and they will be deemed to be included in the Contract the same as though herein written out in full.
- B. Bidder's signatures shall be construed as acceptance of and willingness to comply with all provisions of the acts of the General Assembly of the State of Illinois relating to the Department of Human Rights Act, previously the Illinois Fair Employment Practices Act, Prevailing Wage Act for workers in our area, preference to citizens of the United States and residents of the State of Illinois, and discrimination and intimidation of employees. Provisions of said acts are hereby incorporated by reference and become a part of this proposal and specification.

1.15 EXECUTION OF THE AGREEMENT

- A. The successful Bidder, if awarded the Project, shall sign the necessary Agreements with the Owner and furnish Payment and Performance Bonds and Certificates of Insurance, if required elsewhere in this document, but no such Agreement shall be in force and effect until it is executed by all parties, and the Payment and Performance Bonds and Certificates of Insurance have been approved.
- B. Failure to execute and return the Agreement within ten (10) calendar days may result in the rescinding of the Contract award.

1.16 RECORDS:

- A. The Contractor shall maintain, for a minimum of 5 years after the completion of the contract, adequate books, records and supporting documents to verify the amounts, recipients, and uses of all disbursements of funds passing in conjunction with the contract; the contract and all books, records and supporting documents related to the Contract shall be available for review and audit, and the Contractor agrees to cooperate fully with any audit conducted and to provide full access to all relevant materials.

END OF SECTION

SECTION 004146

BID FORM

PROJECT**IDENTIFICATION:** 9.0L Engine, Project # 2025-022**BID TO:** Board of Trustees
Lake Land College District Number #517
Office of the Vice President for Business Services
5001 Lake Land Boulevard
Mattoon, Illinois, 61938**BID FROM:**

The undersigned Bidder agrees, if this Bid is accepted, to enter into an Agreement with the Owner, in the form included in the Bidding Documents, to perform and furnish all materials, labor and equipment as specified or indicated in the Bidding Documents for the Bid Price and within the Bid Times indicated in this Bid and in accordance with the terms and conditions of the Contract Documents.

In submitting this Bid, Bidder represents that:

- A. This Bid will remain subject to acceptance for 60 days after the day of the bid opening.
- B. The Owner has the right to reject this bid.
- C. Bidder will sign and submit the Agreement with the Bonds and other documents as required by the Bidding requirements within 15 days after the Owner's Notice of Award. A W-9 Form is required.
- D. Bidder has copies of all the Bidding Documents.
- E. Bidder is familiar with federal, state and local laws and regulations.
- F. Bidder has correlated the information known to Bidder with the Bidding Documents.
- G. This Bid is genuine and not made in the interest of or on the behalf of an undisclosed person, firm or corporation and is not submitted in conformity with an agreement or rules of a group, association, organization or corporation; Bidder has not directly or indirectly induced or solicited another Bidder to submit a false or sham Bid; Bidder has not solicited or induced a person, firm or corporation to refrain from bidding; and Bidder has not sought by collusion to obtain for itself an advantage over another Bidder or over the Owner.
- H. Bidder has received the following addenda receipt of which is hereby acknowledged.

Date	Number

Bidder will provide all materials, labor and equipment as specified in accordance with the Contract Documents for the following price(s):

STIPULATED-SUM BID PRICE

(Base Bid – 9.0L Engine)

	Dollars (\$)
(use words)	(figures)

Bidder agrees to provide all materials, labor and equipment, as specified, on or before the number of calendar days indicated below.

SUBMITTED on

 , 2025**Company**

Address

**No. of Working Days
To Provide Specified
Materials, Labor and
Equipment****Signed**

(Printed Name)

 Days**Phone**

Email

END OF SECTION

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SUPPLEMENTARY CONDITIONS

PART 1 GENERAL

1.01 DEFINITIONS

- A. Where the term "Owner" is used throughout these specifications same shall mean the Lake Land College Board of Trustees as their agent.
- B. Where the term "Contractor", "Prime Contractor", or "Principal Contractor" is used, it refers to anyone having a Principal Contract with the Owner.
- C. Where the term "Subcontractor" is used, it refers to anyone having a Contract for labor or material with any of the Principal or Prime Contractor on the job.

1.02 THEFT, ETC.

- A. The Contractors shall be responsible for any damage or loss resulting to the work, materials, or tools due to theft, or in any manner not covered by the insurance called for elsewhere in these Specifications. Payments on account of Contract do not relieve Contractors of this obligation. Contractors may carry Theft Insurance at their own option.

1.03 SOCIAL SECURITY, UNEMPLOYMENT INSURANCE

- A. The Contractors shall keep records and pay, all social security, withholding tax, unemployment insurance, and other taxes imposed by the various governmental authorities and laws.

1.04 MATERIAL AND WORKMANSHIP

- A. The owner or his agent shall have full power to reject any material or workmanship which, in their opinion, do not conform with these specifications or drawings, and cause same to be immediately removed and reconstructed without additional cost to the Owner

1.05 PERMITS

- A. The Owner will obtain and pay for all permits required by Local Law, except as indicated otherwise in these specifications.

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1.06 CLEANING OF GROUNDS AND BUILDINGS

- A. At the completion of the project and before final acceptance by the Owner, the area shall be cleared of all rubbish, materials, and debris which accumulate during the process of work under this Contract. See section 110113 – Scope, of these Specifications.

1.07 SUBCONTRACTORS

- A. The Principal Contractors shall be responsible for any and all Subcontractors working under them, and shall carry insurance for them or see that they are carrying it themselves so as to relieve the Owner of any and all liability.
- B. Nothing contained in the Contract Documents shall create any contractual relation between any Subcontractor and the Owner.
- C. The Owner assumes no responsibility for the overlapping or omission of parts of the work by various Subcontractors in their Contracts with the Principal Contractors.

1.08 PATCHING

- A. The expense of any undue alterations, cutting, patching, or repairing of damage due to carelessness or neglect caused by any trade shall be borne by the Contractor for that trade. The work shall be done by the workmen of the Contractor whose work was damaged so that such patching will be least conspicuous.

1.09 OTHER WORK NOT IN CONTRACT

- A. The Owner reserves the right to let separate Contracts for other work in connection with this project, but agrees that such work shall not interfere with the work of the Contracts previously made.

1.10 EXTRAS AND CHANGES

- A. Should any extra work or changes be required during the work, the Owner and Contractor shall agree upon the price for such extra work or changes and the Owner shall issue a change order to the Contractor for such work as agreed upon. Payment shall be made under same conditions as for original Contract.
- B. No payment shall be made for extra work or materials unless a formal written change order is issued by the Owner.

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1.11 CORRECTION OF WORK AFTER FINAL PAYMENT

- A. Neither the final Certificate, nor payment, nor any provision in the Contract Documents shall relieve the Contractor of responsibility for faulty materials or workmanship discovered to be not as specified or shown on the Drawings.
- B. The Contractor shall remedy any defects due thereto, and pay for, any damages to other work resulting therefrom, which shall appear within a period of one year from the date of acceptance.
- C. The Owner shall give notice of observed defects with reasonable promptness. The Owner shall judge the defects as to maintenance, workmanship, or material defects.
- D. All questions arising under this article shall be decided by the Owner subject to arbitration.

1.12 LOCAL LABOR

- A. It is the desire of the Owner that the Contractors make use of all local labor, material, insurance, etc., if possible, as long as it does not work a hardship on the Contractors.

1.13 PRECEDENCE OF DOCUMENTS

- A. The Contract Documents shall be given precedence in the following order, provided they are in existence at the time of the closing of the Contracts:
 - 1. Agreement
 - 2. General Conditions of the Contract
 - 3. Any Valid Building Code
 - 4. Specifications
 - 5. Full Sized Detail Drawings
 - 6. Large Scale Drawings
 - 7. General Drawings

1.14 PROTECTION OF GENERAL PUBLIC

- A. All Contractors shall provide protection of the general public at all times, providing protection devices as prescribed by laws having jurisdiction.

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- B. The Contractor will, at all times, take all reasonable precautions for the safety of employees on the project, and of the public and all other persons who may be affected, and will comply with all applicable provisions of Federal, State, and Municipal Safety Laws and Building and Construction Codes.

1.15 GUARANTEE & WARRANTIES

- A. All Prime Contractors shall guarantee their work and the work of their Subcontractors for a period of one year from the date of acceptance of their work, unless stipulated for a longer period of time under specific sections of the specifications.
- B. All items requiring a warranty certificate from the manufacturer shall be executed and the certificate delivered to the Owner before final payment can be approved.

1.16 SUPERINTENDENT

- A. The General Contractor shall keep a capable superintendent on the job site at all times when major work is in progress. This Superintendent shall lay out all work required under the Contract and also assist other Contractors in laying out and planning their work.
- B. The Contractors, or his Superintendent, shall also notify other Contractors when it will be necessary to install certain work and take complete responsibility for co-ordination of construction.

1.17 REQUIREMENTS

- A. All Contractors shall comply with all laws, rules and regulations governing the work under this Contract.
- B. Should the Contractor observe anything in the contract documents that is contrary to any code requirement, he shall notify the Owner immediately in writing. The Owner shall issue all changes required to correct the variance, and be responsible for code interpretations.

1.18 OCCUPATIONAL SAFETY AND HEALTH

- A. It shall be each Contractor's responsibility to comply with all local, state and federal laws and regulations governing job safety and health standards, and the requirements of the "Occupational Safety and Health Act of 1970" enacted by Congress and signed into law on December 29, 1970 and all applicable changes, revisions, and amendments.

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1.19 FAIR EMPLOYMENT PRACTICES

- A. All Contractors agree that, in accordance with an Act to prohibit discrimination and intimidation on account of race or color in employment and Contracts for public buildings or public works, approved July 8, 1933, as amended, no person will be refused or denied employment in any capacity on the grounds of race or color, nor be discriminated against in any manner by reason thereof in connection with the performance of the work set forth in the attached drawings and specifications; nor will any unfair employment practice, as defined in the Fair Employment Practices Act, approved July 21, 1961 and all applicable changes, revisions, and amendments, be committed by the said Contractor.

1.20 PREVAILING WAGE POLICY

- A. The Owner has established a general prevailing rate of hourly wage in said District, as determined by the Illinois Department of Labor.
- B. All Contractors and Subcontractors shall comply with the following and any later amendments thereto:
- C. "Illinois Statutes, as amended by Act approved August 8, 1961, (SB No. 250) (Rev. State Chap. 48, Sec. 39S-1 et. seq.) declared to be the policy of the State of Illinois that a wage of no less than the general prevailing hourly rate as paid for work of a similar character in the locality in which the work is performed, shall be paid to all laborers, workmen and mechanics employed by or on behalf of any and all public bodies engaged in public works, exclusive of maintenance work."
- D. Contractors shall have the responsibility of complying with all aspects of the Prevailing Wage Policy.
- E. Certified payroll documentation must be provided to the college by the 15th of the following month.

1.21 BUSINESS ENTERPRISE FOR MINORITIES, FEMALES, AND PERSONS WITH DISABILITIES ACT

- A. On August 25, 2015, Governor Rauner signed into law the Business Enterprise for Minorities, Females, and Persons with Disabilities Act (30 ILCS 575), effective immediately. The Act stipulates certain requirements regarding the use of businesses owned by minorities, females and persons with disabilities for the procurement of goods and services by State agencies, universities, and community colleges.
- B. The College recognizes the importance of increasing the participation of businesses owned by minorities, females and persons with disabilities in public

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contracts in an effort to overcome the discrimination and victimization such firms have historically encountered. It is the College's policy to promote the economic development of businesses owned by minorities, females and persons with disabilities by setting aspirational goals to award contracts to businesses owned by minorities, females, and persons with disabilities for certain services as provided by the Business Enterprise for Minorities, Females and Persons with Disabilities Act, 30 ILCS 575/0.01 et seq. (the "Act") and the Business Enterprise Council for Minorities, Females, and Persons with Disabilities (the "Council").

C. Certified Business Enterprise Contractors

1. In determining whether a business is owned by a minority, female, or person with disabilities, the College shall require the business to provide proof of certification by the Business Enterprise Council, an entity delegated the authority to make certifications by the Business Enterprise Council, or by a state agency with statutory authority to make such a certification, that the business entity is owned by a minority, female, or person with a disability, or by submitting an ownership affidavit provided by the College.

D. Subcontractors and Suppliers

1. The College's aspirational goals are based on the total dollar amounts awarded to businesses owned by minorities, females, and persons with disabilities. All funds awarded to any certified subcontractors and/or suppliers shall be included for the College's aspirational goals, so long as the expenditures are direct, necessary, and proximately related to the work or service of the contract.

E. Evaluation of Contracts to Facilitate Aspirational Goals

1. These procedures shall not eliminate, alter, reduce, alleviate or modify in any way the College's procedures for purchasing. However, in addition to the College's purchasing procedures, the College shall evaluate all contracts, except those subject to federal reimbursement, to determine whether the bidder or contracting party assists the College in meeting its aspirational goals as set forth above, and increase the participation of businesses owned by minorities, females, and persons with disabilities in contracts with the College.

F. Bidding Requirements.

1. Bid Documents

- a. When the College procedures and/or state law require the College to competitively bid a contract, the College shall state in its bid

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documents the College's aspirational goal for the contract. The College's bid documents shall also require each bid submitted for a contract to include: (i) the bidder's name, (ii) the bid amount, and (iii) a business enterprise program utilization plan indicating the percentage of disadvantaged businesses that will be awarded by the bid.

2. Lowest, Responsive and Responsible Bidder

- a. As required by state law and the College's purchasing procedures, the College shall award contracts subject to state public bidding requirements to the lowest, responsive and responsible bidder. A bidder's failure to complete a utilization plan or submit necessary certifications shall be an issue of "responsiveness" which may make the bidder ineligible to receive the contract. In awarding contracts, the College shall also consider that the definition of "lowest responsible bidder" is broader than "lowest bidder" or "financially responsible", and that in proper circumstances, certain public interests can be considered as "responsible" in the College's discretion as allowed by applicable state laws, rules or regulations.

3. Opportunity to Cure

- a. In the event that a bidder offers the lowest, responsive and responsible bid but fails to meet the contract's aspirational goals, the College shall notify the bidder of this deficiency and give the bidder no more than ten (10) days to cure that deficiency. The College may provide the bidder with sufficient information necessary to obtain the Business Enterprise Council's list of certified businesses owned by minorities, females and persons with disabilities. The bidder may only cure this deficiency by subcontracting with businesses that are certified as provided in these procedures.

4. Good Faith Effort Procedures

- a. If the bidder cannot meet the contract's aspirational goal, the bidder must document in the utilization plan its good faith efforts that could reasonably have been expected to meet the goal. The College shall consider the quality, quantity, and intensity of the bidder's efforts, and may evaluate the bidder's:
 - i) Solicitation through all reasonable and available means of certified subcontractors, suppliers, and/or vendors that have the capability to perform the work required by the contract. The bidder must solicit this interest to give certified businesses sufficient time to respond to the solicitation,

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must provide adequate information about the plans, specifications, and contract requirements in a timely manner, and must take appropriate steps to follow up initial solicitations.

- ii) Use of resources from the College, the Business Enterprise Council, and any other business or community groups that provide assistance in the recruitment and placement of certified businesses.
- iii) Selection of portions of the contract work to be performed by certified vendors to increase the likelihood that the goal will be achieved. This includes, where appropriate, breaking out contract work items or services into economically feasible units to facilitate participation by certified businesses, even when the bidder might otherwise prefer to perform the work or services with its own employees.
- iv) Negotiation in good faith with interested certified businesses. In order to show good faith efforts, the bidder's utilization plan shall include the names, addresses, and telephone numbers of certified businesses that were considered, and an explanation for why an agreement could not be reached.
- v) Thorough investigation of the capabilities of certified businesses and not rejecting them as unqualified without sound reasons.
- vi) Efforts to assist interested certified businesses in obtaining contract required lines of credit, insurance, equipment, supplies, materials, or other related assistance or services.

5. Award of Contract

- a. If the College determines that the bidder is the lowest, responsive and responsible bidder and has either met the contract's aspirational goals or has made a good faith effort to meet the goal, the College may award the contract to the bidder. The College shall have the right to reject all bids and re-bid the contract in its sole discretion.

6. Incorporation into Contract

- a. The successful bidder's utilization plan shall become part of the awarded contract and shall not be modified or amended without the College's written consent.

END OF SECTION

SECTION 110113

9.0L Engine

PART 1 GENERAL

1.01 SCOPE

- A. The purpose of these specifications is to establish minimum standards and features for the purchase of a 9.0L Engine. The system shall meet all applicable codes, and other provisions as specified herein. Furnish parts, fittings, and any other accessories required, as specified, to provide complete and fully functioning 9.0L Engine.
- B. If a Bidder is unable to comply with any of the following specifications, the Bidder shall submit in writing the reason for noncompliance. Noncompliance with any specification is grounds for rejection of the entire bid. The buyer reserves the right to reject any bid which does not meet these specifications.
- C. **Bids shall be for product complete, delivered, including all shipping, handling and delivery fees and will have no hidden costs.**
- D. Bids shall include explicit technical information, if applicable, regarding electrical, plumbing, ventilation, special structural considerations or other accommodations required for the proper installation and operation of specified equipment.
- E. All equipment shall bear full manufacturers on-site warranty for a minimum of one year from the date of delivery to the Owner and shall include parts, labor and software upgrades.
- F. Provide on-site/online remote training for college personnel by certified instructor(s) to ensure a reasonable level of proficiency with all supplied equipment.
 - 1. All student and teacher materials, software, manuals, guides or other supplied materials or information shall be presented in a neat, orderly, and professional manner using binders, folders or other devices as necessary.

1.02 QUALITY ASSURANCE

- A. Submit a list of special tools and test equipment required for maintenance and testing of the products supplied.
- B. All equipment shall have a nameplate that identifies the manufacturer's name, address, type or style, model or serial number, and catalog number.

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1.03 GENERAL

- A. Items specified below are singular in quantity unless otherwise specified.

PART 2 PRODUCTS

2.01 Materials

- A. **PowerTech PSS 9L Engine, Model: 6090CI550** as listed in the details in Section 110114.
- B. "POWERUNIT BASE: PEDESTAL MOUNTING ENGINE:
EMISSIONS TIER: FINAL TIER 4 MAKE: JOHN DEERE MODEL:
6090CI550 POWER CURVE: 325K RATED POWER: 325 HP RATED
RPM: 2200 12 VDC ELECTRICAL SYSTEM SAE 1 FLYWHEEL
HOUSING SAE 14 FLYWHEEL ELECTRONIC FUEL SYSTEM W/
ENGINE MOUNTED ECU FEATURES: AIR INTAKE SYSTEM WITH
2-STAGE FILTER INSTALLED CONTROLLER: PV380
CONTROLLER SHIP LOOSE COOLING FAN VARIABLE SPEED
SUCTION INSTALLED COOLING PACKAGE INSTALLED 14002
QUANTITY DESCRIPTION UNIT PRICE AMOUNT QUOTATION
FIRM FOR THIRTY (30) DAYS FROM ABOVE DATE. CK POWER
TERMS AND CONDITIONS OF SALE. SALES TAX SHIPPING &
HANDLING TOTAL PRICE LEAD TIME SUBTOTAL 1 1 1 DEF TANK
REMOTE MOUNTED INSTALLED SCR SYSTEM 11.9 GAL (45.2 L)
DEF TANK ENGINE MANUAL INCLUDED EXHAUST FILTER:
DOC/DPF/SCR CATALYST EXHAUST SYSTEM INSTALLED
EXHAUST SYSTEM TAILPIPE AND RAIN CAP INSTALLED OIL
COOLANT AND DEF FLUID REQUIRED FOR QC PRIMARY AND
SECONDARY FUEL FILTERS WITH WIF SENSOR ENGINE
MOUNTED FUEL SUPPLY".

SECTION 110113

PART 3 EXECUTION

3.01 DELIVERY, STORAGE AND HANDLING

- A. All equipment shall be packaged in a manner to preclude any damage from the weather, humidity and temperature variations, dirt and dust, or other contaminants during transportation or storage.
- B. All equipment shall be provided in the manufacturer's original sealed packaging and shall be clearly marked with the project name and number;

Project 2025-022 – 9.0L Engine

- C. Contractor shall:
 - 1. Provide instruction, specifications and supervision for all final electrical connections to be completed by owner necessary to make all equipment operational.
 - 2. Provide all accessories, controls and appurtenances to provide a fully functioning system.

3.02 INSTALLATION

- A. Provide installation of all equipment according to the manufacturer's diagrams and recommendations.

END OF SECTION

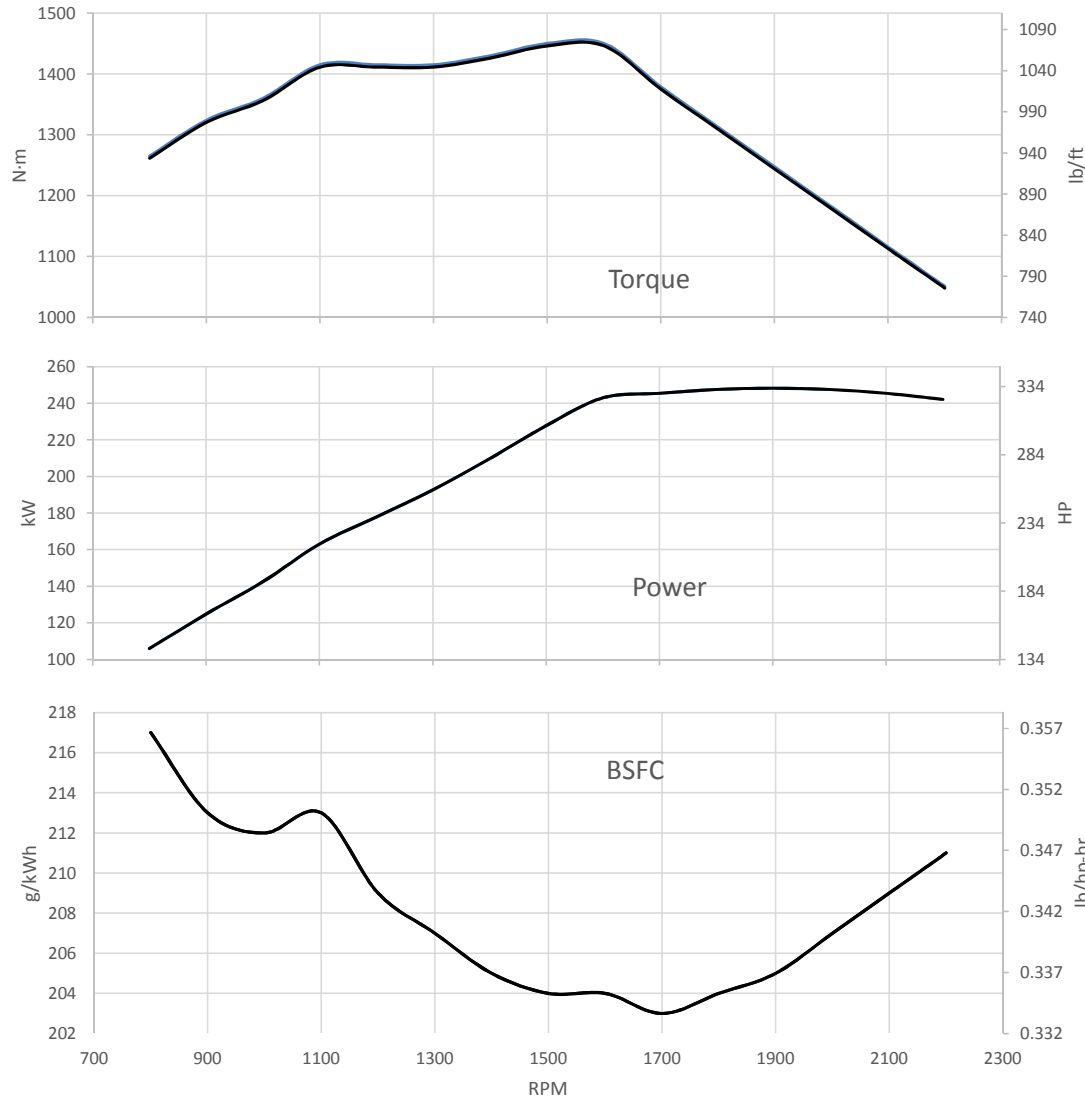


JOHN DEERE

ENGINE PERFORMANCE CURVE

Rating: Gross power
Application: Continuous
Power Budge 2%
Torque Rise 38%

PowerTech™ PSS 9L Engine
Model: 6090CI550
325 hp @2200 rpm
242 kW @2200 rpm



STANDARD CONDITIONS

Air Intake Restriction 12in.H₂O (3kPa)
Exhaust Back Pressure 30 in.H₂O (7.5kPa)
Gross Power Guaranteed within + or - 5% at SAEJ1995 and ISO 3046 conditions:
Air Inlet Temperature = 77°F (25°C)
Barometer = 29.31 in.Hg (99 kPa)
Fuel Inlet Temperature = 104°F (40°C)
Fuel Specific Gravity @ 60 °F (15.5 °C) = 0.853

CONVERSION FACTORS:

Power: kW = HP x 0.746
Fuel: 1 Gal = 7.1 lb, 1 L = .85kg
Torque: N·m = lb·ft x 1.356

All values are from currently available data and are subject to change without notice.

Notes:1) This Performance Curve provides installation requirements necessary for the engine to emit at its certified emission levels. For additional information necessary to meet applicable regulatory requirements, refer to the John Deere Emissions-related Installation Instructions (AG01):
<https://power.deere.com/wps/myportal/jdps/products/engines/apguidelines>.

Designed/Calibrated to meet:

-CARB
-EPA Tier 4
-EU Stage V

Certified By:

24-Jan-19

Ref: Engine Emission Label

Performance Curve: 6090CI550_K

Engine Installation Criteria

General Data

Engine Model	6090CI550	
Number of Cylinders	6	
Bore	118 mm	4.7 in.
Stroke	136 mm	5.4 in.
Displacement	9.0 L	549 in. ³
Compression Ratio	16.0:1	
Valves per Cylinder, Intake/Exhaust	2 \ 2	
Firing Order	1-5-3-6-2-4	
Combustion System	HPCR	
Engine Type	In-Line, 4-cycle	
Aspiration	Turbocharged and air-to-air aftercooled	
Engine Crankcase Vent System	Open	

Physical Data

Length	1326 mm	52.2 in.
Width	879 mm	34.6 in.
Height	1266 mm	49.8 in.
Weight, with oil&no coolant (Includes engine, flywheel housing, flywheel&electrics)	1097 kg	2418 lb
Center of Gravity Location, X-axis From Rear Face of Block	460 mm	18.1 in.
Center of Gravity Location, Y-axis Right of Crankshaft	0 mm	0.0 in.
Center of Gravity Location, Z-axis Above Crankshaft	81 mm	3.2 in.
Max. Bending Moment about Main Bearings Front and Rear	550 N·m	407 lb-ft
Max. Allowable Static Bending Moment At Rear Face of Flywheel Housing with 5-G Load	814 N·m	602 lb-ft
Thrust Bearing Load Limit Forward, Intermittent	2932 N	659 lb
Thrust Bearing Load Limit Forward, Continuous	1933 N	435 lb
Thrust Bearing Load Limit Rearward, Intermittent	139 N	31 lb
Thrust Bearing Load Limit Rearward, Continuous	899 N	202 lb
Max. Continuous Damper Temp	200 °C	392 °F
Max. ECU Vibration, All Axis	6.00 gRMS	
Max. Torisonal Vibration, Front of Crank	0.29 DDA	
Max. Engine Torisonal Vibration in Overspeed	0.37 DDA	

Electrical System

Min. Instantaneous Cranking	50 rpm	
Min. Steady State Cranking	120 rpm	
Starter Rolling Current, 12V @32 °F (0 °C)	920 amps	
Starter Rolling Current, 24V @32 °F (0 °C)	600 amps	
Starter Rolling Current, 12V @-22 °F (-30 °C)	1300 amps	
Starter Rolling Current, 24V @-22 °F (-30 °C)	700 amps	
Min. Voltage at ECU during Cranking, 12V	6 volts	
Min. Voltage at ECU during Cranking, 24V	10 volts	
Max. Voltage Drop, Battery to Starter	0.8 volts	
Max. Allowable Start Circuit Resistance, 12V	0.0012 Ohm	
Max. Allowable Start Circuit Resistance, 24V	0.002 Ohm	
Max. ECU Temperature	105 °C	221 °F
Max. VTG Actuator Surface Temp	180 °C	356 °F
Max. Air Throttle Electrical Actuator Temperature	125 °C	257 °F
Max. Harness Temperature	125 °C	257 °F
Max. Alternator Temperature	105 °C	221 °F
Max. Starter Temperature	120 °C	248 °F
Max. Temperature, All Other Electronics	125 °C	257 °F

Charge Air Cooling System

Air-to-Air Heat Rejection	41.3 kW	2349 BTU/min
Compressor Discharge Temperature @ 77°F (25°C) Ambient Air	174 °C	345 °F
Intake Manifold Pressure	166 kPa	24.1 psi
Compressor Discharge Temperature @ 117°F (47°C) 80 kPa Barometric pressure	#N/A °C	#N/A °F
Max. Temperature Out of Charge Air Cooler @ All Ambient Conditions	88 °C	190 °F
Max. CAC System Volume	#N/A L	#N/A Qt
Max. Pressure Drop through CAC	16 kPa	64 in. H ₂ O
Min. Pressure Drop through CAC	8 kPa	32 in. H ₂ O
Max. Temperature Out of Charge Air Cooler @77°F(25°C) Ambient Air	52 °C	126 °F
Min. Temperature Out of Charge Air Cooler @77°F(25°C) Ambient Air	43 °C	110 °F
Max. Bending Moment on Compressor Outlet	6.0 N·m	4 lb-ft
Max. Shear on Compressor Outlet	4.0 kg	9 lb

Performance Curve: 6090CI550_K

Engine Installation Criteria

Cooling System

Engine Heat Rejection	161.0 kW	9156 BTU/min
Coolant Flow @ 10 kPa External Restriction	540 L/min	143 gal/min
Coolant Flow @ 40 kPa External Restriction	496 L/min	131 gal/min
Max. Auxiliary Coolant Flow	32 L/min	8 gal/min
Thermostat Start to Open	85 °C	185 °F
Thermostat Fully Open	95 °C	203 °F
Engine Coolant Capacity	17.0 Liter	18.0 quart
Min. Coolant Fill Rate	12.0 L/min	3.2 gal/min
Max. Water Pump Inlet Pressure	235 kPa	34 psia
Min. Pump Inlet Pressure @ 203°F (95°C) Coolant	118 kPa	17 psia
Min. Pump Inlet Pressure @ Max. Top Tank Temperature	172 kPa	25 psia
Min. External Coolant Restriction	15 kPa	2 psi
Max. External Coolant Restriction	60 kPa	9 psi
Max. Top Tank Temperature	113 °C	235 °F
Max. Top Tank temperature 95% of Operating Hours	103 °C	217 °F

Exhaust System

Exhaust Flow	31.4 m³/min	1108 ft³/min
Exhaust Temperature	430 °C	805 °F
Max. Allowable Exhaust Restriction	22 kPa	90 in. H ₂ O
Max. Bending Moment on Turbo Outlet	7.0 N·m	5.2 lb-ft
Max. Shear on Turbine Outlet	11.0 kg	24 lb
Exhaust Filter Size	5 DOC/DPF-SCR	
Exhaust Filter Pressure Drop (Clean)	14.9 kPa	60 in. H ₂ O
Min. Mixing Length, Outlet to Exhaust Filter	#N/A	
Max. Bending Moment on Exhaust Filter Inlet	180 N·m	133 lb-ft
Max. Bending Moment on Exhaust Filter Outlet	180 N·m	133 lb-ft
Max. Exhaust Leakage Rate, Engine to Exhaust Filter @30kPa	5.0 L/min	1.3 gal/min
Max. Temperature Drop, Engine to exhaust Filter	30 °C	54 °F

Fuel System

ECU Description	L33 Controller	
Fuel Injection Pump	Denso HP6	
Governor Type	Electronic	
Total Fuel Flow	118 kg/hr	260 lb/hr
Fuel Consumption	51.5 kg/hr	114 lb/hr
Fuel Temperature Rise, Inlet to Return	21 °C	37 °F
Min. Fuel Inlet Pressure	-30 kPa	-121 in. H ₂ O
Max. Fuel Inlet Pressure	20 kPa	80 in. H ₂ O
Max. Fuel Return Pressure	20 kPa	80 in. H ₂ O
Min. Fuel Return Pressure	0 kPa	0 in. H ₂ O
Max. Fuel Inlet Temperature	75 °C	167 °F
Fuel Filter @98% Efficiency	2 mic	

Lubrication System

Oil Pressure at Rated Speed	345 kPa	50 psi
Oil Pressure at Low Idle	100 kPa	15 psi
Max. In-Pan Oil temperature	138 °C	280 °F
Max. Crankcase Pressure	2 kPa	8 in. H ₂ O

Air Intake System

Engine Air Flow	15.9 m³/min	563 ft.³/min
Air Mass Flow	1099 kg/hr	2424 lb/hr
Maximum Allowable Temperature Rise, Ambient Air to Engine Inlet	8 °C	15 °F
Max. Air Intake Restriction, Clean Air Clearer	3.75 kPa	15 in. H ₂ O
Max. Air Intake Restriction, Dirty Air Clearer	6.25 kPa	25 in. H ₂ O
Air Cleaner Efficiency	99.9 %	

Performance Curve: 6090CI550_K

Engine Installation Criteria

Performance Data

Rated Power	242 kW	325 HP
Rated Speed		2200 rpm
Max. Fast Idle Speed		2400 rpm
Breakway Speed		2250 rpm
Power Bulge Speed		2000 rpm
Peak Torque Speed		1500 rpm
Low Idle Speed		800 rpm
Rated Torque	1051 N·m	778 lb-ft
Peak Torque	1450 N·m	1073 lb-ft
Power Bulge		2 %
Torque Rise		38 %
BMEP, Rated	1473 kPa	214 psi
BMEP, Peak Torque	2011 kPa	292 psi
Attitude Capability	3048 m	10000 ft
Friction Power @Rated Speed	37 kW	50 HP
Air Fuel Ratio		21.5:1
Noise @1 m		98 dB(A)

Curved Data

Engine Speed	Power		Torque		BSFC	
	kW	hp	N·M	lb-ft	g/kWh	lb/hp-hr
800	106	142	1265	934	217	0.357
900	125	167	1324	977	213	0.350
1000	142	191	1360	1004	212	0.349
1100	163	219	1415	1044	213	0.350
1200	178	238	1415	1044	209	0.344
1300	193	258	1415	1044	207	0.340
1400	210	281	1430	1055	205	0.337
1500	228	305	1450	1070	204	0.335
1600	243	326	1450	1070	204	0.335
1700	245	329	1379	1018	203	0.334
1800	248	332	1313	969	204	0.335
1900	248	333	1248	921	205	0.337
2000	248	332	1182	872	207	0.340
2100	245	329	1116	824	209	0.344
2200	242	325	1051	776	211	0.347

DEF Data

Load Factor	Engine Speed	DEF Consumption*		Percent of Diesel Consumption**
		g/kWh	lb/hp-hr	
100	2200	5.7	0.0094	2.1
Peak Torque	1500	5.9	0.0097	2.3

*DEF conversion factor: 1.087 kg/l (9.071 lb/gal)

**Percent of diesel consumption by volume at 100% load and peak torque

Performance Curve: 6090CI550_K