

Board of Public Works and Safety

Agenda Item

Cover Sheet

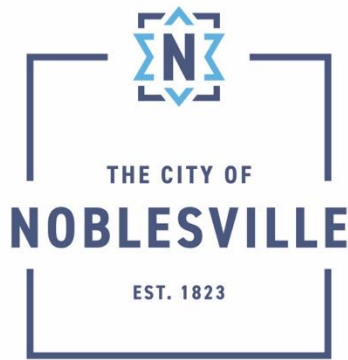
MEETING DATE: December 17, 2024

- Consent Agenda Item
- New Item for Discussion
- Previously Discussed Item
- Miscellaneous

ITEM #: 7

INITIATED BY: Kristyn Parker

- Information Attached
- Bring Paperwork from Previous Meeting
- Verbal
- No Paperwork at Time of Packets



TO: Board of Public Works
FROM: Kristyn Parker, Project Coordinator, Utilities Department
SUBJECT: Reward of bid for 2025 Tandem Axle Heavy Duty Dump Truck
DATE: December 17, 2024

Utilities is requesting the Board to award the bid for a 2025 Tandem Axle Heavy Duty Dump Truck to M3K Quality Truck Sales of Indianapolis, LLC. The award amount will be \$185,500 (base price of \$181,500 plus the alternate bid no. 2 of \$4000 for a 40 ton pintle hitch).

This was the only bid that was received, however, the Utilities did request quotes prior to requesting permission to advertise for bids as to gauge the price range of the dump truck. We received three quotes.

- M3K Quality Truck Sales of Indianapolis, LLC \$185,500.00
- Rush Truck Center of Indianapolis \$194,540.24
- Palmer - Kenworth of Indianapolis East \$194,907.85

M3K Quality Truck Sales of Indianapolis was the lowest quote we received; therefore, the Utilities believes moving forward with the reward of the bid to M3K is the most reasonable and responsible action.

Thank you for your consideration.

PROPOSAL

**2025 TANDEM AXLE HEAVY DUTY DUMP TRUCK
NOBLESVILLE UTILITIES**

NOBLESVILLE, INDIANA

To the Board of Public Works and Safety, Noblesville, Indiana:

Pursuant to the published "Notice to Bidders", the undersigned has investigated the conditions affecting the cost of the proposed:

2025 TANDEM AXLE HEAVY DUTY DUMP TRUCK

And hereby tenders this bid to construct said project in accordance with the Contract Documents now on file with the City of Noblesville, Indiana, and to furnish all necessary machinery, equipment, tools, labor and other means of construction, and to furnish all material specified in the manner and at the time prescribed as required by the Contract Documents and pursuant to the Payment Bond and Performance Bond to be filed, each in the amount of 100 percent of the Contract price of:

TOTAL BASE BID AMOUNT

Base Bid as Specified

one-hundred eighty one thousand five hundred Dollars (Words)

\$ 181,500.00 Dollars (Figures)

These prices are the sum of the quoted unit prices multiplied by the quantity for each item as shown on the attached Itemized Proposal. Whereas as a mathematical computation error exists on the Itemized Proposal; thus causing the above-stated Bid Amount to be stated incorrectly, the Bidder acknowledges that the unit prices, as stated on the Itemized Proposal, shall govern.

ALTERNATE BIDS

The following alternate bid items for material to be furnished and installed as set out below is considered part of this Proposal. In the event any of these alternate bid items are accepted as part of this Proposal, the accepted alternate bid items shall be part of the construction contract and binding upon the Owner and the Contractor.

ALTERNATE BID NO. 1

For the addition of Alternate Bid No. 1, add or subtract from the Base Bid the price of:

Add / upgrade from 4000 to 4500 Allison
No charge Dollars (Words)
No charge \$181,500 Dollars (Figures)

These prices are the sum of the quoted unit prices multiplied by the quantity for each item as shown on the attached Itemized Proposal. Whereas as mathematical computation error exists on the Itemized Proposal; thus causing the above-stated Bid Amount to be stated incorrectly, the Bidder acknowledges that the unit prices, as stated on the Itemized Proposal, shall govern.

ALTERNATE BID NO. 2

For the addition of Alternate Bid No. 2, add to the Base Bid the price of:

Add 40 ton pintle Hitch
Four-thousand dollars Dollars (Words)
\$ 4,000.00 Dollars (Figures)

These prices are the sum of the quoted unit prices multiplied by the quantity for each item as shown on the attached Itemized Proposal. Whereas as mathematical computation error exists on the Itemized Proposal; thus causing the above-stated Bid Amount to be stated incorrectly, the Bidder acknowledges that the unit prices, as stated on the Itemized Proposal, shall govern.

ALTERNATE BID NO. 3

For the addition of Alternate Bid No. 3, add to the Base Bid the price of:

Dollars (Words)
Dollars (Figures)

These prices are the sum of the quoted unit prices multiplied by the quantity for each item as shown on the attached Itemized Proposal. Whereas as mathematical computation error exists on the Itemized Proposal; thus causing the above-stated Bid

Amount to be stated incorrectly, the Bidder acknowledges that the unit prices, as stated on the Itemized Proposal, shall govern.

ALTERNATE BID NO. 4

For the addition of Alternate Bid No. 4, add to the Base Bid the price of:

_____ Dollars (Words)
_____ Dollars (Figures)

These prices are the sum of the quoted unit prices multiplied by the quantity for each item as shown on the attached Itemized Proposal. Whereas as mathematical computation error exists on the Itemized Proposal; thus causing the above-stated Bid Amount to be stated incorrectly, the Bidder acknowledges that the unit prices, as stated on the Itemized Proposal, shall govern.

The undersigned further agrees to complete the furnishing and construction of this Contract and be substantially completed and ready for use on or before 12/31/25.

Enclosed is a certified check to the Board of Public Works and Safety, City of Noblesville, or a Bid Bond binding the undersigned and surety to the Board of Public Works and Safety, City of Noblesville, Indiana, in the amount of:

_____ Dollars (Words)
_____ Dollars (Figures)

which amount is not less than ten percent (10%) of the total bid amount (Base Bid and all Alternate Bids) as set out above, guaranteeing the undersigned will enter into contract for the performance of the work if this Proposal is accepted.

As required by the statutes of the State of Indiana for any bid of \$100,000 of more, Questionnaire Form 96 (revised 2013), of the Indiana State Board of Accounts is properly executed and attached hereto. It is hereby agreed that this Proposal shall remain in full force and effect, and may not be withdrawn for a period of 60 days from the date of receiving proposals by the Board of Public Works and Safety, Noblesville, Indiana.

Respectfully submitted,



Contractor

(Individual) (Partnership) or (Corporation)

By: M3K Quality Truck Sales of Indianapolis, LLC

Address: 1401 Harding Ct, Indianapolis, IN 46217

Dated:

11/21/24

The above Bidder acknowledges receipt of Addenda Nos. _____

Note: The legal status of the Bidder, whether as an individual, partnership or corporation must be indicated as above, and all pertinent information as required by the Specifications must be furnished.



CONTRACTOR'S BID FOR PUBLIC WORK - FORM 96

State Form 52414 (R2 / 2-13) / Form 96 (Revised 2013)
Prescribed by State Board of Accounts

PART I

(To be completed for all bids. Please type or print)

Date (month, day, year): 11/21/24

1. Governmental Unit (Owner): City of Noblesville
2. County: Hamilton County, Indiana
3. Bidder (Firm): M3K Quality Truck Sales of Indianapolis, LLC
Address: 1401 Harding St
City/State/ZIPcode: Indianapolis, IN 46217
4. Telephone Number: (317) 784-3740
5. Agent of Bidder (if applicable): _____

Pursuant to notices given, the undersigned offers to furnish labor and/or material necessary to complete the public works project of one 2026 model year tandem axle Heavy dump truck.
(Governmental Unit) in accordance with plans and specifications prepared by M3K Mack

_____ and dated 11/21/24 for the sum of
one hundred eighty one thousand five hundred \$ \$181,500

The undersigned further agrees to furnish a bond or certified check with this bid for an amount specified in the notice of the letting. If alternative bids apply, the undersigned submits a proposal for each in accordance with the notice. Any addendums attached will be specifically referenced at the applicable page.

If additional units of material included in the contract are needed, the cost of units must be the same as that shown in the original contract if accepted by the governmental unit. If the bid is to be awarded on a unit basis, the itemization of the units shall be shown on a separate attachment.

The contractor and his subcontractors, if any, shall not discriminate against or intimidate any employee, or applicant for employment, to be employed in the performance of this contract, with respect to any matter directly or indirectly related to employment because of race, religion, color, sex, national origin or ancestry. Breach of this covenant may be regarded as a material breach of the contract.

CERTIFICATION OF USE OF UNITED STATES STEEL PRODUCTS (if applicable)

I, the undersigned bidder or agent as a contractor on a public works project, understand my statutory obligation to use steel products made in the United States (I.C. 5-16-8-2). I hereby certify that I and all subcontractors employed by me for this project will use U.S. steel products on this project if awarded. I understand that violations hereunder may result in forfeiture of contractual payments.

ACCEPTANCE

The above bid is accepted this _____ day of _____, _____, subject to the following conditions: _____

Contracting Authority Members:

PART II

(For projects of \$150,000 or more – IC 36-1-12-4)

Governmental Unit: City of Noblesville public works

Bidder (Firm) _____

Date (month, day, year): 11/21/24

These statements to be submitted under oath by each bidder with and as a part of his bid. Attach additional pages for each section as needed.

SECTION I EXPERIENCE QUESTIONNAIRE

1. What public works projects has your organization completed for the period of one (1) year prior to the date of the current bid?

Contract Amount	Class of Work	Completion Date	Name and Address of Owner
	N/A		

2. What public works projects are now in process of construction by your organization?

Contract Amount	Class of Work	Expected Completion Date	Name and Address of Owner
	N/A		

3. Have you ever failed to complete any work awarded to you? NO If so, where and why?

4. List references from private firms for which you have performed work.

SECTION II PLAN AND EQUIPMENT QUESTIONNAIRE

1. Explain your plan or layout for performing proposed work. *(Examples could include a narrative of when you could begin work, complete the project, number of workers, etc. and any other information which you believe would enable the governmental unit to consider your bid.)*

2. Please list the names and addresses of all subcontractors *(i.e. persons or firms outside your own firm who have performed part of the work)* that you have used on public works projects during the past five (5) years along with a brief description of the work done by each subcontractor.

3. If you intend to sublet any portion of the work, state the name and address of each subcontractor, equipment to be used by the subcontractor, and whether you will require a bond. However, if you are unable to currently provide a listing, please understand a listing must be provided prior to contract approval. Until the completion of the proposed project, you are under a continuing obligation to immediately notify the governmental unit in the event that you subsequently determine that you will use a subcontractor on the proposed project.

4. What equipment do you have available to use for the proposed project? Any equipment to be used by subcontractors may also be required to be listed by the governmental unit.

5. Have you entered into contracts or received offers for all materials which substantiate the prices used in preparing your proposal? If not, please explain the rationale used which would corroborate the prices listed.

SECTION III CONTRACTOR'S FINANCIAL STATEMENT

Attachment of bidder's financial statement is mandatory. Any bid submitted without said financial statement as required by statute shall thereby be rendered invalid. The financial statement provided hereunder to the governing body awarding the contract must be specific enough in detail so that said governing body can make a proper determination of the bidder's capability for completing the project if awarded.

SECTION IV CONTRACTOR'S NON – COLLUSION AFFIDAVIT

The undersigned bidder or agent, being duly sworn on oath, says that he has not, nor has any other member, representative, or agent of the firm, company, corporation or partnership represented by him, entered into any combination, collusion or agreement with any person relative to the price to be bid by anyone at such letting nor to prevent any person from bidding nor to include anyone to refrain from bidding, and that this bid is made without reference to any other bid and without any agreement, understanding or combination with any other person in reference to such bidding.

He further says that no person or persons, firms, or corporation has, have or will receive directly or indirectly, any rebate, fee, gift, commission or thing of value on account of such sale.

SECTION V OATH AND AFFIRMATION

I HEREBY AFFIRM UNDER THE PENALTIES FOR PERJURY THAT THE FACTS AND INFORMATION CONTAINED IN THE FOREGOING BID FOR PUBLIC WORKS ARE TRUE AND CORRECT.

Dated at _____ this 21st day of November, 2024

M3K Quality Truck Sales of Indianapolis, LLC
(Name of Organization)

By Logan Stammen
Sales Rep
(Title of Person Signing)

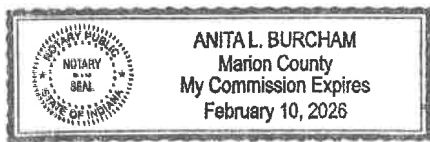
ACKNOWLEDGEMENT

STATE OF INDIANA)
COUNTY OF MARION) ss

Before me, a Notary Public, personally appeared the above-named Logan Stammen and swore that the statements contained in the foregoing document are true and correct.

Subscribed and sworn to before me this 21st day of Nov., 2024
Anita L. Burcham
Notary Public

My Commission Expires: Feb. 10, 2026
County of Residence: Marion



BID OF

M3K Quality Truck Sales of Indianapolis, LLC
(Contractor)

1401 Harding Ct, Indianapolis, In 46217
(Address)

FOR

PUBLIC WORKS PROJECTS

OF

2026 model year Heavy duty tandem dump

Filed _____

Action taken _____

NON-COLLUSION AFFIDAVIT

**2025 Tandem Axle Heavy Duty Dump Truck
Noblesville Utilities**

NOBLESVILLE, INDIANA

The Bidder, by its officers and agents or representatives present at the time of filing this bid, being duly sworn, on their oaths say that neither they nor any of them have in any way directly or indirectly entered into any arrangement or agreement with any other Bidder or with any public officer whereby such affiant or affiants, or either of them has paid or is to pay such other Bidder or public officer anything of value whatsoever, or such affiant or affiants, or either of them has not directly or indirectly entered into any arrangement with any other Bidder or Bidders which tends to or does lesson or destroy free competition in the letting of the contract sought for by the attached bids; that no inducement of any form or character other than that which appears upon the face of the bid will be suggested, offered, paid, or delivered to any person whomsoever to influence the acceptance of the said bid or awarding of the Contract, nor has this Bidder any agreement or understanding of any kind whatsoever with any person whomsoever, to pay, deliver to, or share with any person in any way or manner any of the proceeds of the Contract sought by this bid.

Witness our hands this 21st day of November, 2024.

Name: MJK Quality Truck Sales of Indianapolis, LLC

Address: 1401 Horseshoe Ct.

Indianapolis, IN 46217

By: Logan Stammen, Sales Rep.
Title

CNA SURETY

Bid Bond

Bond No. _____

CONTRACTOR:

(Name, legal status and address)

M&K Truck Centers

SURETY: Western Surety Company; South Dakota Corporation

(Name, legal status and principal place of business)

151 N. Franklin Street
17th Floor
Chicago, IL 60606

This document has important legal consequences. Consultation with an attorney is encouraged with respect to its completion or modification.

Any singular reference to Contractor, Surety, Owner or other party shall be considered plural where applicable.

OWNER:

(Name, legal status and address)

City of Noblesville

BOND AMOUNT: Ten Percent of the Attached Bid (**10%**)

PROJECT:

(Name, location or address, and Project number, if any)

tandem axle dump truck

The Contractor and Surety are bound to the Owner in the amount set forth above, for the payment of which the Contractor and Surety bind themselves, their heirs, executors, administrators, successors and assigns, jointly and severally, as provided herein. The conditions of this Bond are such that if the Owner accepts the bid of the Contractor within the time specified in the bid documents, or within such time period as may be agreed to by the Owner and Contractor, and the Contractor either (1) enters into a contract with the Owner in accordance with the terms of such bid, and gives such bond or bonds as may be specified in the bidding or Contract Documents, with a surety admitted in the jurisdiction of the Project and otherwise acceptable to the Owner, for the faithful performance of such Contract and for the prompt payment of labor and material furnished in the prosecution thereof; or (2) pays to the Owner the difference, not to exceed the amount of this Bond, between the amount specified in said bid and such larger amount for which the Owner may in good faith contract with another party to perform the work covered by said bid, then this obligation shall be null and void, otherwise to remain in full force and effect. The Surety hereby waives any notice of an agreement between the Owner and Contractor to extend the time in which the Owner may accept the bid. Waiver of notice by the Surety shall not apply to any extension exceeding sixty (60) days in the aggregate beyond the time for acceptance of bids specified in the bid documents, and the Owner and Contractor shall obtain the Surety's consent for an extension beyond sixty (60) days.

If this Bond is issued in connection with a subcontractor's bid to a Contractor, the term Contractor in this Bond shall be deemed to be Subcontractor and the term Owner shall be deemed to be Contractor.

When this Bond has been furnished to comply with a statutory or other legal requirement in the location of the Project, any provision in this Bond conflicting with said statutory or legal requirement shall be deemed deleted herefrom and provisions conforming to such statutory or other legal requirement shall be deemed incorporated herein. When so furnished, the intent is that this Bond shall be construed as a statutory bond and not as a common law bond.

Signed and sealed this 26 day of November, 2024.


(Witness)

M&K Truck Centers

(Principal)

(Seal)

(Title)

Western Surety Company

(Surety)



(Title) Rhett Pringle, Attorney-in-Fact


(Witness)



Printed in cooperation with the American Institute of Architects (AIA).

The language in this document conforms to the language used in AIA Document A310 - Bid Bond - 2010 Edition.

Western Surety Company

POWER OF ATTORNEY APPOINTING INDIVIDUAL ATTORNEY-IN-FACT

Know All Men By These Presents, That WESTERN SURETY COMPANY, a South Dakota corporation, is a duly organized and existing corporation having its principal office in the City of Sioux Falls, and State of South Dakota, and that it does by virtue of the signature and seal herein affixed hereby make, constitute and appoint

John Avery, Cathryn M Ware, Bradford J Poggi, Torrie Meier, Shelley R Henschel, Mackenzie Anderson, Rhett Pringle, Individually

of Grand Rapids, MI, its true and lawful Attorney(s)-in-Fact with full power and authority hereby conferred to sign, seal and execute for and on its behalf bonds, undertakings and other obligatory instruments of similar nature

- In Unlimited Amounts -

and to bind it thereby as fully and to the same extent as if such instruments were signed by a duly authorized officer of the corporation and all the acts of said Attorney, pursuant to the authority hereby given, are hereby ratified and confirmed.

This Power of Attorney is made and executed pursuant to and by authority of the Authorizing By-Laws and Resolutions printed at the bottom of this page, duly adopted, as indicated, by the shareholders of the corporation.

In Witness Whereof, WESTERN SURETY COMPANY has caused these presents to be signed by its Vice President and its corporate seal to be hereto affixed on this 4th day of September, 2024.



WESTERN SURETY COMPANY

Larry Kasten, Vice President

State of South Dakota }
County of Minnehaha } ss

On this 4th day of September, 2024, before me personally came Larry Kasten, to me known, who, being by me duly sworn, did depose and say: that he resides in the City of Sioux Falls, State of South Dakota; that he is a Vice President of WESTERN SURETY COMPANY described in and which executed the above instrument; that he knows the seal of said corporation; that the seal affixed to the said instrument is such corporate seal; that it was so affixed pursuant to authority given by the Board of Directors of said corporation and that he signed his name thereto pursuant to like authority, and acknowledges same to be the act and deed of said corporation.

My commission expires

March 2, 2026



M. Bent, Notary Public

CERTIFICATE

I, Paula Kolsrud, Assistant Secretary of WESTERN SURETY COMPANY do hereby certify that the Power of Attorney hereinabove set forth is still in force, and further certify that the By-Law and Resolutions of the corporation printed below this certificate are still in force. In testimony whereof I have hereunto subscribed my name and affixed the seal of the said corporation this 26 day of November, 2024



WESTERN SURETY COMPANY

Paula Kolsrud, Assistant Secretary

Authorizing By-Laws and Resolutions

ADOPTED BY THE SHAREHOLDERS OF WESTERN SURETY COMPANY

This Power of Attorney is made and executed pursuant to and by authority of the following By-Law duly adopted by the shareholders of the Company.

Section 7. All bonds, policies, undertakings, Powers of Attorney, or other obligations of the corporation shall be executed in the corporate name of the Company by the President, Secretary, and Assistant Secretary, Treasurer, or any Vice President, or by such other officers as the Board of Directors may authorize. The President, any Vice President, Secretary, any Assistant Secretary, or the Treasurer may appoint Attorneys in Fact or agents who shall have authority to issue bonds, policies, or undertakings in the name of the Company. The corporate seal is not necessary for the validity of any bonds, policies, undertakings, Powers of Attorney or other obligations of the corporation. The signature of any such officer and the corporate seal may be printed by facsimile.

This Power of Attorney is signed by Larry Kasten, Vice President, who has been authorized pursuant to the above Bylaw to execute power of attorneys on behalf of Western Surety Company.

This Power of Attorney may be signed by digital signature and sealed by a digital or otherwise electronic-formatted corporate seal under and by the authority of the following Resolution adopted by the Board of Directors of the Company by unanimous written consent dated the 27th day of April, 2022:

“RESOLVED: That it is in the best interest of the Company to periodically ratify and confirm any corporate documents signed by digital signatures and to ratify and confirm the use of a digital or otherwise electronic-formatted corporate seal, each to be considered the act and deed of the Company.”

Go to www.cnasurety.com > Owner / Oblige Services > Validate Bond Coverage, if you want to verify bond authenticity.

CITY OF NOBLESVILLE
NOBLESVILLE UTILITIES

2024 BID SPECIFICATIONS FOR TANDEM AXLE HEAVY DUTY DUMP TRUCK

1 ENGINE		
Peak Power Minimum 395 HP	<input checked="" type="radio"/> YES	<input type="radio"/> NO
Peak Torque 1550 lb-ft	<input checked="" type="radio"/> YES	<input type="radio"/> NO
Diesel	<input checked="" type="radio"/> YES	<input type="radio"/> NO
2 ENGINE EQUIPMENT		
Single element Air Cleaner with air intake from both sides of hood	<input checked="" type="radio"/> YES	<input type="radio"/> NO
37.4 CFM Air Compressor	<input checked="" type="radio"/> YES	<input type="radio"/> NO
Block heater 120v 1500w or equal	<input checked="" type="radio"/> YES	<input type="radio"/> NO
3 ENGINE ELECTRONICS		
Oil pressure, engine shutdown	<input checked="" type="radio"/> YES	<input type="radio"/> NO
Coolant temperature, engine shutdown	<input checked="" type="radio"/> YES	<input type="radio"/> NO
Engine Protection System (shutdown)	<input checked="" type="radio"/> YES	<input type="radio"/> NO
4 EXHAUST		
Single, vertical, cab mounted	<input checked="" type="radio"/> YES	<input type="radio"/> NO
5 CLUTCH/TRANSMISSION EQUIPMENT		
4000 RDS 6 speed Allison Gen 6w/prognostics, PTO provision	<input checked="" type="radio"/> YES	<input type="radio"/> NO
Approved equal?	<input type="radio"/> YES	<input type="radio"/> NO
Dash mounted shifter or equal	<input checked="" type="radio"/> YES	<input type="radio"/> NO
6 TRANSMISSION ELECTRONICS		
Dump/Vocational Transmission Package		
Allows truck to be put in gear without service brake	<input checked="" type="radio"/> YES	<input type="radio"/> NO

7 VEHICLE ELECTRONICS		
Road speed limiter	<input checked="" type="radio"/> YES	<input type="radio"/> NO
Pedal road speed limiter	<input checked="" type="radio"/> YES	<input type="radio"/> NO
Cruise control	<input checked="" type="radio"/> YES	<input type="radio"/> NO
Engine brake engage in cruise		
Engine brake engage in cruise, 3 MPH, above set speed	<input checked="" type="radio"/> YES	<input type="radio"/> NO

8 ELECTRICAL		
Back-up Alarm 107 db	<input checked="" type="radio"/> YES	<input type="radio"/> NO
LED Headlamp bulbs	<input checked="" type="radio"/> YES	<input type="radio"/> NO
Daytime running lights with override switch, park brake and engine running activated	Approved equal? <input checked="" type="radio"/> YES	<input type="radio"/> NO
Tail lamps - incandescent	or approved equal <input checked="" type="radio"/> YES	<input type="radio"/> NO

9 PTO		
Power Take Off Control transmission PTO switch and light with wiring and piping for local installation		<input checked="" type="radio"/> YES <input type="radio"/> NO

10 TRAILER CONNECTIONS		
Trailer brake valve electronic trailer brake controller w/ 7pin connector	<input checked="" type="radio"/> YES	<input type="radio"/> NO
Trailer Connection position Trailer air brake connections, end of frame	<input checked="" type="radio"/> YES	<input type="radio"/> NO

11 CAB INTERIOR		
Air Conditioning/Heater Blend air HVAC w/ATC temp regulation	<input checked="" type="radio"/> YES	<input type="radio"/> NO
Floor Covering - Polyurethane floor mat	<input checked="" type="radio"/> YES	<input type="radio"/> NO

AM/FM Stereo, Bluetooth

YES NO

12 FRAME EQUIPMENT/FUEL TANKS

Wheelbase 181" (min.)

YES NO

AF (Overhang) 57" (min.)

YES NO

Frame rails and Liners .37"x3.54"x11.81" min.

YES NO

6" bolt on frame extension

YES NO

Crossmembers - BOC and intermediate(s) steel HD
back to back channel

YES NO

Steel closing rear crossmember

YES NO

Extended-swept back-steel front bumper

YES NO

Towing device, front: Hooks

YES NO

Towing device, back: Hooks, frame mounted

YES NO

66 gallon fuel tank

YES NO

Braided fuel hoses

YES NO

2 step cab access

YES NO

13 FRONT AXLE EQUIPMENT

Front axle brakes: 16.5" x 6"

YES NO

Brake: Cast iron

YES NO

Hub material: Ferrous

YES NO

Double acting shock absorber

YES NO

Power steering

YES NO

14 REAR AXLE EQUIPMENT

Rear axle: fabricated steel housing

YES NO

Interaxle power divider lockout, w/buzzer and light	<input checked="" type="radio"/> YES	<input type="radio"/> NO
Rear axle ratio: 3.56 min.	<input checked="" type="radio"/> YES	<input type="radio"/> NO
Rear suspension: 40,000 lb. capacity min, 50" spacing min, bronze bushings	<input checked="" type="radio"/> YES	<input type="radio"/> NO
Urethane shock insulators, heavy duty	<input checked="" type="radio"/> YES	<input type="radio"/> NO
Traverse torque rod	<input checked="" type="radio"/> YES	<input type="radio"/> NO
Rear axle brake: 16.5"x7"	<input checked="" type="radio"/> YES	<input type="radio"/> NO
Brake: Cast iron	<input checked="" type="radio"/> YES	<input type="radio"/> NO

15 PAINT		
Color: White	<input checked="" type="radio"/> YES	<input type="radio"/> NO

16 WARRANTY & PURCHASED COVERAGES		
Chassis coverage: Heavy Duty base coverage; 12 months/100,000 miles	<input checked="" type="radio"/> YES	<input type="radio"/> NO
Engine warranty: Base engine coverage; 24 months/250,000 miles	<input checked="" type="radio"/> YES	<input type="radio"/> NO
Emission component coverage: 60 months/100,000 miles	<input checked="" type="radio"/> YES	<input type="radio"/> NO
Transmission warranty: per manufacturer		
Carrier & Axle housing warranty: 60 months/500,000 miles	<input checked="" type="radio"/> YES	<input type="radio"/> NO
Air conditioning warranty: 12 months unlimited mileage	<input checked="" type="radio"/> YES	<input type="radio"/> NO
Chassis Towing warranty: 90 days or 5,000 miles	<input checked="" type="radio"/> YES	<input type="radio"/> NO
Engine Towing warranty: 24 months/250,000 miles	<input checked="" type="radio"/> YES	<input type="radio"/> NO

17 Dump Body		
14' Dump Body	<input checked="" type="radio"/> YES	<input type="radio"/> NO
Steel sides, floor and ends	<input checked="" type="radio"/> YES	<input type="radio"/> NO

48" sides	<input checked="" type="radio"/> YES	<input type="radio"/> NO
54" 6-Panel Tailgate	<input checked="" type="radio"/> YES	<input type="radio"/> NO
Steps - inside and outside	<input checked="" type="radio"/> YES	<input type="radio"/> NO
30 Gallon Oil Tank	<input checked="" type="radio"/> YES	<input type="radio"/> NO
Hoses, Fittings and Control Tower	<input checked="" type="radio"/> YES	<input type="radio"/> NO
LED Stop/Turn & Tail Lights	<input checked="" type="radio"/> YES	<input type="radio"/> NO
Wiring Harness	<input checked="" type="radio"/> YES	<input type="radio"/> NO
Stop Cable	<input checked="" type="radio"/> YES	<input type="radio"/> NO
8" Spread Apron	<input checked="" type="radio"/> YES	<input type="radio"/> NO
Sludge Locks	<input checked="" type="radio"/> YES	<input type="radio"/> NO
6" Amber Strobe Lights	<input checked="" type="radio"/> YES	<input type="radio"/> NO
Spring Upper Mount Tarp System	<input checked="" type="radio"/> YES	<input type="radio"/> NO

CUSTOMER PROPOSAL

MAACK®



PREPARED FOR

M&K EQUIPMENT
4350 CLYDE PARK AVE SW
WYOMING
MI 495094090

DATE

11/21/2024

PREPARED BY

M&K QUAL TRK SALES OF INDIANAPOLIS,
LLC
1401 HARDING CT
INDIANAPOLIS
IN 46217-9538

QUOTE INFORMATION

MEYE2024000199D506
GRANITE 64BR
Qty: 1

Chassis Specs



1401 HARDING CT
INDIANAPOLIS, IN 46217
317-784-3740



Thank you for giving us this opportunity to provide a quote.

This proposal contains the complete specification and performance details of the Mack model configured for your application. Every proposed spec from Mack is prepared with lowest total cost of ownership and highest return on investment as the key objectives for our customers.

This reflects Mack's focus on application excellence to deliver uptime and fuel economy, reduced maintenance, driver satisfaction, productivity and high resale value. The enclosed spec and recommendations have been carefully designed to meet all these objectives.

Beyond the technical specifications contained in this proposal, it's important to remember that each Mack truck is backed by Mack Connect, the industry's leading uptime and productivity solution, plus a coast-to-coast network of dealer service locations. I think that after reviewing this proposal you will realize why Mack is "The American Truck You Can Count On."

I look forward to meeting with you and to discuss any questions you might have regarding this proposal.

Yours sincerely

PREPARED FOR
M&K EQUIPMENT
4350 CLYDE PARK AVE SW
WYOMING
MI 495094090

DATE
11/21/2024

PREPARED BY
M&K QUAL TRK SALES OF INDIANAPOLIS,
LLC
1401 HARDING CT
INDIANAPOLIS
IN 46217-9538

QUOTE INFORMATION
MEYE2024000199D506
GRANITE 64BR
Qty: 1

LOGAN STAMMEN

M&K QUAL TRK SALES OF INDIANAPOLIS, LLC

TECHNICAL SPECIFICATION

GRANITE 64BR



				WEIGHT (LB)	
MODEL DEFINING		DESCRIPTION		FRONT	REAR
S	PB100K	PRICE BOOK LEVEL	2026A Pricebook	0	0
S	LAX05X	VOLTAGE	ELECTRICAL SYSTEM 12 VOLT	0	0

				WEIGHT (LB)	
APPLICATION PACKAGES		DESCRIPTION		FRONT	REAR
	MPK0LK	CHASSIS CONFIGURATION PACKAGE	ONEBOX EATS, RH BATTERY BOX, 6.6 GALLON (25L) SLEEVED DEF, 22" SLEEVED LH FUEL TANK	0	0
S	MBP02P	BODY BUILDER PACKAGE	WITHOUT BODY BUILDER PKG	0	0

				WEIGHT (LB)	
CUSTOMER/VEHICLE INFO		DESCRIPTION		FRONT	REAR
S	002EO2	CHASSIS (BASE MODEL)	GRANITE 64BR	4,857	1,848
S	99X93X	ASSEMBLY PLANT	Made in Macungie, PA USA	0	0
	MP2001	CUSTOMER FLEET SIZE	DEALER FLEET WITH LESS THAN 25 VEHICLES IN OWN FLEET OF ANY VEHICLE BRAND	0	0
S	013001	TYPE OF SERVICE	COMMERCIAL	0	0
S	M98018	WARRANTY REGISTRATION LOCATION	USA - WARRANTY REGISTRATION LOCATION	0	0
	MBT01T	EMISSION WARRANTY CERTIFICATION	EPA (only) for Mack MP7 / MP8 Diesel	0	0
	694DDD	Order Subject to Meeting All Mack Policies, Terms and Conditions,	Including but not Limited to Applicable CARB and/or Section 177 States' Regulation requirements	0	0
	M84014	INTENDED REGISTRATION LOCATION	INDIANA	0	0
S	5050B5	INITIAL REGISTRATION LOCATION	USA REGISTRATION	0	0
	5FFB1X	BRAND ORNAMENT	BULLDOG, CHROME	0	0
S	534014	LANGUAGE-PUBS/DECAL/SIGNS	ENGLISH	0	0
S	DHX10X	ROAD CONDITION	WELL MAINTAINED SURFACED ROADS >95% DRIVING DISTANCE	0	0
	0050L5	VEHICLE USE & BODY/TRAILER TYPE	DUMP TRUCK	0	0
	2KEC1X	TRAILER TYPE	FIXED DRAWBAR TRAILER AND CENTERED AXLES	0	0
	DKXEDX	GROSS COMBINATION WEIGHT (CA in PC29 only)	65,000 LB (29.5 TONNES) GROSS COMBINATION WEIGHT	0	0
S	70BB1X	BRAKE REGULATION	BRAKE REGULATION, STOPPING DISTANCE 94M (310FT)	0	0
	QCXA1X	TOPOGRAPHY	GRADES <3% GREATER THAN 98% OF DRIVING DISTANCE MAX GRADE 8%	0	0
S	E1BD1X	AMBIENT TEMP UPPER LIMIT	AMBIENT TEMPERATURE HOT. WARMER THAN 104 F (40 C) ALLOWED UP TO 25 HOURS PER YEAR	0	0
S	032A89	OPERATING TERRAIN GRADE CONDITIONS	ON-OFF HIGHWAY, STARTING GRADES<18%	0	0
S	033A10	LOADING SURFACE FACTOR	CONCRETE LOADING AND / OR UNLOADING SURFACE	0	0
	0342A2	VEHICLE VOCATION	CONSTRUCTION SERVICE	0	0

				WEIGHT (LB)	
ENGINE/TRANSMISSIONS		DESCRIPTION		FRONT	REAR
	100400	ENGINE / MOTOR	MP7-395C MACK 395HP @ 1450-1700 RPM (PEAK) 1950 RPM (GOV) 1550 LB-FT, US'21	2,549	-231
S	3GCB1X	GHG APPLICATION, VEHICLE	GREEN HOUSE GAS VOCATIONAL APPLICATION	0	0
	136236	TRANSMISSION	4000 RDS 6 SPEED ALLISON GEN 6 W/PROGNOSTICS, WITH PTO PROVISION	732	245
S	V4EZ9X	GEARBOX 12TH GEAR LOCK-OUT	WITHOUT 12TH GEARBOX GEAR LOCK-OUT	0	0

TECHNICAL SPECIFICATION (cont.)



EXHAUST/EMISSIONS		DESCRIPTION	WEIGHT (LB)		
			FRONT	REAR	
	Z8FT1X	NOX LIMITS	CARB LEGACY / EPA (200MG/HP/HR), 50 State Idle Compliance	0	0
S	Y7BC1X	IDLE EMISSION LABEL LOCATION (CA in PC29 only)	IDLE EMISSION LABEL LOCATION, LOWER LH CORNER OF DRIVER DOOR	0	0
S	DPF04F	DPF DIESEL PARTICULATE FILTER	CLEARTECH ONE BOX E.A.T.S. RH SIDE UNDER CAB US17 / US21	0	0
S	MCF07F	CHASSIS MOUNTED EMISSIONS FINISH	W/O DEF COVER & PAINTED DPF COVER	0	0
S	DF1001	DIESEL EXHAUST FLUID TANK	6.6 GALLON (25 L) 22" LEFT SIDE FUEL TANK MTD	89	31
	130AD7	EXHAUST	SINGLE VERTICAL RIGHT SIDE CAB MOUNTED, LOWER VENTURI DIFFUSER, TURNED END	-35	-17
	KRXAPX	EXHAUST STACK HEIGHT	9' 6" FROM GROUND	0	0
S	Q0AA1X	EXHAUST - BRIGHT FINISH	W/O BRIGHT FINISH EXHAUST	0	0
	78AAAX	EMISSION ON BOARD DIAG CONTROL	EMISSION OBD, DISPLAY ONLY, USA2025	0	0

ENGINE EQUIPMENT		DESCRIPTION	WEIGHT (LB)		
			FRONT	REAR	
S	125045	AIR CLEANER	UNDER HOOD SINGLE ELEMENT DRY TYPE W/AIR INTAKE FROM BOTH SIDES OF HOOD	0	0
S	121AA5	BUG SCREEN	BLACK ALUMINUM BUG SCREEN MOUNTED BEHIND GRILLE, WITHOUT WINTER FRONT COVER	0	0
S	1130G3	AIR COMPRESSOR/DRYER	WABCO HEATED SS-HP AIR DRYER W/ WABCO 636 (37.4 CFM) AIR COMPRESSOR	0	0
S	KOXA1X	AIR DRYER POSITION (CA)	AIR DRYER POSITION STANDARD	0	0
S	132AB9	ALTERNATOR	DELCO 12V 160A (28SI) BRUSH-TYPE	16	0
S	316AA5	BATTERIES	(3) MACK 12V 760/2280 CCA THREADED STUD TYPE	7	3
S	393AB0	BATTERY BOX - MOUNTING (x)	RH RAIL BEHIND SCR	0	0
S	L5XA1X	BATTERY BOX COVER	MOLDED PLASTIC	0	0
S	NCXA5X	STARTER MOTOR	12 VOLT DELCO 39MT-MXT	31	0
	110AA5	ENGINE BRAKE	MACK MP7 POWERLEASH	0	0
S	JMXB1X	VEHICLE/TRAILER STOP LAMP APPLICATION (CA)	VEHICLE AND TRAILER (IF APPLICABLE) STOP LAMPS ACTIVATE UPON SERVICE BRAKE APPLICATION ONLY(3899000)	0	0
S	J2EAAX	ENGINE BRAKE ACTIVATION	ENGINE BRAKE ACTIVATION, BASIC	0	0
S	118AB8	FAN DRIVE	BEHR FAN AND ELECTRONIC MODULATING VISCOUS FAN DRIVE	0	0
S	119A19	COOLANT PROTECTION	ETHYLENE GLYCOL FULLY FORMULATED COOLANT (50/50 MIX DYED PINK) TO -34DEG, W/ FILTER	0	0
S	124AA3	HOSES - RADIATOR/HEATER	MACK EPDM RADIATOR & HEATER HOSES	0	0
S	293043	FUEL-WATER SEPARATOR	MACK W/MANUAL DRAIN VALVE V2 (INTEGRAL W/ PRIMARY FUEL FILTER)	0	0
S	MBXA1X	RELOCATE FUEL FILTER (CA)	STANDARD FUEL FILTER POSITION	0	0
S	MCA04A	ENGINE HEATERS	120v 1500w BLOCK HEATER ONLY (120V-15A PLUG)	0	0
	5NXA1X	ENGINE BLOCK HEATER	120V 1500W ENGINE BLOCK HEATER	5	0
S	QHXC1X	OIL SUMP	OIL PAN	0	0
S	2YBZ1X	EMERGENCY ENGINE STOP (CA)	WITHOUT ENGINE STOP, EMERGENCY	0	0

CLUTCH/TRANS EQUIPMENT		DESCRIPTION	WEIGHT (LB)		
			FRONT	REAR	
	492007	GEAR SHIFTER	ALLISON DASH MOUNTED SHIFTER W/NEUTRAL TO RANGE INHIBIT (HD SERIES)	0	0
S	MCB05B	CLUTCH ACTUATION SYSTEM & PEDAL PAD	WITHOUT CLUTCH CABLE SYSTEM	0	0
	MRP002	MINIMUM REQUIRED DRIVELINE SIZE (KAX)	MINIMUM REQUIRED DRIVELINE FOR KAX, PROPS-M	0	0
	195AB0	DRIVELINE - MAIN	MERITOR 18 MXL "XTENDED LUBE" (PROPS-L)	0	0

TECHNICAL SPECIFICATION *(cont.)*



			WEIGHT (LB)	
CLUTCH/TRANS EQUIPMENT		DESCRIPTION	FRONT	REAR
	204AA6	DRIVELINE - INTERAXLE	0	31
	76AA1X	DRIVESHAFT MAIN U-JOINT	0	0
S	8WAAAX	DRIVESHAFT INTERAXLE U-JOINT	0	0
S	4LDA1X	TRANSMISSION OUTPUT TORQUE	0	0
	7RXAEX	LUBRICANTS, TRANSMISSION	0	0
	139008	TRANSMISSION OIL COOLER	0	0

			WEIGHT (LB)	
FRONT AXLE EQUIPMENT		DESCRIPTION	FRONT	REAR
S	240AA2	FRONT AXLE	325	0
S	244AB1	SPRINGS - FRONT	27	0
	241081	BRAKES - FRONT	29	0
	U3XA1X	BRAKE DRUMS - FRONT	0	0
	U0AA1X	SLACK ADJUSTERS - FRONT	0	0
	V7AB1X	BRAKE CHAMBERS - FRONT	0	0
	0KXA1X	HUBS - FRONT	157	0
S	61500A	FRONT AXLE LUBRICANT	0	0
S	1KAA1X	SHOCK ABSORBERS - FRONT	0	0
S	245AA3	STEERING	175	0

			WEIGHT (LB)	
REAR AXLE EQUIPMENT		DESCRIPTION	FRONT	REAR
	268055	REAR AXLE	0	1,445
S	6MAA1X	WIDE TRACK AXLE OPTION	0	0
S	617003	DRIVE AXLE LUBRICANT	0	0
S	01800R	CARRIER - REAR AXLE	0	0
S	3LAC1X	POWER DIVIDER LOCKOUT	0	40
	TAXAWX	REAR AXLE RATIO	0	0
	18603Y	REAR SUSPENSION	0	1,687
	XZXA1X	TRUNNION BUSHING	0	36
S	GWXABX	BOGIE SPREAD, REAR	0	12
	2AAABX	SHOCK INSULATORS	0	5
S	XYXB1X	TRANSVERSE TORQUE RODS	0	0
S	237037	AUX.SPRING BRAKE QTY	0	20
S	253AA4	BRAKES - REAR	0	-35
S	U4XA1X	BRAKE DRUMS - REAR	0	0
S	U1AA1X	SLACK ADJUSTERS - REAR	0	0
	V1AB1X	REAR BRAKE CHAMBER SIZE	0	0
	N5FAJX	BRAKE ORI REAR-MOST DRIVE AXLE	0	0
S	300AS0	PARKING BRAKE CHAMBER	0	0
S	0LXI5X	HUBS - REAR	0	318

TECHNICAL SPECIFICATION *(cont.)*



			WEIGHT (LB)		
REAR AXLE EQUIPMENT		DESCRIPTION	FRONT	REAR	
	9GAABX	ABS SENSOR/CHANNEL OPTION	6S/6M SYSTEM SENSING BOTH REAR AXLES W/WHEEL END SENSORS	5	0
S	6980C8	ANTILOCK BRAKE SYSTEM	MACK ROAD STABILITY ADV.BENDIX ABS/ATC/RSA W/YAW CNTRLW/MUD/SNOW SW; REQ-TRUCK APPL 6S6M	0	0
S	URXD1X	AIR SYSTEM VALVE VENDOR	BENDIX SWITCHES AND VALVES WHERE POSSIBLE	0	0
S	H9CA1X	TRACTION CONTROL DISABLE (CA in PC29 only)	AUTOMATIC TRACTION CONTROL (ATC) FULL DISABLE SWITCH	0	0
S	3ZAA1X	SPRING BRAKE INVERSION VALVE	TRACTOR SPRING BRAKE INVERSION VALVE	5	0

			WEIGHT (LB)		
FRAME EQUIPMENT/FUEL TANKS		DESCRIPTION	FRONT	REAR	
	271181	WHEELBASE	181"	3	3
	374057	AF (OVERHANG)	57"	-6	168
	MCE08E	FRAME RAILS & LINERS	9.5 x 90 x 300mm - (0.37" x 3.54" x 11.81"); RBM 2,470,000 LB-IN	0	0
S	5CAAA1X	BOLT ON FRONT FRAME EXTENSION	6" BOLT ON FRAME EXTENSION	155	-2
S	A0XK1X	FRONT FRAME LENGTH	STANDARD BUMPER POSITION	31	-4
S	281AA5	CROSSMEMBERS	BOC AND INTERMEDIATE(S) STEEL HD BACK-TO-BACK CHANNEL	0	0
S	Q5AA1X	REAR CROSSMEMBER OPTIONS	STEEL CLOSING REAR CROSSMEMBER	-8	49
S	X6XA1X	TAPERED FRAME RAIL ENDS	WITHOUT TAPERED FRAME RAIL ENDS	0	0
S	4DXM9X	FRONT BUMPER	EXTENDED-SWEPT BACK-STEEL	0	0
	5FXA1X	RADIATOR GUARD	PLATE TYPE	38	-4
S	4ZAAAX	TRUNNION BRACKET	BASIC SOLUTION TRUNNION BRACKET, STD HEIGHT	0	0
S	4EXG1X	TOWING DEVICE, FRONT	HOOKS	0	0
	6PXD1X	TOWING DEVICE, REAR	HOOKS - FRAME MOUNTED	-6	27
S	2RAA1X	FUEL LEVEL SENDER UNIT, LIQUID	BASIC FUEL LEVEL SENDER MOUNTED ON L.H TANK	0	0
S	288AF2	FUEL TANK - LH	66 GALLON (250 L) 22" ALUMINUM, SLEEVED D-SHAPED	142	71
S	290AA1	FUEL TANK - RH	W/O RH FUEL TANK	0	0
S	JHXB1X	FUEL LINE MATERIAL	BRAIDED HOSE	5	3
S	8520C2	FUEL FILLER NECK OPTIONS	WITHOUT FILLER NECK SCREEN, WITH NON-LOCKABLE FUEL TANK CAP	0	0
	12AA1X	FUEL SYSTEM - DUAL	W/O FUEL LINE OPTION	0	0
S	Q2AA1X	CAB ACCESS STEPS	STANDARD 2 STEP CAB ACCESS	0	0
S	223AA3	STEPS (BRIGHT) - FUEL TANK	STANDARD FINISH STEPS AND BRIGHT FINISH STRAPS	0	0

			WEIGHT (LB)		
AIR/BRAKE		DESCRIPTION	FRONT	REAR	
S	141AA1	RELOCATE AIR RESERVOIRS	W/O RELOCATED AIR TANKS	0	0
S	UWXC1X	AIR TANK DRAIN VALVE	MANUAL (PETCOCK) DRAIN VALVES ON ALL TANKS	0	0
S	U2XB1X	AIR RESERVOIRS	STEEL AIR TANK PAINTED CHASSIS COLOR	0	0
S	3MBA1X	PARK BRAKE ALARM	ALARM TO SOUND WHEN DRIVER DOOR OPENED & PARKING BRAKE NOT ON	0	0
	1JAABX	PARKING BRAKE VALVE	TWO (2) VALVE DUAL BRAKE SYSTEM - TRAILER SUPPLY AND TRACTOR-TRAILER PARK	0	0

			WEIGHT (LB)		
ELECTRICAL		DESCRIPTION	FRONT	REAR	
	5RXA6X	BACK-UP ALARM	ECCO BACK-UP ALARM 575 CONSTANT SOUND LEVEL 107 dB	0	3

TECHNICAL SPECIFICATION (cont.)



			WEIGHT (LB)	
ELECTRICAL		DESCRIPTION	FRONT	REAR
	EAXD4X	DASH MOUNTED SWITCHES	0	0
S	3120A2	ROOF & SIDE MARKER LIGHTS	0	0
S	LJXCAX	HEADLAMP BULB TYPE	0	0
S	LSXJ7X	DAYTIME RUNNING LIGHTS	0	0
S	X2AA1X	DRL OVERRIDE SPEED THRESHOLD	0	0
S	NEXC1X	TAIL LAMPS	0	7

			WEIGHT (LB)	
TRAILER CONNECTIONS		DESCRIPTION	FRONT	REAR
	WGXD1X	HAND CONTROL VALVE	0	0
	WHXQ2X	TRAILER CONNECTIONS	23	23
CA	3210M1	TRAILER ELECTRICAL RECEPT	0	0
S	3SAZ1X	TRAILER CONNECTORS HOLDER	3	0

			WEIGHT (LB)	
PTO		DESCRIPTION	FRONT	REAR
	TYXE1X	PTO - CONTROL	3	0
S	B83083	BODY BUILDER INTERFACE	5	5

			WEIGHT (LB)	
SPECIALTY EQUIPMENT		DESCRIPTION	FRONT	REAR
S	MCQ01Q	LANE SUPPORT SYSTEM (LSS)	0	0
S	2PEZ1X	DATA CAPTURE	0	0
S	1PAZ1X	SURVEILLANCE CAMERA OPTIONS (CA)	0	0

			WEIGHT (LB)	
CAB INTERIOR (A THRU G)		DESCRIPTION	FRONT	REAR
S	198048	SPEEDOMETER -&- GAUGES - UNIT(s) OF MEASURE	0	0
	E1AAAX	GAUGE OIL TEMP-REAR AXLE	0	0
	I6AA1X	AUX.INCAB PNEUMATIC LINE	0	0
S	4AXC1X	CLIMATE UNIT	0	0
S	EEXA1X	CUPHOLDER	0	0
S	I0XAHX	DOME LAMP, INTERIOR	0	0
S	3XAA1X	DASH INDICATOR - LAMP BODY OUT OF POS	0	0
	7860E6	FIRE EXTINGUISHER	9	0
S	V8DZ1X	CARBON MONOXIDE DETECTION SYS	0	0
S	184AA2	FLOOR COVERING	0	0

TECHNICAL SPECIFICATION *(cont.)*



				WEIGHT (LB)	
CAB INTERIOR (H THRU R)		DESCRIPTION		FRONT	REAR
S	C52082	INSTRUMENT CLUSTER LANGUAGE	DEFAULT: ENGLISH, SPANISH, FRENCH	0	0
S	20XA1X	KEY TYPES FOR DOORS	ALL CHASSIS KEYPED AT RANDOM	0	0
S	13AA1X	KEYLESS ENTRY	W/O ELECTRONIC KEYLESS ENTRY	0	0
S	E3XD1X	OVERHEAD CONSOLE	(2) STORAGE COMPARTMENTS AND NET RETAINERS W/CENTER MOUNTING FOR CB PROVISIONS	0	0
S	1740D4	RADIO/RADIO ACCOMMODATION	PREMIUM STEREO, AM/FM, MP3, WEATHER BAND, BLUETOOTH	0	0
S	73AC1X	RADIO - ANTENNA	RADIO ANTENNA, CAB MOUNTED BEHIND LH DOOR	0	0
	5BXB5X	RADIO ANTENNA - CB	48" ANTENNA LEFT SIDE MIRROR MOUNTED	0	0
S	1WAB1X	RADIO - BINDING POSTS FOR CB	POWER LEADS (5-WAY BINDING POSTS FOR CB RADIO) IN HEADER CONSOLE	0	0
S	5CXB2X	AUDIO SPEAKER LOCATION	SPEAKER LOCATION, IN DOORS, MIDDLE HIGH SIDE PANEL	0	0
S	5JXAIX	RADIO - CB RADIO MOUNTING	CB RADIO MOUNTING REINFORCEMENT IN HEADER CONSOLE	0	0
S	IFXB1X	REAR WALL STORAGE COMPARTMENT	STORAGE POUCH REAR	5	0
	784054	REFLECTOR KIT	EMERGENCY REFLECTOR KIT MOUNTED PARALLEL & CENTERED AGAINST BOC	12	5

				WEIGHT (LB)	
CAB INTERIOR (S THRU Z)		DESCRIPTION		FRONT	REAR
S	004014	INTERIOR TRIM LEVELS	COMFORT TRIM PACKAGE, STEEL GRAY (Package 11A)	0	0
S	196AAA	SEAT - DRIVER'S	MACK-AIR, HIGH BACK, 1 CHAMBER AIR LUMBAR	71	16
S	MAP05P	SEAT COVERING - DRIVER'S	DRIVER'S SEAT - BLENDED BLACK & GREY VINYL	0	0
	197AA2	SEAT - PASSENGER'S	MACK-FIXED, HIGH BACK, W/ STORAGE BOX	40	9
S	MAQ06Q	SEAT COVERING - PASSENGER'S	PASSENGER'S SEAT - BLENDED BLACK & GREY VINYL	0	0
	3PXC1X	SEAT ARM REST(S)	INBOARD MOUNTED ARM REST, DRIVER'S & RIDER'S SEAT	5	3
S	592092	SEAT BELT(S)	LAP & SHOULDER (BOTH SEATS) CAB MOUNTED SHOULDER BELT ADJUSTMENT	0	0
S	D8XC1X	SEAT BELT WARNING INDICATOR	SEAT BELT REMINDER IN INSTRUMENT, WITH AUDIO	0	0
S	2QAA1X	STARTER SWITCH	KEY TYPE	0	0
S	161011	STEERING WHEEL	2 SPOKE URETHANE GRIP, SATIN ALUMINUM SPOKES, WITH SWITCHES	0	0
S	WSXBAX	WINDSHIELD TYPE	TWO PIECE WINDSHIELD	0	0
S	145AA1	CAB GLASS	TINTED WINDSHIELD & SIDE WINDOWS & REAR WINDOW (IF EQUIPPED)	0	0
S	JQXAAX	WINDSHIELD WASHER	W/O WINDSHIELD WASHER OPTION	0	0
S	148AA3	WINDSHIELD WIPERS	2 SPEED ELECTRIC MOTOR W/INTERMITTENT FEATURE	0	0

				WEIGHT (LB)	
CAB EXTERIOR		DESCRIPTION		FRONT	REAR
S	MCY02Y	HOOD LATCH TYPE & FINISH	STRAP TYPE HOOD LATCH WITH BLACK FINISH	0	0
S	MCG0AG	EXTERIOR TRIM FINISH AND PACKAGES	GRANITE BRIGHT AIR INTAKE	0	0
S	400010	GRILLE	BLACK FINISH BARS W/BRIGHT FINISH SURROUND GRILL MOUNTED	0	0
S	89AA1X	HOOD INSULATION	HOOD INSULATION	0	0
S	MCD03D	PASSENGER SIDE VISIBILITY OPTIONS	AUXILIARY WINDOW IN RH DOOR	3	0
S	2KXB1X	FENDER EXTENSIONS	FENDER EXTENSIONS	5	0
	5870B7	GRAB HANDLES	BF EXTERIOR CAB GRAB HANDLES, BLACK GRAB HANDLE RH INTERIOR WINDSHIELD POST	0	0
S	154AA2	HORN - AIR	(1) MACK RECTANGULAR SINGLE TRUMPET	5	0

TECHNICAL SPECIFICATION *(cont.)*



				WEIGHT (LB)	
CAB EXTERIOR		DESCRIPTION		FRONT	REAR
S	LXXD1X	HORN - ELECTRICAL	DUAL TONE	5	0
S	1520B2	MIRRORS - EXTERIOR	FLAT MIRROR - POLISHED ALUMINUM FINSH, W/O LAMPS	0	0
S	153AA2	MIRRORS - CONVEX TYPE CAB DOORS	BRIGHT FINISH, LH & RH, 8" DIAMETER CONVEX	0	0
	15H0BH	MIRROR - CONVEX HOOD & FENDER	VELVAC HOOD MOUNTED FIXED ARM DUAL VIEW W/ CONVEX MIRROR R.H. & L.H.	7	0

				WEIGHT (LB)	
AERODYNAMIC DEVICES		DESCRIPTION		FRONT	REAR
S	159AA1	CAB AERODYNAMIC PACKAGES	WITHOUT CAB AERODYNAMIC DEVICES	0	0
S	MCM998	FRONT CHASSIS AERODYNAMIC PACKAGE	WITHOUT FRONT AERODYNAMIC FAIRINGS	0	0

				WEIGHT (LB)	
WHEELS & TIRES		DESCRIPTION		FRONT	REAR
	900460	TIRES BRAND/TYPE - FRONT	425/65R22.5 L BRIDGESTONE M864 (22800 lbs) (Total for QTY = 2)	380	0
	531141	WHEELS - FRONT	22.5x12.25 MAXION 222204x WHITE POWDER COATED STEEL, 5.28" OFFSET, 5 HAND HOLE (Total for QTY = 2)	221	0
	901AJ6	TIRES BRAND/TYPE - REAR	11R22.5 H BRIDGESTONE M799 (24020 lbs) (DRIVE ONLY) (Total for QTY = 8)	0	988
	3461E6	WHEELS - REAR	22.5x8.25 MAXION 91262x WHITE POWDER COAT STEEL, 6.62" OFFSET, 5 HAND HOLE (Total for QTY = 8)	0	512
S	15XABX	VALVE STEMS & CAPS	STANDARD VALVE STEMS AND CAPS	0	0
S	MCH03H	FRONT HUB/WHEEL TRIM	WITHOUT FRONT HUB/WHEEL TRIM	0	0
S	MCI03I	REAR HUB/WHEEL TRIM	WITHOUT REAR HUB/WHEEL TRIM (Total for QTY = 2)	0	0
S	80AA1X	WHEEL NUT & FINISH - FRONT (CA)	WHEEL NUT BASIC FINISH, FRONT	0	0
S	3PBA1X	WHEEL NUT & FINISH - REAR (CA)	WHEEL NUT BASIC FINISH, REAR	0	0

				WEIGHT (LB)	
COMMUNICATION SYSTEMS		DESCRIPTION		FRONT	REAR
S	3YAA1X	CO-PILOT - DISPLAY FEATURES ACCESS LEVEL	CO-PILOT DISPLAY, DRIVER ACCESS LEVEL 1	0	0
S	M30060	TELEMATIC GATEWAY	TELEMATICS GATEWAY, 4G/LTE AND WLAN SYSTEM WITH DIAGNOSTIC SERVICES	0	0

				WEIGHT (LB)	
ENGINE ELECTRONICS		DESCRIPTION		FRONT	REAR
S	WOXA1X	SHUTDOWN-ENG.OIL PRESSURE	OIL PRESSURE, ENGINE SHUTDOWN	0	0
	WIXAAX	SHUTDOWN-ENG.COOLANT LVL.	COOLANT LEVEL ENGINE SHUTDOWN	0	0
S	WMXA1X	SHUTDOWN-ENG.COOLANT TEMP	COOLANT TEMP, ENGINE SHUTDOWN	0	0
S	K5XA2X	ENG /OIL TEMP SHUTDOWN	ENGINE PROTECTION (SHUTDOWN)	0	0
	C7AABX	FAN ENGAGEMENT TIME-A/C	ENG FAN CONTROL, A/C ON, TIME SETTING, 60 SEC	0	0
	K7XY3X	LOW IDLE ENGINE RPM	IDLE CONTROL, 700 RPM	0	0
	I1AAAX	LOW IDLE RPM ADJUSTMENT	LOW IDLE RPM ADJUSTMENT	0	0
S	X0AB0X	IDLE RPM UP W/LOW VOLTAGE	INCREASE 10 MINUTE MAXIMUM TIME	0	0
S	M3CA1X	IDLE S/D ABS TAMPER CHECK	IDLE SHUTDOWN ABS TAMPER CHECK, ENABLED	0	0
S	B1ACAX	IDLE S/D WARNING TIME	30 SEC IDLE S/D WARNING TIME	0	0
S	A8AALX	IDLE S/D IF WARM-UP TEMP	38C DEG (100F), WARM UP TEMP DELAY	0	0

TECHNICAL SPECIFICATION (cont.)



				WEIGHT (LB)	
ENGINE ELECTRONICS		DESCRIPTION		FRONT	REAR
S	A4AAEX	IDLE S/D WARM-UP TIMER	5 MIN. WARM UP TIME DELAY	0	0
S	A6AABX	IDLE S/D IF PTO ACTIVE	ENGINE IDLE SHUTDOWN TIME OVERRIDDEN IF PTO ACTIVE	0	0
S	B0AAAX	IDLE SHUTDOWN IF POWER > LIMIT	ENG IDLE SHUTDOWN TIME OVERRIDDEN IF TORQUE > THAN LIMIT	0	0
S	M4CB1X	IDLE S/D OVERRIDE %ENGINE LOAD	IDLE SHUTDOWN OVERRIDE UPTO 20% ENGINE LOAD THRESHOLD	0	0
S	D2AAFX	AMBIENT TEMP MIN TRESHOLD	AMBIENT TEMP MIN TRESHOLD, 16 DEG C, (60 DEG F)	0	0
S	D3AAEX	AMBIENT TEMP MAX TRESHOLD	AMBIENT TEMP MAX TRESHOLD, 27 DEG C, (80 DEG F)	0	0
S	B6ABAX	EHT, MAX ENG SPEED	ELECTRONIC HAND THROTTLE, MAX ENGINE SPEED, 1000 RPM	0	0
S	B4ADAX	EHT, MIN ENG SPEED	ELECTRONIC HAND THROTTLE, MIN ENGINE SPEED, 700 RPM	0	0
S	B9AABX	EHT, SPEED RAMP RATE	ELECTRONIC HAND THROTTLE, SPEED RAMP RATE, 100 RPM/SEC	0	0
	L9CB1X	EHT HOLD TO NEAREST RPM	ELECTRONIC HAND THROTTLE HOLD TO NEAREST 50RPM	0	0
	M1CB1X	EHT ACCEL BUMP-UP RPM	ELECTRONIC HAND THROTTLE ACCEL "BUMP-UP" 50RPM	0	0
	M2CB1X	EHT DECEL BUMP-DOWN RPM	ELECTRONIC HAND THROTTLE DECEL "BUMP-DOWN" 50RPM	0	0

				WEIGHT (LB)	
TRANSMISSION ELECTRONICS		DESCRIPTION		FRONT	REAR
	7790L9	TRANSMISSION ELECTRONICS PACKAGE	DUMP/VOCATIONAL(223) - ALLOWS TRUCK TO BE PUT IN GEAR WITHOUT SERVICE BRAKE (FOR PAVING)	0	0
	B1EC1X	TRANSM AUTO NEUTRAL ON P-BRAKE	ALLISON PARK BRAKE AUTO NEUTRAL-ALLOWS THE DRIVER TO ENGAGE GEAR PRIOR TO DISENGAGING THE PARK BRAKE	0	0
	MAV0AV	TRANSMISSION ELECTRONIC SHIFTING PROPERTIES	FUELSENSE, FULL NEUTRAL AT STOP	0	0

				WEIGHT (LB)	
VEHICLE ELECTRONICS		DESCRIPTION		FRONT	REAR
	JCXF1X	ROAD SPEED LIMIT (RSL)	110 KM/H ROAD SPEED LIMITER (68MPH)	0	0
	Y3CD0X	PEDAL SPEED LIMITER	110 KM/H PEDAL ROAD SPEED LIMITER (68MPH)	0	0
S	JDXA1X	CRUISE CONTROL	CRUISE CONTROL	0	0
	JFXLRX	CRUISE CONTROL, MAX SPEED	MAX CRUISE, 110 KPH (68 MPH)	0	0
	E3AAAX	CRUISE CONTROL MIN SPEED	MIN CRUISE, 16 KPH (10 MPH)	0	0
S	E5AACX	ENG BRAKE ENGAGE IN CRUISE	ENG BRK ENGAGE IN CRUISE, 3 MPH, ABOVE SET SPEED	0	0
	L2CB1X	PDLO ENGAGED VLS	POWER DIVIDER LOCK OUT (PDLO) ROAD SPEED LIMIT 24KMH (15MPH)	0	0
	Q6FZ1X	DIFF LOCK SPEED LIMIT	WITHOUT DIFFERENTIAL LOCK ROAD SPEED LIMIT	0	0
	W5BD2X	MAXIMUM ENG SPEED AT 0 MPH	1350 MAXIMUM ENGINE SPEED AT 0 MPH	0	0
S	A4BAAX	SPEED SENSOR TAMPERING DETECTION	DETECTION OF SPEED SENSOR TAMPERING, ENABLE	0	0
S	8RXAEX	PWR.LIMIT LVL.-MPH SENSOR	ENG TORQUE LIMITED TO 50%, IF SPEED SENSOR TAMPER DETECTED	0	0
S	0PAZ1X	DRIVER PERFORMANCE & BONUS PARAMETERS	WITHOUT DRIVER PERFORMANCE PARAMETERS	0	0
S	G5AAHX	DATAMAX ENGINE OVERSPEED-COMPANY	ENGINE OVERSPEED, ALL CONDITIONS, TIME LOG IF ABOVE 2200 RPM	0	0
S	G2AAGX	DATAMAX ENGINE OVERSPEED-FUEL	ENGINE OVERSPEED, FUELED, TIME LOG IF ABOVE 2100 RPM	0	0
S	G4AAUX	DATAMAX VEHICLE OVERSPEED-ALL	VEHICLE OVERSPEED,ALL COND, TIME LOG IF ABOVE 75MPH (121KMH)	0	0
S	G3AAPX	DATAMAX VEHICLE OVERSPEED-FUEL	VEHICLE OVERSPEED, FUELED, TIME LOG IF ABOVE 70MPH (113KMH)	0	0
S	G1AABX	DATAMAX IDLE LOG DELAY	ENGINE IDLE DELAY TO START LOG, 2 MIN	0	0
S	W9A01X	PERIODIC TRIP LOG DAY OF MONTH	PERIODIC TRIP LOG, DAY 1 OF THE MONTH	0	0

TECHNICAL SPECIFICATION *(cont.)*



				WEIGHT (LB)	
PTO ELECTRONICS		DESCRIPTION		FRONT	REAR
S	F3AAEX	PTO1 SINGLE SPEED CONTROL RPM.	PTO 1ST, SINGLE SPEED SETTING, 1000 RPM	0	0
S	F5AABX	PTO 1ST, MAX ROAD SPEED	1ST PTO, MAX ROAD SPEED, 10 MPH (16 KPH)	0	0
S	F6AABX	PTO 1ST, SPEED RAMP RATE	PTO 1ST, SPEED RAMP RATE 100 RPM/SEC	0	0
S	F7AAPX	PTO 1ST, MAX ENGINE SPEED	PTO 1ST, MAX ENGINE SPEED, 2100 RPM	0	0
S	F8AAGX	PTO 1ST, ROAD SPEED LIMIT	PTO 1ST, ROAD SPEED LIMIT, 97 KMH (60 MPH)	0	0
S	F9AABX	PTO 1ST, MINIMUM ENGINE SPEED	PTO 1ST, MINIMUM ENGINE SPEED, 600 RPM	0	0
S	H6AAEX	PTO 2ND, SINGLE SPEED SETTING	PTO 2ND, SINGLE SPEED SETTING, 1000 RPM	0	0
S	H0AABX	PTO 2ND, MAX ROAD SPEED	2ND PTO, MAX ROAD SPEED, 10 MPH (16 KPH)	0	0
S	G9AABX	PTO 2ND, SPEED RAMP RATE	PTO 2ND, SPEED RAMP RATE 100 RPM/SEC	0	0
S	H7AANX	PTO 2ND, MAX ENGINE SPEED	PTO 2ND, MAX ENGINE SPEED, 2100 RPM	0	0
S	H5AAGX	PTO 2ND, ROAD SPEED LIMIT	PTO 2ND, ROAD SPEED LIMIT, 97 KMH (60 MPH)	0	0
S	G8AABX	PTO 2ND, MINIMUM ENGINE SPEED	PTO 2ND, MINIMUM ENGINE SPEED, 600 RPM	0	0

				WEIGHT (LB)	
PAINT		DESCRIPTION		FRONT	REAR
S	950AD0	PAINT DESIGN	SINGLE COLOR	0	0
S	924014	PAINT TYPE	SOLID PAINT	0	0
S	944AA7	PAINT COLOR - FIRST COLOR	MACK WHITE; P9188	0	0
S	945998	PAINT COLOR - SECOND COLOR	NO SECOND TRUCK COLOR PROVIDED; NO COLOR	0	0
S	946998	PAINT COLOR - THIRD COLOR	NO THIRD TRUCK COLOR PROVIDED; NO COLOR	0	0
S	996AA3	PAINT - CAB PAINT SYSTEM	PAINT - CAB, URETHANE CLEAR COAT	0	0
S	MPB944	CAB COLOR	SAME AS FIRST COLOR - CAB	0	0
S	MPD944	HOOD COLOR	SAME AS FIRST COLOR - HOOD	0	0
S	MPC998	SLEEPER ROOF COLOR	WITHOUT SLEEPER ROOF COLOR	0	0
S	MPA998	ROOF FAIRING COLOR	WITHOUT ROOF FAIRING	0	0
S	951AA6	CHASSIS RUNNING GEAR	MACK BLACK (URETHANE); P3036	0	0
S	958018	BUMPER	PAINT BUMPER SAME COLOR AS CHASSIS RUNNING GEAR	0	0
S	959019	FUEL TANK - ***NO INVENTED VARIANTS ALLOWED in the FUEL TANK PAINT FAMILY***	W/O OPTIONAL FUEL TANK PAINT	0	0
S	962032	HUBS & DRUMS-FRONT	SAME AS CHASSIS RUNNING GEAR	0	0
S	963033	HUBS & DRUMS-REAR	SAME AS CHASSIS RUNNING GEAR	0	0

				WEIGHT (LB)	
CALCULATED CODES - KAX		DESCRIPTION		FRONT	REAR
S	9JXA1X	PROPCALC SELECTION	YES, THE ORDER MUST BE CALCULATED	0	0
	D5EA1X	AUTO ROUTING & CLIPPING, CENTER	AUTOMATIC ROUTING & CLIPPING PLACEMENT, CENTER SECTION	0	0

				WEIGHT (LB)	
BASE WARRANTY & PURCHASED COVERAGES		DESCRIPTION		FRONT	REAR
S	898003	VEHICLE WARRANTY TYPE	HEAVY DUTY WARRANTY CLASSIFICATION	0	0
S	M50030	BASIC CHASSIS COVERAGE	HEAVY DUTY STANDARD BASE COVERAGE 12 MONTHS/100,000 MILES (161,000 KM)	0	0
	M8301T	EMISSION - SURCHARGE	EPA (only) for Mack MP7 / MP8 Diesel	0	0

TECHNICAL SPECIFICATION (cont.)



BASE WARRANTY & PURCHASED COVERAGES		DESCRIPTION	WEIGHT (LB)		
			FRONT	REAR	
S	M51021	ENGINE WARRANTY	MACK MP7/MP8 BASE ENGINE COVERAGE 24 MONTHS / 250,000 MILES (402,000KM)	0	0
S	M52022	EMISSION COMPONENT COVERAGE	US and CANADA EQUIPPED VEHICLE EMISSION COMPONENTS COVERAGE 60 MONTHS/100,000 MILES (161,000 KM)	0	0
	M540B4	TRANSMISSION WARRANTY	ALLISON TRANSMISSIONS (Contact Allison Transmission for standard warranty and extended coverage data)	0	0
S	M550G7	CARRIER & AXLE HOUSING WARRANTY	STANDARD MACK HEAVY DUTY COVERAGE 60 MONTHS / 500,000 (804,872 KM)	0	0
S	M56026	AIR CONDITIONING WARRANTY	AIR CONDITIONING STANDARD COVERAGE (Sealed System Only) 12 MONTHS UNLIMITED MILEAGE	0	0
S	M57027	CHASSIS TOWING WARRANTY	STANDARD NORMAL / HEAVY DUTY CHASSIS TOWING 90 DAYS OR 5,000 MILES	0	0
S	M58028	ENGINE TOWING WARRANTY	STANDARD MACK ENGINE TOWING COVERAGE 24 MONTHS/250,000 MILES (402,000 KM)	0	0

CONNECTED SERVICES		DESCRIPTION	WEIGHT (LB)		
			FRONT	REAR	
S	S03011	MACK INTEGRATED UPTIME	MACK INTEGRATED UPTIME - 24 MONTHS	0	0
	S04011	MACK CONNECT LOCATION & REPORTING	MACK CONNECT LOCATION & REPORTING - 24 MONTHS	0	0
S	S05010	FLEET INTEGRATION	WITHOUT FLEET INTEGRATION	0	0
S	S06400	PARTNERED SERVICES	NO PARTNERED SERVICES PROVIDED	0	0

ADDITIONAL ENGINEERING (Included)		DESCRIPTION	WEIGHT (LB)		
			FRONT	REAR	
	CA 24M28568			0	0

FRONT / REAR AXLE WEIGHTS (LB)

10106 7302

TOTAL WEIGHT (LB)

17408

PERFORMANCE - PREDICTOR



Inputs Required	DWGRef	Inputs	UOM
Vehicle Type		Aero Muscle Hood - Roof Fairing (0.60)	MPH
Performance Level		>67 MPH / >108KPH	MPH
Frontal Area		110.0	FEET²
Accessory Power Loss		11.0	HP

VEHICLE SPECIFICATION SUMMARY			
Model			GRANITE 64BR
Gross Combination Weight			65,000 LB (29.5 TONNES) GROSS COMBINATION WEIGHT
Vehicle Application			ON-OFF HIGHWAY, STARTING GRADES<18%
Body/Trailer Type			DUMP TRUCK
Loading/Unloading Surface Type			CONCRETE LOADING AND / OR UNLOADING SURFACE
Engine			MP7-395C MACK 395HP @ 1450-1700 RPM (PEAK) 1950 RPM (GOV) 1550 LB-FT, US'21
Peak Power	HP		395.0 @ 1450 - 1700
Peak Torque	Newton Meters		2157 @ 1050
Transmission			4000 RDS 6 SPEED ALLISON GEN 6 W/PROGNOSTICS, WITH PTO PROVISION
Rear Axle			40000# (18100kg) MACK S400R FABRICATED STEEL HOUSING
Rear Axle Ratio			4.19
Rear Tire			11R22.5 H BRIDGESTONE M799 (24020 lbs) (DRIVE ONLY)
Tire Revolutions per Mile	Mile		496
Total Reduction			2.72

CALCULATED PERFORMANCE SUMMARY					
	Speed	UOM	RPM	Desired / Recommended Value	Status
Engine RPM @ 65 MPH	65.2	MPH	1468		
Engine RPM @ Desired Cruise Speed	68.4	MPH	1538	1075 - 1275 rpm	CHECK
Engine RPM @ Road Speed Limit (RSL)	68.4	MPH	1538	< 1950 rpm	OK
Sweet Spot Cruise Speed Range in Top Gear	47.8 - 56.7	MPH	1075 - 1275		
Top Gear Speed Range	44.4 - 86.7	MPH	1000 - 1950	65.2 MPH	OK
Minimum Practical Speed In Reverse	3.6	MPH	600		
Maximum Practical Speed in Reverse	11.7	MPH	1950		
Minimum Practical Speed In Lowest Forward Gear	2.1	MPH	600		
Maximum Practical Speed In Lowest Forward Gear	6.7	MPH	1950		
	Concrete / Asphalt		UOM		
Wheel HP Required at (65 MPH) Cruise Speed	248.4 / 271.2		HP		
Wheel HP Required at (75 MPH) Road Speed Limit	248.4 / 271.2		HP		
Wheel HP Required at (92 MPH) Top Speed	427.3 / 458.0		HP		

PERFORMANCE - PREDICTOR (cont.)



VEHICLE SPECIFICATION SUMMARY			
Gradeability			Recommended Min. Gradeability in Top Gear
Maximum in Top Gear (Concrete)	1.6%		1.9%
Maximum in Top Gear (Asphalt)	1.4%		1.9%
Startability			Recommended Min. Startability
In Lowest Gear	18.2%		18.0%
Loading/Unloading Surface Type	CONCRETE LOADING AND / OR UNLOADING SURFACE		
			Recommended Speed on 1.5% Grade
Speed on a 1.5% Grade (Concrete)	47.8 MPH		>67 MPH
	@1075 rpm in 7th gear		PL5
Suggested Value for Gear Down Vehicle Speed	RSL - 10		
Driveability Rating		Status	
100% Max Power available after shift		CAUTION!	
>95% Very Good >90% Acceptable			
Performance Level	Recommended Speed on 1.5% Grade	Min. Gradeability in Top Gear	
PL5 - High Performance	>67 MPH	1.9%	
PL4 - Performance	61 - 67 MPH	1.7%	
PL3 - Economy	54 - 60 MPH	1.5%	
PL2 - Fleet / Construction	47 - 53 MPH	1.3%	
PL1 - Heavy Haul	40 - 46 MPH	1.1%	



RPM at 65 MPH

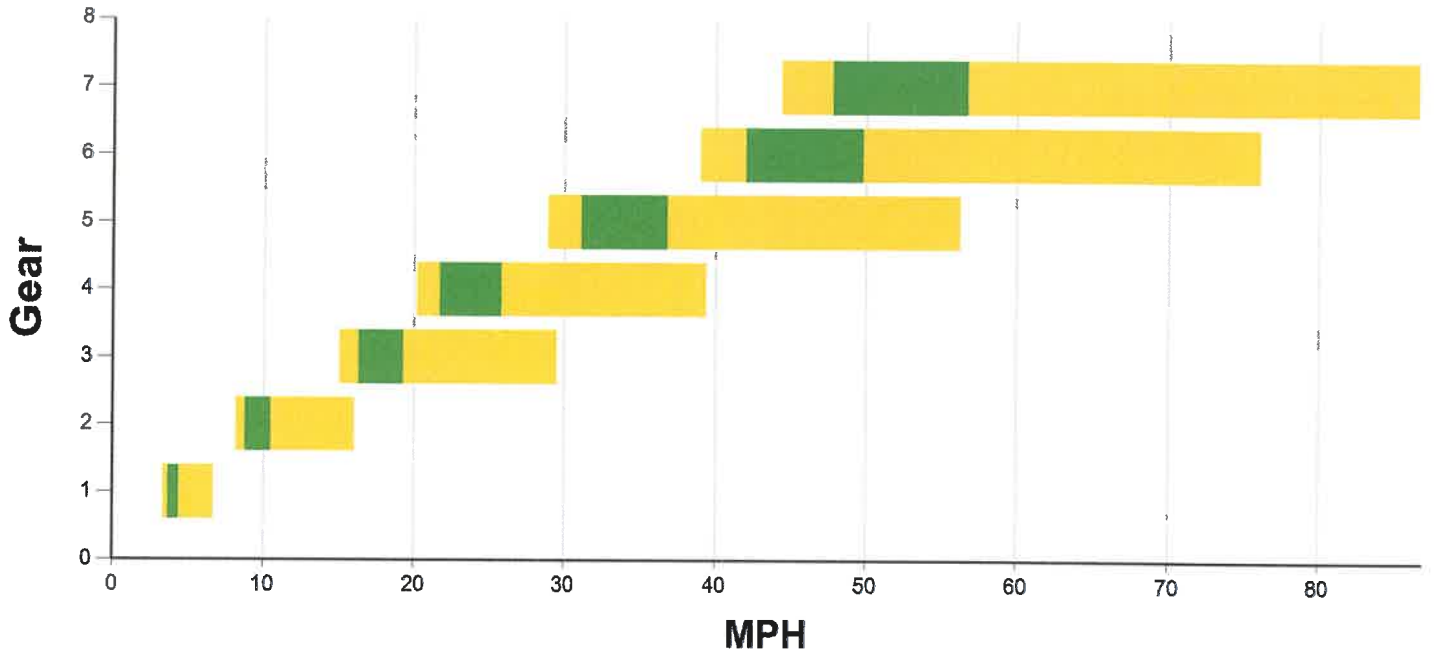


RPM at Cruise Speed

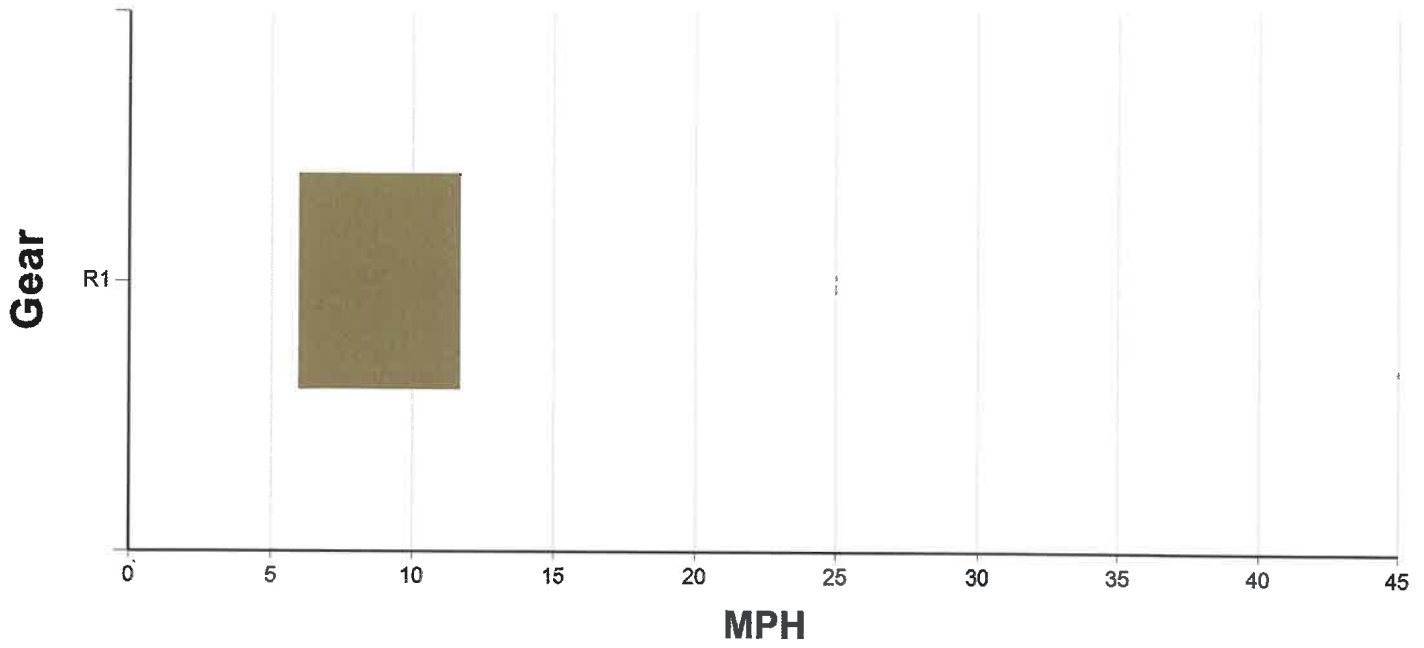


	MPH	RPM
Minimum of Engine Range	44.4	1000.00
Minimum of Economy Range	47.8	1075.00
Cruise Speed	68.4	1537.87
Maximum of Economy Range	56.7	1275.00
Road Speed Limit	68.4	1537.87
Maximum of Engine Range	86.7	1950.00

Forward Geared Speed

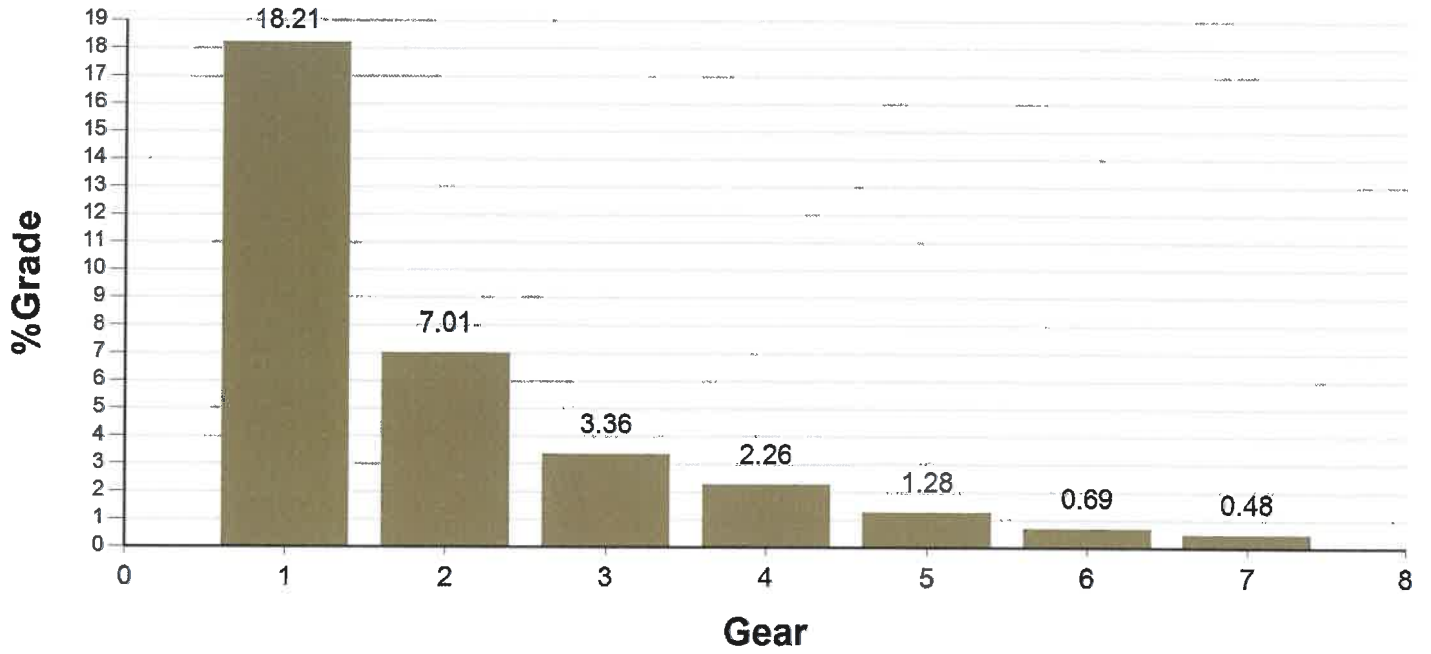


Reverse Geared Speed

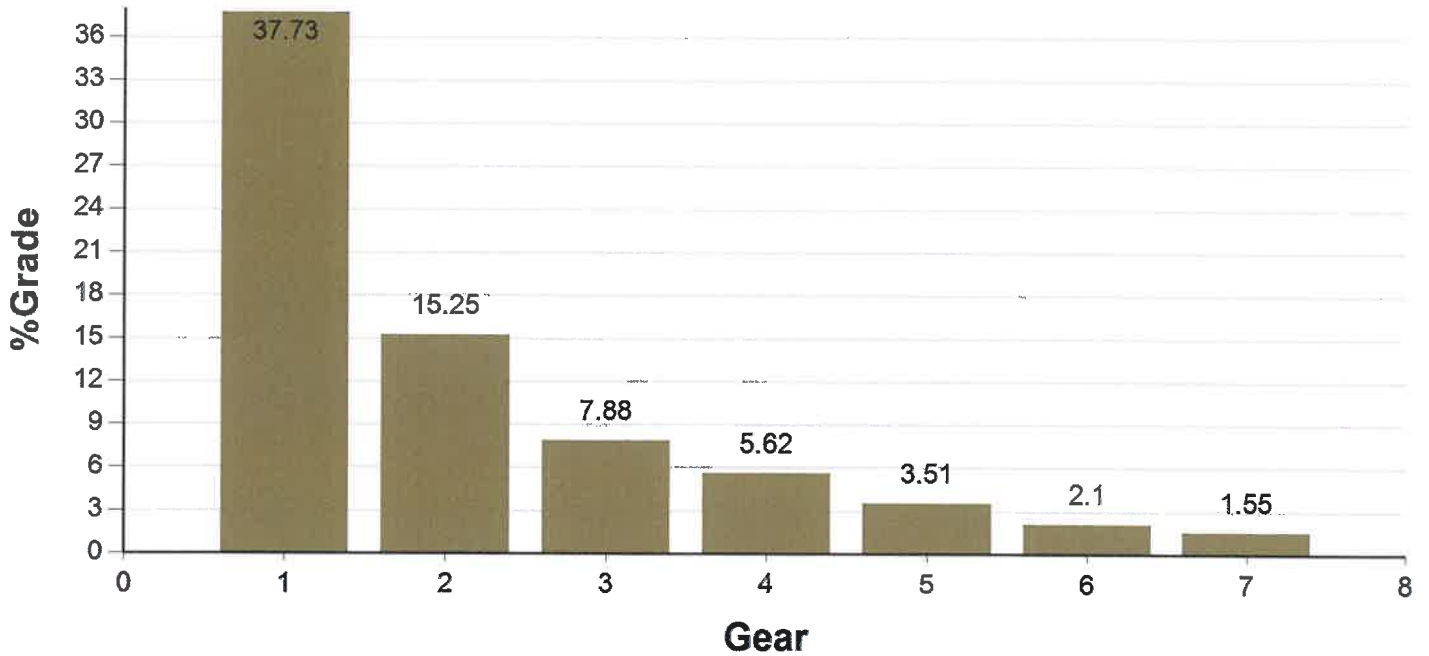




Startability

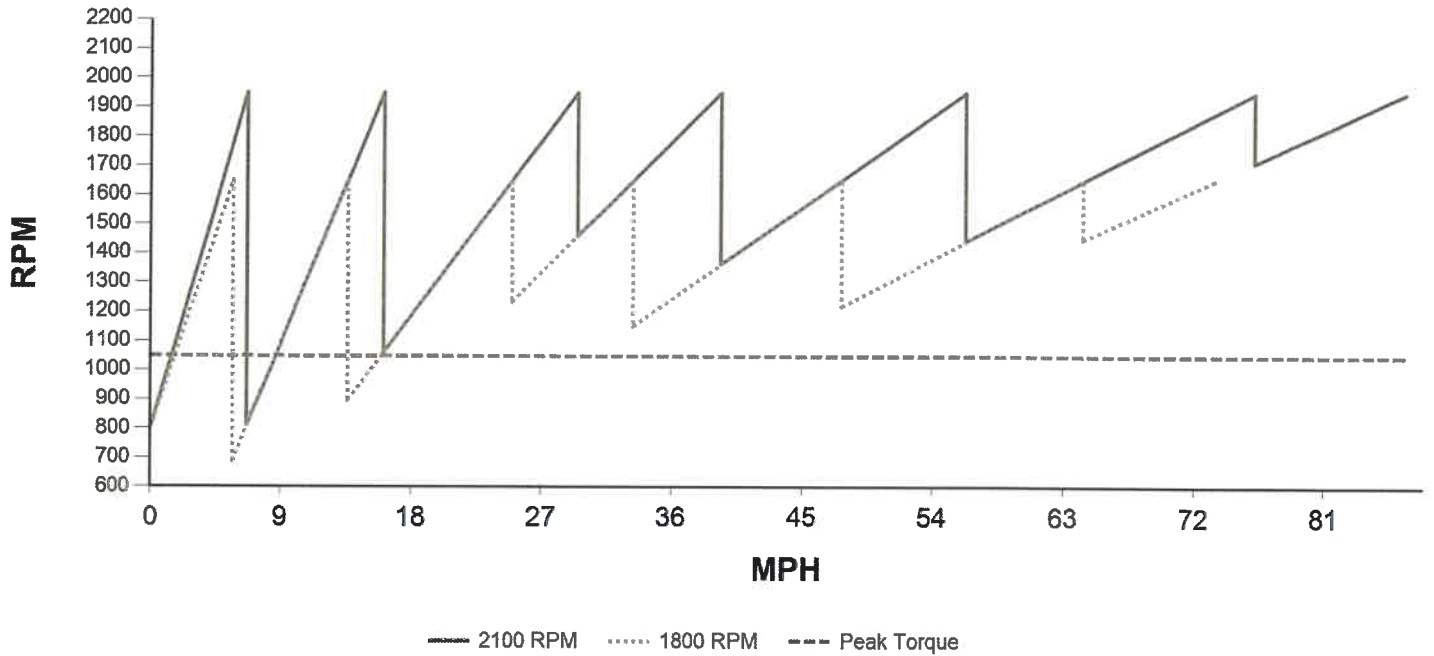


Gradeability at Max Torque

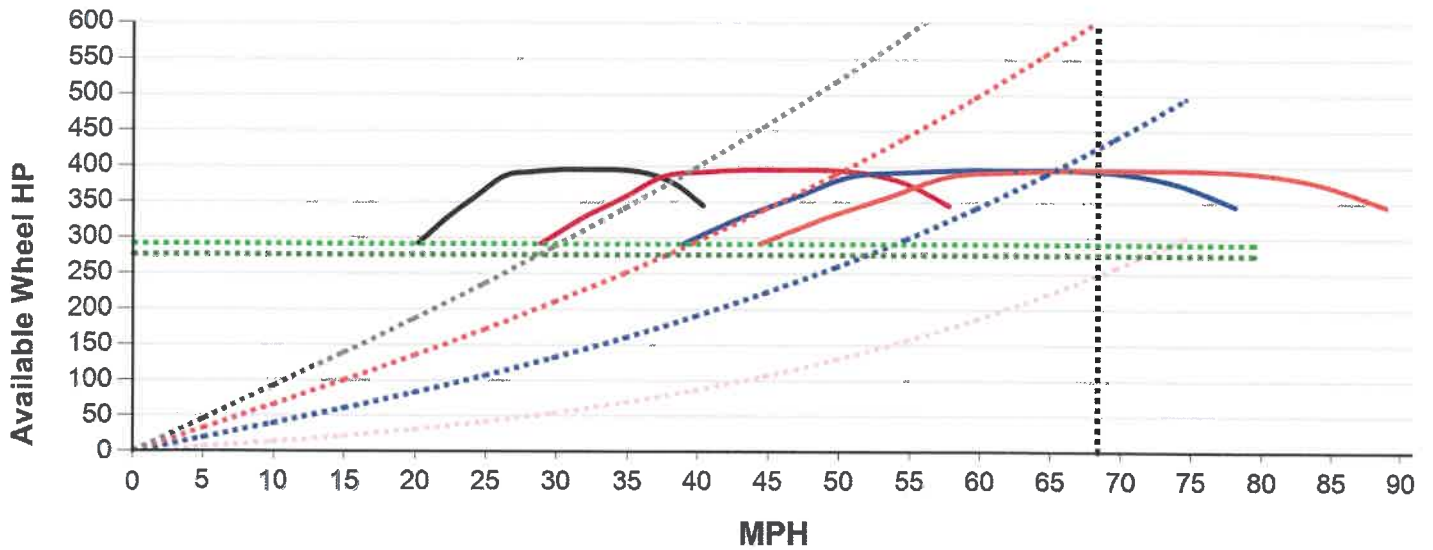




Shift Chart



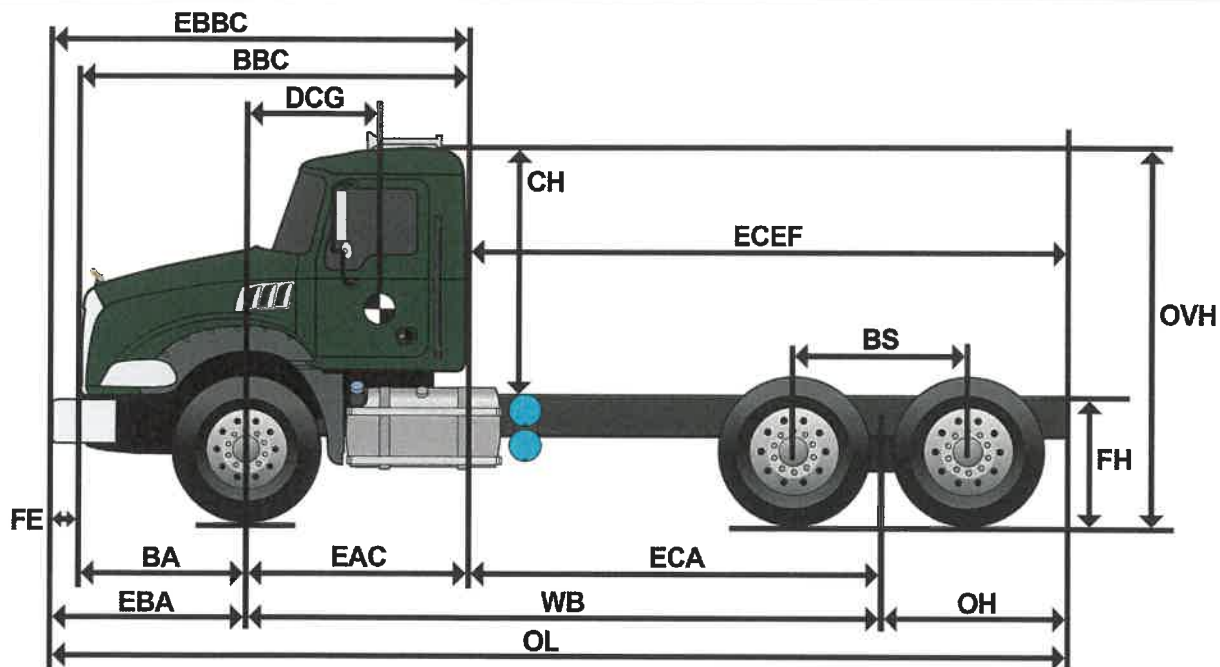
Horsepower VS. Speed



— 9th Gear	— 11th Gear	... 0.0% Grade	... 3.0% Grade	... Cruise Speed	... 90% Power	... 95% Power
— 10th Gear	— 12th Gear	... 1.5% Grade	... 4.5% Grade			

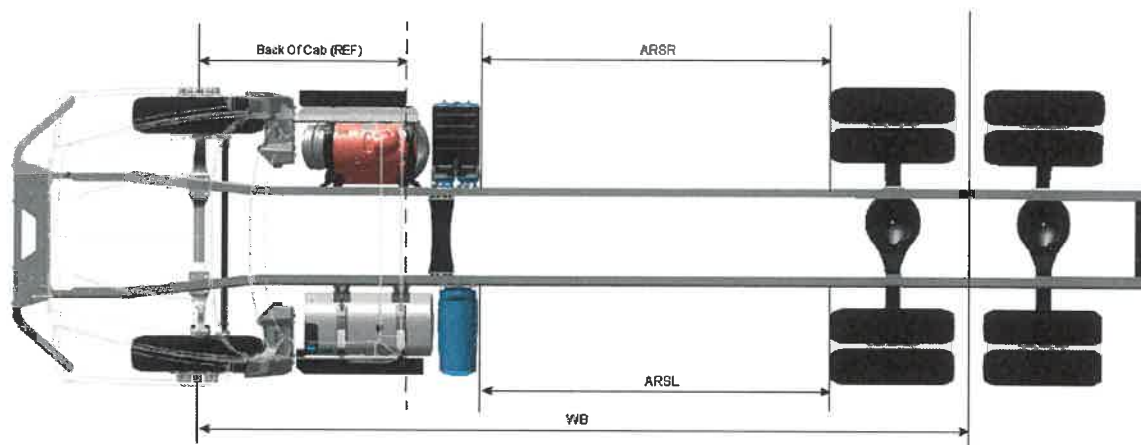
VEHICLE SPECIFICATION/CALCULATED PERFORMANCE SUMMARY

Description	Sales Code	Dwg Ref	Length	UOM
Front Frame Extension	N/A	FE	6.1	INCHES
Bumper to Front Axle	N/A	BA	51.1	INCHES
Eff. Bumper to Front Axle	N/A	N/A	57.2	INCHES
Wheelbase	N/A	WB	180.5	INCHES
Rear Overhang	N/A	OH	57.5	INCHES
Overall Length	N/A	OL	295.2	INCHES
Bumper to Back of Cab	N/A	BBC	116.5	INCHES
Eff. Bumper to Back of Cab	N/A	EBBC	122.6	INCHES
Eff. Cab to Rear Axle	N/A	ECA	115.0	INCHES
Eff. Front Axle to Back of Cab	N/A	EAC	65.5	INCHES
Eff. Cab to End of Frame	N/A	ECEF	172.5	INCHES
Unladen Frame Height	N/A	FH	43.2	INCHES
Cab Height	N/A	CH	70.9	INCHES
Overall Height	N/A	OVH	117.2	INCHES
Driver CG	N/A	DCG	47.2	INCHES
50" AXLE SPACING (BOGIE WHEELBASE)	GWXABX	BS	50.0	INCHES



VEHICLE SPECIFICATION/CALCULATED PERFORMANCE SUMMARY

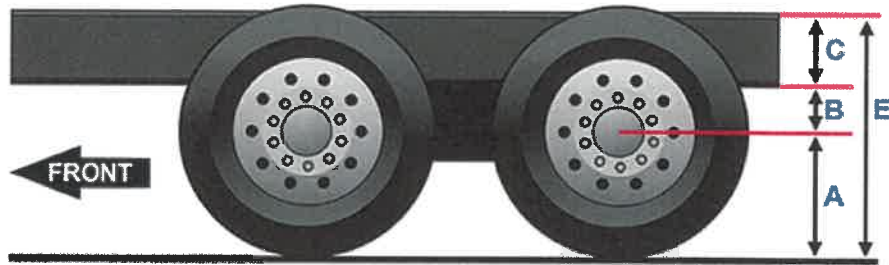
Description	Sales Code	Dwg Ref	Left Value(in)	Right Value(in)
Wheelbase	N/A	WB	180.5	180.5
Available Rail Space Right	N/A	ARSR	N/A	40.6
Available Rail Space Left	N/A	ARSL	55.5	N/A
Eff. Front Axle to Back of Cab	N/A	REF	65.5	65.5
Front Axle To Fender	CDX23X	N/A	27.0	27.0
Cleartech One Unit	DPF04F	N/A	0.0	50.0
Battery Box	393AB0	N/A	0.0	17.0
66 GALLON (250 L) 22" ALUMINUM, SLEEVED D-SHAPED / W/O RH FUEL TANK	288AF2 / 290AA1	N/A	44.6	0.0
Ad-Blue Tank	DF1001	N/A	7.5	0.0
Drive Tire Radius	901AJ6	N/A	21.0	21.0



Top View image is intended for illustration purposes only and is not presented to scale. Wheelbase, Axle Spacing and After frame are not shown as specified, but are a representation. Customer Adaptation (CA) options and relocated components are not represented in these images. Most CA options impact the variation of the image, thus an image may not populate. Calculations are approximate to a tolerance of ± 4 inches due to component mounting variation. Certain chassis component options are NOT represented in the Top View image, such as, but not exclusive to, Front Frame Extensions, Fuel Water Separators, Air Dryers, PTOs, Fifth Wheels, Chassis Fairings, Toolboxes, Trailer Connections. For further information on these items and their respective locations on your specification, please refer to the data sheets associated with those items in the configurator.

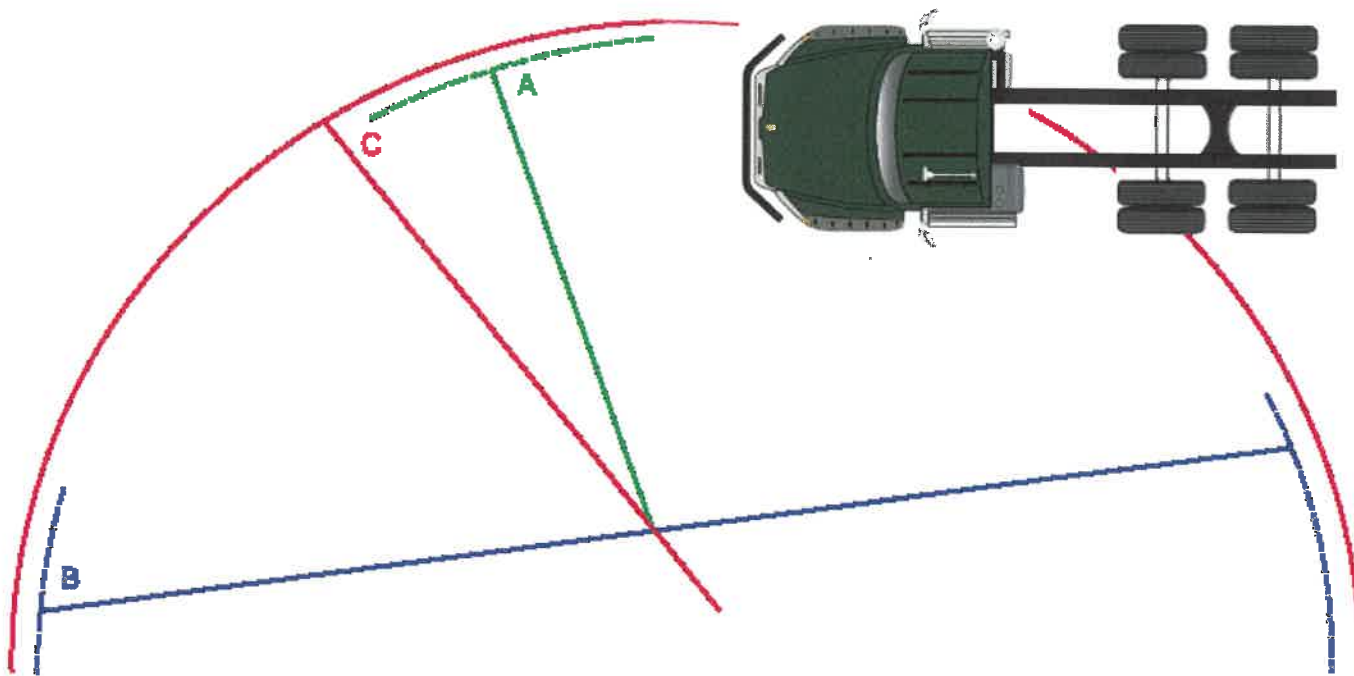
VEHICLE SPECIFICATION/CALCULATED PERFORMANCE SUMMARY

Description	Sales Code	Dwg Ref	Rear		UOM
			Unladen	Laden	
Tire Radius	901AJ6	A	21.0	19.5	INCHES
Suspension Height	18603Y	B	10.4	9.3	INCHES
Frame Depth	YBXGAX	C	11.8	11.8	INCHES
Total Height	N/A	E	43.2	40.6	INCHES



VEHICLE SPECIFICATION/CALCULATED PERFORMANCE SUMMARY

Description	Sales Code	Dwg Ref	Length	UOM
SAE Turning Radius	N/A	A*	29.0	FEET
Adjusted Turning Radius	N/A	A	32.4	FEET
Curb-to-Curb Diameter	N/A	B	66.2	FEET
Wall-to-Wall Diameter	N/A	C	70.6	FEET



Tests have shown that the true location of the turning center is further to the rear than midway between drive axle sets (where applicable)

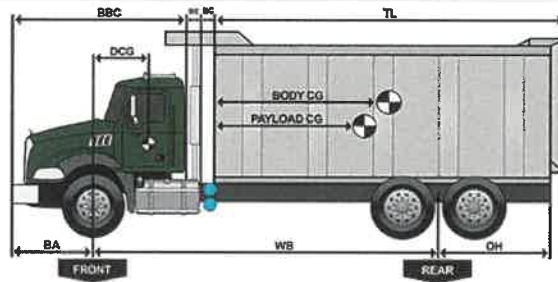
The actual location of the turning center depends on:

- Whether the drive tire equipment is single or dual.
- The overall load distribution for the vehicle (front/rear, between drive axles) in a loaded condition
- Manufacturing tolerances within the steering components



Inputs Required	DWGRef	Inputs	UOM
Driver(s) & Equipment Weight		201	LB
Total Body Length	TL	16.4	FEET
Body Tare Weight		3501	LB
Front of Body to Body CG	BODY CG	96.0	INCHES
Additional Clearance from Back of Exhaust to Front of Body	BC	6.0	INCHES

VEHICLE SPECIFICATION SUMMARY				
Description	Description	Dwg Ref	Length	UOM
Bumper to Front Axle	N/A	BA	51.1	INCHES
Wheelbase	N/A	WB	180.5	INCHES
Rear Overhang	N/A	OH	57.5	INCHES
Bumper to Back of Cab	N/A	BBC	116.5	INCHES
BOC Exhaust Space	130AD7	N/A	0.0	INCHES
Driver CG from Front Axle	N/A	DCG	47.2	INCHES



CALCULATED PERFORMANCE SUMMARY				
Tare Weights	Front Axle	Rear Axle (s)	Total	UOM
Chassis	10106	7302	17408	LB
Driver(s) & Equipment Weight	149	53	201	LB
Fuel	280	172	452	LB
Body/Trailer	252	3249	3501	LB
Total Tare	10786	10775	21561	LB
Payloads				
First Body Payload	2623	33817	36440	LB
Total - Lift Axles Down	13409	44592	58000	LB
GAWR	18000	40000	65035	LB



VEHICLE SPECIFICATION/CALCULATED PERFORMANCE SUMMARY

Sub-Category	Sales Code	Sales Code Description	Value	UOM
Front Axle	240AA2	18000# (8200 KG) MACK FXL18 STRAIGHT SPINDLE/UNITIZED BEARINGS	18000	LB
Front Suspension	244AB1	MACK TAPERLEAF 18000# (8200 KG) GROUND LOAD RATING, EQUAL BIAS	18000	LB
Front Tires	900460	425/65R22.5 L BRIDGESTONE M864 (22800 lbs)	22801	LB
Front Wheels	531141	22.5x12.25 MAXION 222204x WHITE POWDER COATED STEEL, 5.28" OFFSET, 5 HAND HOLE	22796	LB
Front GAWR			18000	LB
Rear Axle	268055	40000# (18100kg) MACK S400R FABRICATED STEEL HOUSING	40000	LB
Rear Suspension	18603Y	SS40 MACK CAMELBACK MULTILEAF 40,000 lb, STANDARD DUTY	40000	LB
Rear Tires	901AJ6	11R22.5 H BRIDGESTONE M799 (24020 lbs) (DRIVE ONLY)	48041	LB
Rear Wheels	3461E6	22.5x8.25 MAXION 91262x WHITE POWDER COAT STEEL, 6.62" OFFSET, 5 HAND HOLE	59200	LB
Rear GAWR			40000	LB
Truck GVWR			58000	LB
Gross Combination Weight Rating			65035	LB
Tax Value GVWR (USA FET Only)			58000	LB

MACK®



Mack Trucks
www.macktrucks.com

14' Dump Bed Specs

RTE

Rowe Truck Equipment, Inc.
 P.O. Box 386, 102 W. 1st Street
 Otterbein, IN 47970
 Phone: 765-583-4461
 Fax: 765-583-2907
 www.rowetruck.com

QUOTATION

41549
 Page 1 of 2

CUSTOMER: M & K Quality Truck Sales
CONTACT: Logan Stammen
ADDRESS: 1401 Harding Ct.
 Indianapolis IN 46217

Quote Number: 41549
Quote Date: 11/6/2024
Quote valid until: 11/21/2024

PHONE: 616-292-2205
FAX: 616-583-3068
Cell: 317-503-9621

Salesperson: April Brown

E-Mail: Logna.stammen@mktruck.com

Make:	MACK	Model:	GR64B	Year:	2026	Single/Dual:	
Cab to Axle:	115"	Wheelbase:	181"	Trans:	Allison 4500	VIN:	

QUANTITY	DESCRIPTION		
1	14' Smooth Side Dump Body Package - INSTALLED 14' Dump Body Sides, Floor and Ends are Hardox 450 3/16" Steel Crossmemberless 48" Sides 54" 6-Panel Tailgate Heavy Duty Pump 2.5" Gear - Air or Manual Shift (Circle One) 63120 Cylinder 6" 3-Stage 120" Stroke Steps - Left Front - Inside and Outside Front Trunion Rear Hinge 2 Body Props 30 Gallon Oil Tank Hoses, Fittings and Control Tower Recessed Rear Stop/Turn & Tail Lights - L.E.D. Wiring Harness Stop Cable Safety Decals Primer Paint One Color: Paint Color or Number Code: _____ Also Includes: 1/2 Cab Shield, Straight Tailgate, Air Tailgate Kit Spread Apron <u>8"</u> 10" or 12" (Circle One) Manual PTO: Transmission Make and Model Number Required PTO for Automatic Transmission Extra Cost Make _____ Model Number _____		
1	Aero Electric Series Spring Upper Mount Tarp System: Installed Asphalt Style or Mesh Style (Circle One) Straight Arms	\$0.00	\$0.00
1	6" Amber Oval Strobe Lights in Front of Cab Shield	\$0.00	\$0.00
1	6" Oval Amber Strobe Lights	\$0.00	\$0.00
1	Rearward Facing in Corner Post		
1	1 1/2 Side Boards	\$0.00	\$0.00

QUOTATION 41549

CUSTOMER: M & K Quality Truck Sales
CONTACT: Logan Stammen
ADDRESS: 1401 Harding Ct.
Indianapolis IN 46217

Quote Number: 41549
Quote Date: 11/6/2024
Quote valid until: 11/21/2024

PHONE: 616-292-2205
FAX: 616-583-3068
Cell: 317-503-9621

Salesperson: April Brown

E-Mail: Logna.stammen@mktruck.com

1	Sludge Locks (Pair): Installed	\$0.00	\$0.00
1	Handrail - Special Driver Side w/ Double Step.	\$0.00	\$0.00
1	Hot Shift PTO: for Automatic Transmissions	\$0.00	\$0.00
1	Tipping Valve w/ Fittings, Hoses & Mounting Plates for M-Drive, I-Shift, Ultrashift or Allison Automatic Transmissions	\$0.00	\$0.00

Customer must fill out the information below before the order can be processed.

Accepted by:	
Date:	
P.O. number:	

- ◆ Quote valid for 15 days.
- ◆ Terms are Due upon Receipt unless prior credit arrangements are made.
- ◆ If ordered to match cab color, exact color match is not guaranteed.

Notes:

STANDARD CHASSIS WARRANTY CERTIFICATE



Mack Trucks 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' maintenance and inspection requirements are followed. See your local authorized Mack dealer for recommended maintenance and inspection procedures. All warranty periods are calculated from date in service of the vehicle. All coverage is 100% for parts and labor subject to the qualifications, limitations, and exclusions 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 2023 trucks**, AN, GR, LR, PI, TE models, manufactured by Mack Trucks, operated in the United States and Canada with **EPA 17 and newer engines**. Specific coverage is based on the application and weight class as described in the following chart:

	Standard NORMAL DUTY	Standard HEAVY DUTY	Standard SEVERE DUTY
Typical Vocations	Line / Long Haul, Short Haul, or Pickup & Delivery	Heavy Line Haul, Construction, Refuse, Fire or Rescue Service	Heavy Construction, Heavy Refuse, Off-Road, Heavy Haul, Mining, Logging, or Oil Field
Weight Class Qualifications	Vehicle must have GVWR ≤ 63,000 lbs. (≤ 28 metric tons) or GCWR ≤ 110,000 lbs. (≤ 50 mt.)	Vehicle must have GVWR ≤ 80,000 lbs. (≤ 36 mt.) or GCWR ≤ 143,000 lbs. (≤ 65 mt.)	Vehicle must have GAWR > 52,000 lbs. (> 23.5 mt.) or GVWR > 80,000 lbs. (> 36 mt.) or GCWR > 143,000 lbs. (> 65 mt.)
Basic Coverage *	12 months or 100,000 miles (160,934 km)	12 months or 100,000 miles (160,934 km)	12 months or 100,000 miles (160,934 km)
Chassis Towing	Towing/Road Service coverage is limited to 90 days or 5,000 miles (8047 km), whichever occurs first, limited to the truck (less trailer) and to a single tow per incident to the nearest authorized Mack Trucks service center. Charges in excess of \$1,000 are not covered unless Mack OneCall™ service is contacted and approves additional amounts prior to tow.		Not Applicable
Air Conditioning	Air conditioning (sealed system only) is covered for 12 months with no mileage limitation.		
Engine / Emission	Not covered under this warranty certificate. See respective engine manufacturer's warranty certificate. See paragraph 19 on reverse side.		
Transmission, Driveline, Rear Axle, Front Non-Drive Steer Axle	36 months or 350,000 miles (563,270 km) Covered Components are as follows: • Manual Transmission – Transmission assembly • Rear Axle – Differential carrier assembly & axle housing • Front Non-Drive Steer Axle – Axle beam, steering knuckle, & tie rod • Driveline – Bearings, hangers & shafts Allison Automatic Transmissions are not covered under this warranty certificate. See paragraph 19 on reverse side.		12 months or 100,000 miles (160,934 km)
Mack Carrier & Axle Housing	60 months or 750,000 miles (1,207,008 km)	60 months or 500,000 miles (804,672 km)	24 months or 100,000 miles (160,934 km)
mDRIVE™ Transmission	60 months or 750,000 miles (1,207,008 km) mDRIVE™ and mDRIVE™ HD	mDRIVE™: 36 months or 250,000 miles (402,336 km); mDRIVE™ HD: 36 months with no mileage limitation	12 months or 100,000 miles (160,934 km); mDRIVE™ HD: 24 months with no mileage limitation
mDRIVE™ Clutch	36 months or 350,000 miles (563,270 km) mDRIVE™ and mDRIVE™ HD	36 months or 250,000 miles (402,336 km) mDRIVE™ and mDRIVE™ HD	mDRIVE™: 12 months or 100,000 miles (160,934 km); mDRIVE™ HD: 24 months or 250,000 miles (402,336 km)
mDRIVE™ Transmission Towing	Towing/Road Service on warrantable transmission failures is covered to 24 months or 250,000 miles (402,336 km) whichever occurs first, limited to the truck (less trailer), and to a single tow per incident to the nearest authorized Mack Trucks service center. Charges in excess of \$1,000 are not covered unless Mack OneCall™ service is contacted and approves additional amounts prior to tow.		Not Applicable
Trunnion Bracket	36 months or 300,000 miles (482,803 km) Limited to Trunnion Bracket & Spindle, Suspension Trunnion (Except Bushings)		12 months or 100,000 miles (160,934 km) (same restrictions as Normal & Heavy)
Cab Structure	60 months or 500,000 miles (804,672 km)	24 months or 200,000 miles (321,869 km)	12 months or 100,000 miles (160,934 km)
Internal Cab Corrosion	60 months or 500,000 miles (804,672 km)	60 months or 500,000 miles (804,672 km)	60 months or 500,000 miles (804,672 km)
Covered only where metal is perforated from the inside to the outside. See paragraph 18 on the reverse side.			
Frame Rail / Crossmembers	60 months or 500,000 miles (804,672 km) Anthem/Pinnacle Models Only: 72 months or 750,000 miles (1,207,008 km)	36 months or 300,000 miles (482,803 km) Granite Model only: 60 months or 500,000 miles (804,672 km)	12 months or 100,000 miles (160,934 km)
Noise Emission	LIFE OF VEHICLE: Mack Trucks, warrants to the first purchaser of this vehicle for purposes other than resale, and to each subsequent purchaser, that this vehicle was designed, built and equipped to conform, at the time of sale to such first purchaser, with all applicable U.S. EPA noise control regulations. This warranty is not limited to any vehicle particular part, component, or system of the vehicle. Defects in the design, assembly, or any part, component or system of the vehicle, which at the time of sale to such first purchaser, caused noise emission levels to exceed Federal standards, are covered by this warranty for the life of the vehicle. EXCLUSIONS: Failures which arise as a result of tampering rather than from defects in the design, assembly, or any part, components, or system of the vehicle are not covered by this warranty.		

*Covered for 30 Days: Fluorescent Lights or Ballast, Light Bulbs, Fuses, Wiper Blades, and All Filters (oil, fuel, air, etc.).
Covered for 90 Days: Loose Fasteners, Leaking Fittings, or Loose Hose Clamps.

THESE LIMITATIONS AND EXCLUSIONS ARE IMPORTANT AND MUST BE READ AND UNDERSTOOD.

LIMITATIONS – Mack Trucks' obligation is limited to, at its sole option, repair or replacement of parts which are acknowledged by it to be defective. The defective parts or assemblies replaced shall become the property of Mack Trucks. Warranty repairs performed by an authorized Mack dealer in accordance with the terms of the warranty set forth herein are free of charge. Warranty consideration can only be given if the deficiency is brought to the attention of an authorized Mack dealer upon discovery and the vehicle must be made available, in a timely fashion during the coverage period, for repair.

EXCLUSIONS:

- REPAIR:** In the case of acknowledged defective Covered Parts, exchange with factory remanufactured parts may occur. Warranty repairs do not constitute an extension of any warranty period for any vehicle, component or part.
- DAMAGES:** Damages due to misapplication, misuse, accidents, negligence, improper operations, alterations, storage or transport, operation at excessive speeds, loading beyond the factory rated load capacity, failure to follow Mack Trucks' recommended inspection, maintenance, and service procedures, and improper or insufficient maintenance services are not covered.
- PROGRESSIVE DAMAGE:** Damages due to failure of operator to take reasonable precautions to mitigate damage are not covered. Damages to a Covered Part due to failure of non-covered part are not covered. Coverage is limited to failure of a Covered Part directly causing failure of a non-covered part, where reasonable precautions were taken to mitigate damages.
- APPLICATION:** The selling dealer is responsible for designating the correct application and/or specification for a vehicle sold to a customer. Damages due to misapplication, including but not limited to, failures of component parts of vehicles being operated in excess of factory rated load capacities, or the use of a vehicle, component or part for a purpose for which it was not intended are not covered.
- ALTERATIONS:** Any vehicle, component or part repaired, altered, or inspected in any way, so as to adversely affect, in Mack Trucks' sole judgment, its stability, durability, or reliability, is not covered.
- NON-ORIGINAL EQUIPMENT:** Any part of the vehicle that fails, malfunctions, or does not perform as a result of improper conversion or installation of bodies or equipment by other manufacturers or suppliers is not covered.
- MAINTENANCE AND PARTS CONSUMED:** Maintenance and inspection requirements found in the Operator's Manuals and service manuals/instructions, including, but not limited to, engine tune-up, fuel system cleaning, replacement of lubricants and filter elements, adjustments of the engine injection pump/transmission/brakes/linkages, as well as diagnosis, test time and all other adjustments must be followed and are not covered. Parts which are normally consumed or worn out during the vehicle's normal service life and customarily replaced during usual maintenance service, including, but not limited to, mud flaps and brackets, brake linings, clutch brake, and clutch linings, are not covered.
- PERFORMANCE COMPLAINTS:** Performance complaints are not covered (including, but not limited to, low power and/or poor fuel economy). Coverage is limited to defects in material and workmanship of a Covered Part directly causing the performance issue.
- WEAROUT:** Mack Trucks does not cover normal wear of Covered Parts. Failures attributable to wear are excluded. For example and without limitation, the wear rate of parts in any engine or transmission, and especially those parts within the combustion area and clutch housing area, will vary depending upon operating conditions and environment. Conditions, such as load, trailer configuration, road speed and road conditions, as well as the quality of fuel, lubrication oil, and all filters bear a direct relationship to the wear rate and resulting life of parts. Depending upon the severity of these various conditions, parts wear and resulting failure could occur within the time limit of the coverage.
- NON-GENUINE PARTS:** Any failure of any vehicle, component or part caused by the use of parts and accessories, or major assemblies and exchange units, which do not meet factory standards is not covered.
- ODOMETER READING:** Any vehicle on which the actual mileage or hours cannot readily be determined, or on which the odometer, hour meter, or Electronic Control Unit has been disconnected, disabled, or altered, may not be covered by this warranty.
- ACCESS TO INFORMATION:** Owner must allow Mack Trucks full access to all data stored in all Electronic Control Modules; failure to do so may result in the loss of warranty coverage.
- LABOR:** Labor to remove and install a Covered Part is included only if a Mack Trucks authorized dealer originally installed the Covered Part. Labor for overtime and/or shift differential is not covered. Excessive labor for a warrantable repair due to the prior installation of equipment or body is not covered.
- MISC. EXPENSE:** Meals, lodging, communications charges, travel time and expense, loss of cargo, downtime, loss of profit/revenue, rental vehicles, driver's wages and other miscellaneous expenses are not covered. Shop supplies, lube oil, lubricants, sealers, anti-freeze, filter elements and labor performed by a non-approved location are not covered.
- ADDITIONAL COMPONENTS:** Components or parts that are not installed by Mack Trucks, including winches, power take-offs, dumper, mixer and refuse assemblies, hoists and bodies or other special equipment are not covered. During a warrantable repair, additional time to remove any customer installed components will not be covered under warranty. Mack Trucks' factory manufacturing records will be determinative as to factory installed components.
- TOWING:** Unless expressly provided in this Warranty Certificate, expenses for towing or road service are not covered. Failures caused by improper towing technique are not covered.
- SUSPENSION PARTS:** Suspension parts, including but not limited to rubber bushings, torque rod bushings, spring pins and bushings, and greased lubrication points that fail due to improper maintenance, abnormally severe service or abuse are not covered.
- CAB STRUCTURE AND CORROSION:** Cab structural defects or cab corrosion that occurs in areas of the cab that previously were damaged, repaired, altered or modified are not covered. Cab corrosion where metal is perforated from the outside to the inside is not covered.
- VENDOR ENGINES, ALLISON AUTOMATIC TRANSMISSIONS and ALTERNATE FUEL STORAGE AND DELIVERY SYSTEMS:** Vendor engines, Allison automatic transmissions and alternate fuel (CNG/LNG/DME) fuel storage/delivery components used in Mack trucks are warranted by their respective manufacturers and not by Mack Trucks, Inc. Refer to the manufacturers' warranty statements.
- OIL CONSUMPTION:** Before a claim based upon excessive oil consumption will be considered, the owner must provide proof that all recommended maintenance has been performed and submit adequate documentation to show that oil consumption exceeds Mack Trucks' published standards. Under no circumstances will warranty pay for repairs related to excessive oil consumption after the earlier of 24 months, 250,000 miles, or 402,000 kilometers.
- ENVIRONMENTAL DAMAGE:** Parts made out of cloth, leather, wood, rubber, synthetics, paint or chrome which have been affected by exposure to the elements or chemical influence including, but not limited to, road salt/chemicals, industrial fall-out or the use of improper cleaners, polishes and/or waxes are not covered.
- ALIGNMENT:** Alignment of axle(s), balance of tires, changing of axle camber, caster, toe and thrust angle are not covered.
- GLASS:** Glass breakage and scratches are not covered unless physical proof of manufacturing responsibility is established.
- TIRES:** Except as expressly provided in warranty certificates covering Green House Gas (GHG) components, tires are covered only under warranties provided by the tire manufacturer.
- CHANGES:** Mack Trucks reserves the right to make any changes in design, or make additions to or upon its products, without incurring any obligations to install the same changes on vehicles previously built.

THIS WARRANTY IS MADE EXPRESSLY IN LIEU OF ANY OTHER WARRANTIES, REPRESENTATIONS OR CONDITIONS, STATUTORY OR OTHERWISE, EXPRESSED OR IMPLIED, INCLUDING BUT NOT LIMITED TO ANY IMPLIED WARRANTY OR CONDITION OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, AND OF ANY OTHER OBLIGATION OR LIABILITY ON THE PART OF THE MANUFACTURER INCLUDING, WITHOUT LIMITATION OF THE FOREGOING, CONSEQUENTIAL, INDIRECT, AND INCIDENTAL DAMAGES. MANUFACTURER NEITHER ASSUMES NOR AUTHORIZES ANY PERSON TO ASSUME FOR IT ANY OTHER LIABILITY IN CONNECTION WITH THE SALE OF VEHICLES, COMPONENTS OR PARTS.

MACK

Mack Trucks, Inc.
Post Office Box 26259
7825 National Service Road
Greensboro, North Carolina 27409

STANDARD ENGINE WARRANTY CERTIFICATE

(EPA 17 and Newer, Model Year 2023)



Mack Trucks warrants certain individual components of each new Mack MP®7 and MP8 EPA 17 and newer emission engine in a new Mack truck to be free from defects in material and workmanship under normal use and service up to the periods specified, provided all Mack Trucks' maintenance and inspection requirements are followed. See your local authorized Mack dealer for recommended maintenance and inspection procedures. All warranty periods are calculated from the date in service of the vehicle. All coverage is 100% for parts and labor subject to the qualifications, limitations and exclusions as noted.

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

This warranty applies to only new Mack MP®7 and MP8 engines meeting EPA 17 and newer emission requirements in new Mack trucks operated in the United States and Canada installed in Model Year 2023 trucks.

Standard Mack Engine Components Coverage: 24 months or 250,000 miles (402,336 km), whichever occurs first, unless otherwise noted.

Major Components Coverage: 60 months or 500,000 miles (804,672 km), whichever occurs first.

USE OF IMPROPER OR UNAPPROVED FUEL OR ENGINE OIL WILL VOID THE ENGINE AND AFTERTREATMENT SYSTEM (DIESEL PARTICULATE FILTER) WARRANTIES. EPA 17 AND NEWER EMISSION MACK ENGINES REQUIRE THE USE OF MACK SPECIFICATION EOS 4.5 HIGH PERFORMANCE DIESEL ENGINE OIL AND ULTRA LOW SULFUR DIESEL (ULSD) FUEL.

USE OF FLUIDS OTHER THAN API CERTIFIED DIESEL EXHAUST FLUID (DEF) WILL COMPROMISE AFTERTREATMENT SYSTEM PERFORMANCE, INCREASE EMISSIONS, AND MAY IMPACT THIS TRUCK'S PRODUCT WARRANTIES.

SEE FOLLOWING TABLE FOR SPECIFIC COVERAGES:

Covered Standard Components List: 24 Months or 250,000 miles (402,336 km)	Qualifications and Limitations
Air Compressor	Includes: Sprocket and Mounting Bolts
Bearings	All internally lubricated bearings and bushings only.
Camshaft, Caps, and Bolts	Failures resulting from the valve and injector adjustments not being maintained properly are NOT covered. Normal maintenance adjustments are NOT covered.
Connecting Rods, Caps, and Bolts	
Coolant Duct Cover	
Crankcase Ventilation Assembly	
Crankshaft	
Crankshaft Hub	
Cylinder Block	Includes: Casting, Main Caps, and Bolts
Cylinder Block Heater	
Cylinder Head	Includes: Assembly, Casting, Bolts, Plugs, and Sleeves
Diesel Particulate Filter Assembly (DPF) / Diesel Oxidation Catalyst (DOC) / Selective Catalytic Reduction (SCR)	Includes: Aftertreatment Hydrocarbon Injector (AHI), Aftertreatment Wiring Harness, Aftertreatment Control Module, Diffuser Pipe (AHI Mounting), Fuel Lines to AHI Injector, AHI Shutoff Valve, AHI Fuel Pressure Sensor, Pre-Catalyst Temperature Sensor, Post-Catalyst Temperature Sensor, Downstream DPF Temperature Sensor, DPF Differential Pressure Sensor, Particulate Matter (PM) Sensor, SCR Assembly, DEF Pump Assembly (Pump Reverting Valve, Pump Pressure Sensor), DEF Injector, DEF Tank Heating Control Valve, NOx (SCR Inlet and Outlet) Sensor, Downstream SCR Temperature Sensor (T4)
EGR (Exhaust Gas Recirculation) Components	All components including Clamps, Control Valve, Controller Area Network (CAN) EGR Valve, Cooler, Fittings, Gaskets, Mixer, Pipes, Charge Air Cooler Temperature Out (CAC Out) Sensor, EGR Venturi Differential Pressure Sensor, EGR Wiring Harness.
Electrical EA Harness Supplied with Engine	From EECU to sensors and injectors and actuators
Engine Electronic Control Unit (EECU)	
Engine Brake Mechanism - PowerLeash™	Factory installed only. Includes: PowerLeash™ Control Valve and PowerLeash™ Rocker Arms. Turbo Compound (TC) engine: Closed Loop Butterfly (CLB)

Continued on Page 2...

Covered Standard Engine Components List: 24 Months or 250,000 miles (402,336 km)	Qualifications and Limitations
Exhaust Manifold	Includes: Casting, Joint Seals, Rings, and Wraps
Fan Belt Tensioner Assemblies and Bracket	Excludes: Fan Belts
Flywheel	Includes: Housing and Ring Gear
Fuel Filter Housing	Excludes: Filters
Fuel Injection System	Includes: Injectors and Common Rail Assembly (Electronic Fuel Pressure Regulator and Pressure Sensor)
Fuel Transfer Pump	
Gaskets, Seals, O Rings, and Silicon Sealant	
Gears	All internally lubricated gears only (Timing and Idler gears)
Hoses and Lines Supplied with Engine	Fluid carrying: Engine to engine mounted
Idler Pulleys	
Intake Manifold and Throttle Assembly	
Ladder Frame	
Oil Cooler	Engine Oil Cooler only
Oil Fill Tube and Cap	
Oil Filter Housing	Excludes: Oil Filters. Includes: All control valves and sensors contained in the Oil Filter Housing.
Oil Pan	
Oil Pump	
Piston Assembly	Includes: Cooler Nozzles, Liners, Pistons, and Rings
Pneumatic Control System	TC Engine: Air Valve Unit, Buffer Valve Unit, and Check Valve
Power Steering Pump	
Pre-Heater	Factory installed only. Includes: Preheat Relay, Terminals, and Power Cables
PTO Drive / REPTO (Rear Engine Mounted PTO Drive)	Factory installed only. Excludes: All Pumps or Driven Gears
Rocker Arm Assembly and Shafts	Includes: PowerLeash™ Rockers and Non-PowerLeash™ Rockers. Failures resulting from the valve and injector adjustments not being maintained properly are NOT covered. Normal maintenance adjustments are NOT covered.
Sensors (On Engine)	Includes: Temperature-Coolant, Crankcase Pressure, EGR Temperature, Engine Oil Level/Temperature, Engine Oil Pressure, Engine Timing/Speed (Flywheel), Temperature & Pressure – Inlet Manifold Air Sensor; Piston Cooling Jet Pressure
Starter Motor	
Telematics Gateway	TGW Unit and Associated Hardware (Antenna, Cab Overlay Harness, Antenna Cables)
Thermostat (Coolant)	Includes: Thermostat Side Cover
Timing Gear Cover and Plate	
Towing	Towing/Road Service on warrantable engine failures is covered to 24 months or 250,000 miles (402 336 km) whichever occurs first, limited to the truck (less trailer) and to a single tow per incident to the nearest authorized Mack service center. Charges in excess of \$1,000.00 are not covered unless Mack OneCall™ service is contacted and approves additional amounts prior to tow.
Turbocharger Assembly	Includes: VGT Actuator Module and Turbo Compound (TC) Assembly, if included
Valve Assembly	Includes: Guides, Keepers, Rotators, Seats, Springs, and Valves. Failures resulting from the valve adjustments not being maintained properly are NOT covered. Normal maintenance adjustments are NOT covered.
Valve Cover	
Valve Yokes (Bridge) and Pins	Failures resulting from the valve adjustments not being maintained properly are NOT covered. Normal maintenance adjustments are NOT covered.
Vibration Dampers and Bolts	
Water Pump Assembly	
Covered Major Engine Components List: 60 Months or 500,000 miles (804,672 km)	Qualifications and Limitations
Camshaft, Caps, and Bolts	Failures resulting from the valve & injector adjustments not being maintained properly are NOT covered. Normal maintenance adjustments are NOT covered.
Connecting Rods, Caps, and Bolts	
Crankshaft Forging	
Cylinder Block Casting, Main Caps, and Bolts	
Cylinder Head Casting and Bolts	
Exhaust Manifold Casting	
Flywheel Housing	
Gears	All internally lubricated gears only (Timing and Idler Gears)
Intake Manifold Housing	
Ladder Frame	
Thermostat Housing	
Timing Gear Mounting Plate	Excludes: Timing Gear Cover

Continued on Page 3...

THESE LIMITATIONS AND EXCLUSIONS ARE IMPORTANT AND MUST BE READ AND UNDERSTOOD.

LIMITATIONS – Mack Trucks' obligation is limited to, at its sole option, repair or replacement of parts which are acknowledged by it to be defective. The defective parts or assemblies replaced shall become the property of Mack Trucks. Warranty repairs performed by an authorized Mack dealer in accordance with the terms of the warranty set forth herein are free of charge. Warranty consideration can only be given if the deficiency is brought to the attention of an authorized Mack dealer upon discovery and the vehicle must be made available, in a timely fashion during the coverage period, for repair.

EXCLUSIONS:

1. **REPAIR:** In the case of acknowledged defective Covered Parts, exchange with factory remanufactured parts may occur. Warranty repairs do not constitute an extension of any warranty period for any vehicle, component or part.
2. **DAMAGES:** Damages due to misapplication, misuse, accidents, negligence, improper operations, alterations, storage or transport, operation at excessive speeds, loading beyond the factory rated load capacity, failure to follow Mack Trucks' recommended inspection, maintenance, and service procedures, and improper or insufficient maintenance services are not covered.
3. **PROGRESSIVE DAMAGE:** Damages due to failure of operator to take reasonable precautions to mitigate damage are not covered. Damages to a Covered Part due to failure of non-covered part are not covered. Coverage is limited to failure of a Covered Part directly causing failure of a non-covered part, where reasonable precautions were taken to mitigate damages.
4. **APPLICATION:** The selling dealer is responsible for designating the correct application and/or specification for a vehicle sold to a customer. Damages due to misapplication, including but not limited to, failures of component parts of vehicles being operated in excess of factory rated load capacities, or the use of a vehicle, component or part for a purpose for which it was not intended are not covered.
5. **ALTERATIONS:** Any vehicle, component or part repaired, altered, or inspected in any way, so as to adversely affect, in Mack Trucks' sole judgment, its stability, durability, or reliability, is not covered.
6. **NON-ORIGINAL EQUIPMENT:** Any part of the vehicle that fails, malfunctions, or does not perform as a result of improper conversion or installation of bodies or equipment by other manufacturers or suppliers is not covered.
7. **MAINTENANCE AND PARTS CONSUMED:** Maintenance and inspection requirements found in the Operator's Manuals and service manuals/instructions, including, but not limited to, engine tune-up, fuel system cleaning, replacement of lubricants and filter elements, adjustments of the engine injection pump/transmission/brakes/linkages, as well as diagnosis, test time and all other adjustments must be followed and are not covered. Parts which are normally consumed or worn out during the vehicle's normal service life and customarily replaced during usual maintenance service, including, but not limited to, mud flaps and brackets, brake linings, clutch brake, and clutch linings, are not covered.
8. **PERFORMANCE COMPLAINTS:** Performance complaints are not covered (including, but not limited to, low power and/or poor fuel economy). Coverage is limited to defects in material and workmanship of a Covered Part directly causing the performance issue.
9. **WEAROUT:** Mack Trucks does not cover normal wear of Covered Parts. Failures attributable to wear are excluded. For example and without limitation, the wear rate of parts in any engine or transmission, and especially those parts within the combustion area and clutch housing area, will vary depending upon operating conditions and environment. Conditions, such as load, trailer configuration, road speed and road conditions, as well as the quality of fuel, lubrication oil, and all filters bear a direct relationship to the wear rate and resulting life of parts. Depending upon the severity of these various conditions, parts wear and resulting failure could occur within the time limit of the coverage.
10. **NON-GENUINE PARTS:** Any failure of any vehicle, component or part caused by the by use of parts and accessories, or major assemblies and exchange units, which do not meet factory standards is not covered.
11. **ODOMETER READING:** Any vehicle on which the actual mileage or hours cannot readily be determined, or on which the odometer, hour meter, or Electronic Control Unit has been disconnected, disabled, or altered, may not be covered by this warranty.
12. **ACCESS TO INFORMATION:** Owner must allow Mack Trucks full access to all data stored in all Electronic Control Modules; failure to do so may result in the loss of warranty coverage.
13. **LABOR:** Labor to remove and install a Covered Part is included only if a Mack Trucks authorized dealer originally installed the Covered Part. Labor for overtime and/or shift differential is not covered. Excessive labor for a warrantable repair due to the prior installation of equipment or body is not covered.
14. **MISC. EXPENSE:** Meals, lodging, communications charges, travel time and expense, loss of cargo, downtime, loss of profit/revenue, rental vehicles, driver's wages and other miscellaneous expenses are not covered. Shop supplies, lube oil, lubricants, sealers, anti-freeze, filter elements and labor performed by a non-approved location are not covered.
15. **ADDITIONAL COMPONENTS:** Components or parts that are not installed by Mack Trucks, including winches, power take-offs, dumper, mixer and refuse assemblies, hoists and bodies or other special equipment are not covered. During a warrantable repair, additional time to remove any customer installed components will not be covered under warranty. Mack Trucks' factory manufacturing records will be determinative as to factory installed components.
16. **TOWING:** Unless expressly provided in this Warranty Certificate, expenses for towing or road service are not covered. Failures caused by improper towing technique are not covered.
17. **SUSPENSION PARTS:** Suspension parts, including but not limited to rubber bushings, torque rod bushings, spring pins and bushings, and greased lubrication points that fail due to improper maintenance, abnormally severe service or abuse are not covered.
18. **CAB STRUCTURE AND CORROSION:** Cab structural defects or cab corrosion that occurs in areas of the cab that previously were damaged, repaired, altered or modified are not covered. Cab corrosion where metal is perforated from the outside to the inside is not covered.
19. **VENDOR ENGINES, ALLISON AUTOMATIC TRANSMISSIONS and ALTERNATE FUEL STORAGE AND DELIVERY SYSTEMS:** Vendor engines, Allison automatic transmissions and alternate fuel (CNG/LNG/DME) fuel storage/delivery components used in Mack trucks are warranted by their respective manufacturers and not by Mack Trucks, Inc. Refer to the manufacturers' warranty statements.
20. **OIL CONSUMPTION:** Before a claim based upon excessive oil consumption will be considered, the owner must provide proof that all recommended maintenance has been performed and submit adequate documentation to show that oil consumption exceeds Mack Trucks' published standards. Under no circumstances will warranty pay for repairs related to excessive oil consumption after the earlier of 24 months, 250,000 miles, or 402,000 kilometers.
21. **ENVIRONMENTAL DAMAGE:** Parts made out of cloth, leather, wood, rubber, synthetics, paint or chrome, which have been affected by exposure to the elements or chemical influence including, but not limited to, road salt/chemicals, industrial fall-out or the use of improper cleaners, polishes and/or waxes are not covered.
22. **ALIGNMENT:** Alignment of axle(s), balance of tires, changing of axle camber, caster, toe and thrust angle are not covered.
23. **GLASS:** Glass breakage and scratches are not covered unless physical proof of manufacturing responsibility is established.
24. **TIRES:** Except as expressly provided in warranty certificates covering Green House Gas (GHG) components, tires are covered only under warranties provided by the tire manufacturer.
25. **CHANGES:** Mack Trucks reserves the right to make any changes in design, or make additions to or upon its products, without incurring any obligations to install the same changes on vehicles previously built.

THIS WARRANTY IS MADE EXPRESSLY IN LIEU OF ANY OTHER WARRANTIES, REPRESENTATIONS OR CONDITIONS, STATUTORY OR OTHERWISE, EXPRESSED OR IMPLIED, INCLUDING BUT NOT LIMITED TO ANY IMPLIED WARRANTY OR CONDITION OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, AND OF ANY OTHER OBLIGATION OR LIABILITY ON THE PART OF THE MANUFACTURER INCLUDING, WITHOUT LIMITATION OF THE FOREGOING, CONSEQUENTIAL, INDIRECT, AND INCIDENTAL DAMAGES. MANUFACTURER NEITHER ASSUMES NOR AUTHORIZES ANY PERSON TO ASSUME FOR IT ANY OTHER LIABILITY IN CONNECTION WITH THE SALE OF VEHICLES, COMPONENTS OR PARTS.

MACK®

Mack Trucks, Inc.
Post Office Box 26259
7825 National Service Road
Greensboro, North Carolina 27409

STANDARD EMISSIONS COMPONENT WARRANTY CERTIFICATE

(EPA 17 and Newer, Model Year 2023)



Mack Trucks warrants certain individual components of the Emission Control system in a new Mack truck equipped with a new Mack MP@7 and MP8 EPA 17 and newer emission engine to be free from defects in material and workmanship under normal use and service up to the periods specified, provided all Mack Trucks' maintenance and inspection requirements are followed. See your local authorized Mack Trucks dealer for recommended maintenance and inspection procedures. All warranty periods are calculated from the date in service of the vehicle. All coverage is 100% for parts and labor subject to the qualifications, limitations and exclusions as noted.

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

This warranty applies to new Mack MP@7 and MP8 engines meeting EPA 17 and newer emission requirements in new Mack trucks operated in the United States and Canada.

Emission Control System Warranty: Engine emission controls manufactured by Mack Trucks are warranted to 60 months or 100,000 miles (160,934 km), whichever first occurs. Vehicles sold for use in California and other opt-in states, with a CARB emission label certification, are covered for 60 months or 350,000 miles (563,270 km).

USE OF IMPROPER OR UNAPPROVED FUEL OR ENGINE OIL WILL VOID THE ENGINE AND AFTERTREATMENT SYSTEM (DIESEL PARTICULATE FILTER) WARRANTIES. MACK ENGINES REQUIRE THE USE OF MACK SPECIFICATION EOS 4.5 HIGH PERFORMANCE DIESEL ENGINE OIL AND ULTRA LOW SULFUR DIESEL (ULSD) FUEL.

USE OF FLUIDS OTHER THAN API CERTIFIED DIESEL EXHAUST FLUID (DEF) WILL COMPROMISE AFTERTREATMENT SYSTEM PERFORMANCE, INCREASE EMISSIONS, AND MAY IMPACT THIS TRUCK'S PRODUCT WARRANTIES.

SEE FOLLOWING TABLE FOR SPECIFIC COVERAGES:

Covered Emission Components List: EPA: 60 Months or 100,000 Miles (160,934 km) CARB: 60 Months or 350,000 Miles (563,270 km)	Qualifications and Limitations
Aftertreatment Control Module (ACM)	Includes: Software and Dataset
Aftertreatment Diesel Particulate Filter (DPF) with Aftertreatment Diesel Oxidation Catalyst (DOC)	Includes: DPF Module (Substrate), DOC Module (Substrate), Aftertreatment Hydrocarbon Injector (AHI), AHI Shutoff Valve, AHI Fuel Pressure Sensor, AHI Fuel Line, Diesel Dosing Valve, Pre-Catalyst Temperature Sensor, Post-Catalyst Temperature Sensor, Downstream DPF Temperature Sensor, DPF Differential Pressure Sensor
Aftertreatment Wiring Harness (DPF)	
Aftertreatment Wiring Harness (SCR)	Includes: Jumper to AHI Pressure Regulator, ACM Power Supply, Heater NOx Care, DEF Tank
Charge Air Cooler (CAC)	
Common Rail Assembly	Includes: Rail, Rail Injectors, Rail Pressure Release Valve
Controller Area Network (CAN) EGR Valve	
Crankcase Ventilation (CCV) Assembly	
Crankcase Tubing & Hoses Before Separator	
EGR Assembly	Includes: Cooler, Mixer/Mixing Chamber, EGR Cooler to Intake Manifold (cold side) Piping, EGR Piping Exhaust Manifold to EGR Cooler (hot side), EGR Valve, EGR Valve Control, EGR Venturi, Intake Manifold Heater, Diffuser Pipe, Intake Throttle Valve
Engine Electronic Control Unit (EECU)	Includes: Software and Dataset. For the failure to be covered, the failure must affect the emissions of the unit.
Engine Turbocharger Assembly: Variable Geometry Turbo (VGT) or Turbo Compound (TC)	Includes: Variable Geometry Turbo (VGT) Actuator
Exhaust Gas Piping	From Turbocharger to After-treatment System
Fuel Filter Module	Includes: Fuel Filter Housing, Diesel Low Pressure Pump, Fuel Pressure Regulating Valve
Injectors	
Instrument Cluster	Limited to Repair of Microprocessor, MIL, Real Time Clock, DEF Gauge, DEF Lamp

Continued on Page 2...

Covered Emission Components List: EPA: 60 Months or 100,000 Miles (160,934 km) CARB: 60 Months or 350,000 Miles (563,270 km)	Qualifications and Limitations
Intake Manifold Throttle Assembly	
Pre-Heater	
Selective Catalytic Reduction (SCR)	SCR - SCR Assembly: SCR Module (if applicable) (Substrate); Insulation Blanket (where applicable); DEF Pump Assembly: Pump Reverting Valve, Pump Pressure Sensor; DEF Injector; DEF Heated Hoses; DEF Tank; DEF Tank Heating Control Valve; DEF Tank Heater / Sender; DEF Tank Temperature Sensor, DEF Level Sensor, DEF Tank Heater; Downstream SCR Temperature Sensor; DEF Quality Sensor
Sensor, NOx (SCR Inlet and Outlet)	
Sensor, Ambient Air Temperature	
Sensor, Charge Air Cooler Outlet Temperature	
Sensor, Downstream SCR Temperature (T4)	
Sensor, EGR Temperature	
Sensor, EGR Valve Position	
Sensor, EGR Venturi Differential Pressure	
Sensor, Engine Timing / Speed (Flywheel)	
Sensor, Engine Oil Level/Temperature	
Sensor, Engine Oil Pressure	
Sensor, Engine Position (Camshaft)	
Sensor, Exhaust Manifold Pressure	
Sensor, Fuel Pressure (Common Rail)	
Sensor, Fuel Temperature	
Sensor, Particulate Matter (PM)	
Sensor, Temperature – Coolant (Engine)	
Sensor, Temperature & Pressure – Inlet Manifold Air	
Sensor, Temperature - Exhaust Manifold	
Sensor, Turbo Compressor Outlet	
Sensor, Turbocharger Speed	
Thermostat, Coolant	
Vehicle Electronic Control Unit (VECU)	Includes: Software and Dataset. For the failure to be covered, the failure must affect the emissions of the unit.
Water Pump Assembly, Engine Coolant	
Wiring Harness, Engine Electrical EA Harness Supplied with Engine	
GHG Covered Component 24 Months or 24,000 Miles (38,624 km)	Qualifications and Limitations
Tires	Drive and steer tires only are warranted to be free from defects in materials and workmanship for the first 24 months or 24,000 miles (38 624 km) of vehicle operation, whichever occurs first, and applying only to the first set of tires on the vehicle when delivered to the ultimate purchaser. Emissions related warranty coverage only, refer to the specific tire manufacturer's warranty policy for other term lengths.
GHG Covered Components: EPA: 60 Months or 100,000 Miles (160,934 km) (Only those vehicles certified as "Highway Tractors" according to the requirements of Chapter 40 of the Code of Federal Regulations, Part 1037)	Qualifications and Limitations
Exterior Components	Limited to: Chassis Fairings, Ground Effect Extensions, Roof Deflectors, Cab Side Deflectors, Adjustable Roof Extensions, Side Deflector Extensions, Bumper Deflectors, A-Pillar Deflectors, Factory Installed Aerodynamic Devices
Air Conditioning Components	Limited to: A/C Compressor, A/C Condenser, A/C Pressure Switches and Transducers, Bunk Climate Unit, Hoses (Compressor to Condenser, Condenser to Drier, Drier to Climate Unit, Climate Unit to Compressor, Bunk Climate Unit), Main Climate Unit, Receiver Drier

Continued on Page 3...

THESE LIMITATIONS AND EXCLUSIONS ARE IMPORTANT AND MUST BE READ AND UNDERSTOOD.

LIMITATIONS – Mack Trucks' obligation is limited to, at its sole option, repair or replacement of parts which are acknowledged by it to be defective. The defective parts or assemblies replaced shall become the property of Mack Trucks. Warranty repairs performed by an authorized Mack dealer in accordance with the terms of the warranty set forth herein are free of charge. Warranty consideration can only be given if the deficiency is brought to the attention of an authorized Mack dealer upon discovery and the vehicle must be made available, in a timely fashion during the coverage period, for repair.

EXCLUSIONS:

1. **REPAIR:** In the case of acknowledged defective Covered Parts, exchange with factory remanufactured parts may occur. Warranty repairs do not constitute an extension of any warranty period for any vehicle, component or part.
2. **DAMAGES:** Damages due to misapplication, misuse, accidents, negligence, improper operations, alterations, storage or transport, operation at excessive speeds, loading beyond the factory rated load capacity, failure to follow Mack Trucks' recommended inspection, maintenance, and service procedures, and improper or insufficient maintenance services are not covered.
3. **PROGRESSIVE DAMAGE:** Damages due to failure of operator to take reasonable precautions to mitigate damage are not covered. Damages to a Covered Part due to failure of non-covered part are not covered. Coverage is limited to failure of a Covered Part directly causing failure of a non-covered part, where reasonable precautions were taken to mitigate damages.
4. **APPLICATION:** The selling dealer is responsible for designating the correct application and/or specification for a vehicle sold to a customer. Damages due to misapplication, including but not limited to, failures of component parts of vehicles being operated in excess of factory rated load capacities, or the use of a vehicle, component or part for a purpose for which it was not intended are not covered.
5. **ALTERATIONS:** Any vehicle, component or part repaired, altered, or inspected in any way, so as to adversely affect, in Mack Trucks' sole judgment, its stability, durability, or reliability, is not covered.
6. **NON-ORIGINAL EQUIPMENT:** Any part of the vehicle that fails, malfunctions, or does not perform as a result of improper conversion or installation of bodies or equipment by other manufacturers or suppliers is not covered.
7. **MAINTENANCE AND PARTS CONSUMED:** Maintenance and inspection requirements found in the Operator's Manuals and service manuals/instructions, including, but not limited to, engine tune-up, fuel system cleaning, replacement of lubricants and filter elements, adjustments of the engine injection pump/transmission/brakes/linkages, as well as diagnosis, test time and all other adjustments must be followed and are not covered. Parts which are normally consumed or worn out during the vehicle's normal service life and customarily replaced during usual maintenance service, including, but not limited to, mud flaps and brackets, brake linings, clutch brake, and clutch linings, are not covered.
8. **PERFORMANCE COMPLAINTS:** Performance complaints are not covered (including, but not limited to, low power and/or poor fuel economy). Coverage is limited to defects in material and workmanship of a Covered Part directly causing the performance issue.
9. **WEAROUT:** Mack Trucks does not cover normal wear of Covered Parts. Failures attributable to wear are excluded. For example and without limitation, the wear rate of parts in any engine or transmission, and especially those parts within the combustion area and clutch housing area, will vary depending upon operating conditions and environment. Conditions, such as load, trailer configuration, road speed and road conditions, as well as the quality of fuel, lubrication oil, and all filters bear a direct relationship to the wear rate and resulting life of parts. Depending upon the severity of these various conditions, parts wear and resulting failure could occur within the time limit of the coverage.
10. **NON-GENUINE PARTS:** Any failure of any vehicle, component or part caused by the use of parts and accessories, or major assemblies and exchange units, which do not meet factory standards is not covered.
11. **ODOMETER READING:** Any vehicle on which the actual mileage or hours cannot readily be determined, or on which the odometer, hour meter, or Electronic Control Unit has been disconnected, disabled, or altered, may not be covered by this warranty.
12. **ACCESS TO INFORMATION:** Owner must allow Mack Trucks full access to all data stored in all Electronic Control Modules; failure to do so may result in the loss of warranty coverage.
13. **LABOR:** Labor to remove and install a Covered Part is included only if a Mack Trucks authorized dealer originally installed the Covered Part. Labor for overtime and/or shift differential is not covered. Excessive labor for a warrantable repair due to the prior installation of equipment or body is not covered.
14. **MISC. EXPENSE:** Meals, lodging, communications charges, travel time and expense, loss of cargo, downtime, loss of profit/revenue, rental vehicles, driver's wages and other miscellaneous expenses are not covered. Shop supplies, lube oil, lubricants, sealers, anti-freeze, filter elements and labor performed by a non-approved location are not covered.
15. **ADDITIONAL COMPONENTS:** Components or parts that are not installed by Mack Trucks, including winches, power take-offs, dumper, mixer and refuse assemblies, hoists and bodies or other special equipment are not covered. During a warrantable repair, additional time to remove any customer installed components will not be covered under warranty. Mack Trucks' factory manufacturing records will be determinative as to factory installed components.
16. **TOWING:** Unless expressly provided in this Warranty Certificate, expenses for towing or road service are not covered. Failures caused by improper towing technique are not covered.
17. **SUSPENSION PARTS:** Suspension parts, including but not limited to rubber bushings, torque rod bushings, spring pins and bushings, and greased lubrication points that fail due to improper maintenance, abnormally severe service or abuse are not covered.
18. **CAB STRUCTURE AND CORROSION:** Cab structural defects or cab corrosion that occurs in areas of the cab that previously were damaged, repaired, altered or modified are not covered. Cab corrosion where metal is perforated from the outside to the inside is not covered.
19. **VENDOR ENGINES, ALLISON AUTOMATIC TRANSMISSIONS and ALTERNATE FUEL STORAGE AND DELIVERY SYSTEMS:** Vendor engines, Allison automatic transmissions and alternate fuel (CNG/LNG/DME) fuel storage/delivery components used in Mack trucks are warranted by their respective manufacturers and not by Mack Trucks, Inc. Refer to the manufacturers' warranty statements.
20. **OIL CONSUMPTION:** Before a claim based upon excessive oil consumption will be considered, the owner must provide proof that all recommended maintenance has been performed and submit adequate documentation to show that oil consumption exceeds Mack Trucks' published standards. Under no circumstances will warranty pay for repairs related to excessive oil consumption after the earlier of 24 months, 250,000 miles, or 402,000 kilometers.
21. **ENVIRONMENTAL DAMAGE:** Parts made out of cloth, leather, wood, rubber, synthetics, paint or chrome which have been affected by exposure to the elements or chemical influence including, but not limited to, road salt/chemicals, industrial fall-out or the use of improper cleaners, polishes and/or waxes are not covered.
22. **ALIGNMENT:** Alignment of axle(s), balance of tires, changing of axle camber, caster, toe and thrust angle are not covered.
23. **GLASS:** Glass breakage and scratches are not covered unless physical proof of manufacturing responsibility is established.
24. **TIRES:** Except as expressly provided in warranty certificates covering Green House Gas (GHG) components, tires are covered only under warranties provided by the tire manufacturer.
25. **CHANGES:** Mack Trucks reserves the right to make any changes in design, or make additions to or upon its products, without incurring any obligations to install the same changes on vehicles previously built.

THIS WARRANTY IS MADE EXPRESSLY IN LIEU OF ANY OTHER WARRANTIES, REPRESENTATIONS OR CONDITIONS, STATUTORY OR OTHERWISE, EXPRESSED OR IMPLIED, INCLUDING BUT NOT LIMITED TO ANY IMPLIED WARRANTY OR CONDITION OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, AND OF ANY OTHER OBLIGATION OR LIABILITY ON THE PART OF THE MANUFACTURER INCLUDING, WITHOUT LIMITATION OF THE FOREGOING, CONSEQUENTIAL, INDIRECT, AND INCIDENTAL DAMAGES. MANUFACTURER NEITHER ASSUMES NOR AUTHORIZES ANY PERSON TO ASSUME FOR IT ANY OTHER LIABILITY IN CONNECTION WITH THE SALE OF VEHICLES, COMPONENTS OR PARTS.

MACK®

Mack Trucks, Inc.
Post Office Box 26259
7825 National Service Road
Greensboro, North Carolina 27409

TANDEM AXLE



PALMER - KENWORTH OF INDIANAPOLIS EAST (I081)
 9704 E 30TH STREET
 INDIANAPOLIS, Indiana 46229

CITY OF NOBLESVILLE
 197 WASHINGTON STREET
 NOBLESVILLE, Indiana 46060
 United States of America

Eric Wiselogle
 Cell Phone: 317-354-3343
 Office Phone: 317-247-8421
 Email: EWiselogle@palmertrucks.com

JONATHON MIRGEAUX
 Office Phone: 317-776-6353
 Email: jmirgeaux@noblesville.in.us

Vehicle Summary

Unit		Chassis	
Model:	T480 Series Conventional	Fr Axle Load (lbs):	16000
Type:	FULL TRUCK	Rr Axle Load (lbs):	40000
Description 1:	T480	G.V.W. (lbs):	66000
Description 2:			
Application		Road Conditions:	
Intended Serv.:	Snowplow: Vehicles which are configured	Class A (Highway)	90
Commodity:	Gravel/crushed rock/sand	Class B (Hwy/Mtn)	8
		Class C (Off-Hwy)	2
		Class D (Off-Road)	0
Body		Maximum Grade:	6
Type:	End dump	Wheelbase (in):	206
Length (ft):	16	Overhang (in):	67
Height (ft):	13	Fr Axle to BOC (in):	69.5
Max Laden Weight (lbs):	4000		
		Cab to Axle (in):	136.5
		Cab to EOF (in):	203.5
		Overall Comb. Length (in):	313
Trailer		Special Req.	
No. of Trailer Axles:	0	U.S. Domestic registry, 50-state.	
Type:			
Length (ft):	0		
Height (ft):	0		
Kingpin Inset (in):	0		
Corner Radius (in):	0		
Restrictions			
Length (ft):	75		
Width (in):	102		
Height (ft):	13.5		

Approved by: _____

Date: _____

Note: All sales are F.O.B. designated plant of manufacture.



Sales Code	Std/Opt	Description	\$ List	Weight
Model				
0000480	S	T480 Series Conventional	111,895	10,386
0071000	O	T480 Aero Hood	0	0
0080050	S	CARB Idle Emissions Reduction Feature for PX-7 and PX-9	35	0
0090162	O	T480 Tandem	0	0
0098414	O	State of Registry: Indiana	0	0
Engine & Equipment				
0130205	O	PX-9 330 330@1750 1000@1200, 2021 With Turbo Exhaust Brake (VGT Brake). N09420 C333 0.....Reserve Speed Limit Offset (N09380 C334 0.....Maximum Cycle Distance (N202 N09360 C400 252...Reserve Speed Function Reset N09200 C399 120...Standard Maximum Speed Limit N09400 C401 10.....Maximum Active Distance (N20 N09220 C402 0.....Expiration Distance (N207) N09540 C395 0.....Expiration Distance (N209) N09260 C121 68....Max Vehicle Speed in Top Gea N09440 C234 NO....Engine Protection Shtdwn N09460 C231 NO....Gear Down Protection N09580 C133 5.....Idle Shtdwn Time N09680 C233 NO....Idle Shtdwn Override N09480 C132 1400..Max PTO Speed N09300 C128 68....Max Cruise Control Speed N09500 C239 NO....Cruise Control Auto Resume N09520 C238 NO....Auto Engine Brake in Cruise N09780 C190 80....High Ambient Temperature Thr N09740 C188 40....Low Ambient Temperature Thre N09760 C189 60....Intermediate Ambient Tempera N09720 C382 YES...Enable Hot Ambient Automatic N09600 C396 YES...Enable Impending Shutdown Wa N09620 C397 60....Timer For Impending Shutdown N09640 C206 35....Engine Load Threshold N09560 C225 YES...Enable Idle Shutdown Park Br	1,571	0
1000046	O	EPA Emissions Warranty Engine	0	0
1000151	S	PremierSpec	0	0
1000244	O	Gearing Analysis: Balance power/economy blend results.	0	0
1000256	O	Customer's Typical Operating Spd: 64 MPH	0	0
1000684		Effective VSL Setting NA	0	0

Price Level: January 1, 2022

Deal: T480

Printed On: 7/27/2023 3:09:47 PM

Date: July 27, 2023

Quote Number: QUO-968394-F6B9K9



Sales Code	Std/Opt	Description	\$ List	Weight
1000858	O	Engine Idle Shutdown Timer Disabled	0	0
1000859	S	Enable EIST Ambient Temp Override	0	0
1000891		Eff EIST NA Expiration Miles Use only with MX and Cummins engines	0	0
1002060	S	Air compressor: Cummins 18.7 CFM For Cummins And PACCAR PX engines.	0	0
1041399	S	Air Cleaner: MD Composite Engine Mounted	0	0
1105231	O	Fan Hub: Horton On/Off for PX-9 or L9N	0	0
1121231	O	Cooling Module: 2.1M MD - Aero Hood 1000 Square Inches	0	0
1247234	S	EXH: 2021 RH Under DPF/SCR with RH SOC Vertical tailpipe. Not 2.1m high roof sleepers	411	0
1290124	S	Tailpipe: 5 in. single 24 in. 45 degree curved.	143	6
1321102	S	Fuel Filter: PACCAR 2.1M MD for PX-7 or PX-9 Fuel/water separator for 2021 and later engines.	0	0
1321205	S	Run Aid:Fuel Heat *For Fuel Filter	41	0
1321305	S	Start Aid:12V Heat *For Fuel Filter	22	1
1500029	S	Kenworth Fuel Cooler Required for Cummins engines with a single fuel tank. Required for PACCAR MX-13 engine with a single fuel tank and stationary use: High RPM, low vehicle speed, sustained for longer than 1 hour. Optional for all other applications.	166	0
1504006	S	Block heater: PACCAR 750 watt 120V for PX-7 and B6.7N. 1000 watt for PX-9 and ISL9 engines.	24	2
1816260	S	Alternator: PACCAR 160 amp, brush type	0	0
1821220	S	Batteries: 2 PACCAR GP31 threaded post (700-730) 1400-1460 CCA dual purpose.	0	0
1836106	S	Mitsubishi 105P55 12V Starter with Cummins and PX PACCAR 12 volt electrical system. W/ centralized power distribution incorporating plug-in style relays. Circuit protection for serviceability, 12-volt light system w/circuit protection circuits number & color coded. Only for Cummins or PX engines.	0	0
1901018	O	Remote PTO/Throttle, 12-Pin, 250K, Back of Cab OR Back of Sleeper, J1939, Remote Control Provision	0	0

Transmission & Clutch

2011613	O	Transmission: Allison 3000RDS 6-speed, With PTO drive gear. 6th Generation controls. Includes heat exchanger & oil level sensor. Rugged Duty Series for vocational applications. Requires a push button shift control code. Oil temperature gauge is standard on class 8 models. Transynd transmission fluid is standard on all Allison 1000, 2000, 3000 & 4000 series transmissions.	6,336	399
---------	---	--	-------	-----

Price Level: January 1, 2022

Deal: T480

Printed On: 7/27/2023 3:09:47 PM

Date: July 27, 2023

Quote Number: QUO-968394-F6B9K9



Sales Code	Std/Opt	Description	\$ List	Weight
2401405	S	Driveline: 2 Dana standard-duty; 1 centerbearing. *Standard duty is 1710 series.	0	0
2409941	O	One Heavy-Duty One-Piece Aluminum crossmember This option upgrades an existing crossmember. The cost does not include the centerbearing and bracket. Crossmember location will be in accordance with Kenworth engineering standards, using the major components specified on the DTPO.	0	0
2410018	S	Torque converter included w/Allison Transmission.	0	0
2410114	O	Left hand Pto access, right hand dip stick tube Allison 3000 series only.	18	0
2410153	S	Push Button Shifter Controls, Center Console Mounted for Allison Transmission. 2.1m Medium Duty only.	0	0
2410310	S	Allison Neutral at Stop	394	0
2410325	O	Allison Fuel Sense: ARM Base Economy	246	0
2429378	S	Customer installed transmission PTO in the LH Mounted position (8 o'clock) for Allison 3000 & 4000 transmissions.	0	0
Front Axle & Equipment				
2534001	O	PACCAR FX-20 ST Fr Axle rated @ 16K 4" drop	1,523	0
2607002	O	Front Brakes: 14,601-22K Bendix air disc brakes.	716	10
2690025	O	Splined rotor for front air disc brakes for use with iron hubs.	478	0
2690039	O	Integral Knuckle for Air Disc Brake, for use on PACCAR FX Steer Axle	0	-33
2702020	O	Front Hubs Iron hub pilot 20,000 lbs. 10 Bolt 16.5x6in. or 7in. or air disc brakes. 10 Bolt, 11-1/4 in. bolt circle. Consider Wheelguards (5850002) with aluminum wheels.	259	80
2741970	S	ConMet PreSet Plus Hub package; front axle.	0	0
2750001	S	Hubcap: front vented.	0	0
2769000	O	Slack Adjusters included w/ front axle or brake. Also use w/ disc brakes.	0	0
2864074	O	Front Springs: Taperleaf 16K w/ shock absorbers w/ maintenance-free elastomer spring pin bushings.	150	76
2895300	O	Dual power steering gears: 16K.	956	75
2899336	S	Power Steering Cooler:Radiator Mounted Air-to-Oil	325	11
2900062	O	60 mm front suspension spacer block.	0	0
Rear Axle & Equipment				
3122164	O	Dual Rear Axle 40,000 lbs. Meritor RT40-160P with pump	11,277	2,369

Price Level: January 1, 2022

Deal: T480

Printed On: 7/27/2023 3:09:47 PM

Date: July 27, 2023

Quote Number: QUO-968394-F6B9K9



Sales Code	Std/Opt	Description	\$ List	Weight
3200538	O	Rear Axle Ratio - 5.38.	0	0
3334004	O	Dual Rear Brakes 16-1/2x7 in. to 46K; Bendix ES-extended service S-cam.	0	0
3392005	O	Dual Rear Brake Drums: cast. For use with 16.5X7" or 16.5X8.625" brake.	0	0
3407050	O	Dual Rear Hubs: Aluminum hub pilot 46K; 11.25" bolt circle. Requires "R" series outer ends.	0	0
3441972	O	ConMet PreSet Plus Hub package; dual rear axle.	0	0
3465002	O	Dual Rear axle automatic slack adjusters. For use with drum brakes.	0	0
3485209	O	Spring Brake: 3030 high output dual.	122	0
3495226	S	Bendix 4S/4M anti-lock brake system.	0	0
3500006	O	Inverted chambers for 16-1/2 x 7 in. brakes; Replaces standard mount w/ higher mount.	12	0
3500037	O	Interaxle driveline:1 Dana 1710 Series Tandem Rear Axels Only.	391	86
3511420	O	Driver Controlled Differential Lock (Crosslock) for Meritor Axles 40K to 52K forward rear & rear rear axle. Under Speed Interlock is standard on T680.	2,069	39
3742941	O	Tandem Hendrickson HAULMAAX EX (HMX) 460 46K. 54 in. axle spacing, 17.5 in. saddle height. With shocks, track rods and rubber bolster bushings. Unladen Height: 12.5 in. Laden Height: 10.5 in.	5,154	488
Tires & Wheels				
4010006	O	Front Tires: Michelin X Works Z 315/80R22.5 20PR	1,047	96
4210150	O	Rear Tires: Michelin X Works D 11R22.5 16PR	2,976	240
4900008	O	Rear Tire Quantity: 8	0	0
5042311	O	Front Wheel: Accuride 29039 22.5X9 steel Steel Armor[™] powder coat, hub-pilot mount. 10000lb. maximum rating. 5-hand holes.	343	70
5242285	O	Rear Wheel: Accuride 50344 22.5x8.25 steel Steel Armor[™] powder coat, hub-pilot mount. Heavy-duty 5 hand-hole hub pilot mount. Code is priced per pair of wheels.	448	80
5853906	S	Powder coat white steel wheel. Use in conjunction with front, dual front, rear, spare or lift axle wheel code(s). All wheels on chassis must have same finish color.	0	0
5900008	O	Rear Wheel/Rim Quantity: 8	0	0
Frame & Equipment				
6054250	S	Frame Rails: 10-5/8 x 3-1/2 x 5/16 in. Steel to 308 in. Truck frame weight is 2.91 lb.-in. per pair of rails. Section modulus is 14.80 cu.in., RBM is 1,776,000 in-lbs per rail. 120,000 PSI	0	94

Price Level: January 1, 2022

Deal: T480

Printed On: 7/27/2023 3:09:47 PM

Date: July 27, 2023

Quote Number: QUO-968394-F6B9K9



Sales Code	Std/ Opt	Description	\$ List	Weight
		yield. Heat treated. Frame rail availability may be restricted based upon application, axle/suspension capacity, fifth wheel setting, or component/dimensional specifications. The results of the engineering review may result in a change to the requested frame rail. If a change is required Kenworth Application Engineering will advise the dealer of the appropriate material specification for a substitute rail.		
6141400	S	Full Steel Insert: for 10-5/8 in. or 10-3/4 in. Steel 285 in. to 336 in. or 2nd insert for 11-5/8 in. steel frame. Adds 1,149,000 in-lb to main rail RBM. Truck insert weight is 2.05 lb.-in. per pair of rails. Full frame insert length is equal to wheelbase plus rear frame cutoff plus dimension forward of front axle by model: T660, T680, T800, T880 = 21.26 in.; C500B = bumper setting minus 0.79 in.; W900B = 5.27 in., W900L = 1.50 in., W900S = 3.27 in.; T440/T470 50 in. bumper setting = 21.26 in., T470 73 in. bumper setting = 72.3 in.	1,471	615
6308710	O	Bumper: Aerodynamic, Painted. Requires a bumper setting code.	38	0
6319040	O	40 in. Bumper setting. Requires a bumper code.	0	0
6321010	S	Front tow loops: Two	0	0
6397001	O	Huck bolts throughout frame, where possible.	0	0
6400644	O	Battery box cantilever aluminum BOC with smooth natural finish aluminum cover.	217	19
6409902	S	Battery box location: RH Side.	89	0
6451125	S	DPF/SCR box natural end plates and natural cover.	0	0
6490139	S	Heavy-duty one-pc aluminum intermediate/fill-in crossmember.	0	0
6490433	S	Heavy-duty 5-piece rear cab support, hucked assembly. Huck fastened to frame.	0	0
6679859	O	Final end-of-frame cut-off dimension will be modified to 56 in. to 60 in.	0	0
6721102	S	Rear mudflap arms: Betts B-25 standard-duty, straight. Includes B1732 mounting brackets as standard.	0	0
6722000	S	Rear mudflap shields: White plastic antisail w/ Kenworth logo.	0	0
6741005	O	Straight crossmember for pintle hook mounting; square end-of-frame towing configuration. This crossmember limits hitch capacity to 78K.	721	135
Fuel Tanks & Equip				
7140080	O	80 US gallon D-Shape rectangular aluminum under fuel tank, replace. With non-slip step.	256	52
7722173	S	Large DEF tank, 15 gallons.	206	26
7889203	S	DEF to fuel fill ratio 2:1 or greater.	0	0

Price Level: January 1, 2022

Deal: T480

Printed On: 7/27/2023 3:09:47 PM

Date: July 27, 2023

Quote Number: QUO-968394-F6B9K9



Sales Code	Std/ Opt	Description	\$ List	Weight
7889614	S	DEF tank location is LH BOC. For 2.1M medium duty	0	0
7920080	O	Location: 80 gal fuel tank LH under cab	0	0
Cab & Equipment				
8024311	S	Cab: Stamped aluminum with curved windshield LED markers. Requires seperate roof code.	0	0
8090155	O	Hood: Med Aero w/ Chrome Crown	142	0
8108011	S	Cab HVAC - Day Cab and 40in Sleeper System With Defrost, A/C, and 48,000 BTU/hr Heater. Includes automatic temperature control with one touch defrost operation and dash mounted cab temperature and solar intensity sensors. Pleated fresh air filter and cabin recirculation air filter standard. The Kenworth HVAC system is designed to provide optimal heating and cooling in all operating environments without need for additional insulation. Cab HVAC without sleeper heater AC is available with 40in sleeper.	0	0
8201013	S	Steering wheel: 18 in. 4-spoke.	0	0
8201200	S	Adjustable telescoping tilt steering column.	0	0
8203060	O	5 sets of keys. Replaces standard 2 sets of keys.	38	0
8205038	O	Controls on dash for pintle hook. Includes piping.	37	2
8205069	O	Dash Controls:Tailgate or Dump Gate, Includes Piping and Telltale	173	1
8205135	O	Information for customer-installed PTO Muncie 10-bolt.	0	0
8205177	O	Dash Switch: 1st Allison-mntd PTO. Electric switch and wiring are factory-installed to control the 1st Allison Trans mounted PTO.	166	0
8205272	O	Dash Mounted - Compact Valve to Actuate Rear Service Brakes Self-Returning.	291	0
8208494	O	One spare switch: Wired to power.	38	0
8222403	O	Gauge: DD Virtual Gauge - Trailer Brake Application	50	0
8222409	O	Gauge: DD Virtual Gauge - Air Filter Restriction	0	0
8222413	O	Gauge: DD Virtual Gauge - Manifold Pressure Boost	0	0
8222414	O	Gauge: DD Virtual Gauge - Engine Percent Torque	0	0
8222418	O	Gauge: DD Virtual Gauge - Engine Hours	0	0

Price Level: January 1, 2022

Deal: T480

Printed On: 7/27/2023 3:09:47 PM

Date: July 27, 2023

Quote Number: QUO-968394-F6B9K9



Sales Code	Std/Opt	Description	\$ List	Weight
		Instrument Cluster		
8222419	O	Gauge: DD Virtual Gauge - Volts Instrument Cluster	0	0
8282024	S	Main Instrument Package: 7" Digital Display Cluster. Includes Physical (Analog): Speedometer, Tachometer, Oil Pressure, and Coolant Temp; and Digital: Fuel Level #1, DEF Level, DPF Filter Status, Fuel Economy, Volts Telltale, OAT and Primary Air Pressure, Secondary Air Pressure, and Air Application for air brake trucks.	0	0
8282109	O	Large Flat Panel on Dash For C/I Controls. Replaces Storage Bucket.	10	0
8330591	S	Interior Trim Package: 2.1M MD Gray Foam Backing/Cloth Headliner W/Gray Sunvisor & Seat Color Three Underdash Center Console Cupholders (Two If Allison Transmission Is Selected).	0	0
8410122	O	Driver Seat: KW Air Seat HB Vinyl w/ Dual Armrests/Susp Cover/Isolator Lever	153	0
8480232	O	Rider Seat: KW Toolbox Seat HB Vinyl w/ Dual Armrests/Record Holder/Occupancy Sensor	153	0
8490161	O	SEAT COLOR: Black Replacing Standard Gray	0	0
8601432	O	Kenworth Radio DEA710 AM/FM/WB/USB, Bluetooth	384	0
8698965	O	Speaker Package For Cab: (2) Speakers B-Pillar	50	0
8699934	O	CB Installation Kit: C/I Center Mtd of Header w/ Single Antenna on LH Mirror, low mount.	130	0
8700196	S	Turn Signal: Self-Cancelling	0	0
8700283	S	LH and RH Trip Ledge Rain Deflectors	0	0
8700501	O	Metal Int Door Panel Kick Plates	68	0
8800260	O	Long grabhandle RH side mounted to side-of-cab exhaust.	23	2
8800372	O	Grabhandle: LH, Exterior, Side of Cab - Ergonomic Grab Handle Mounted To The Left Hand Exterior Of The Cab For Entry and Exit.	117	3
8800402	S	Dual Cab Interior Grabhandles: A Pillar Mounted Dash Wrap and B Pillar Mounted Grabhandles	0	0
8832113	S	Kenworth Daylite Door with standard LH/RH electric door locks and LH/RH electric window controls.	0	0
8841411	S	Single air horn under cab.	0	0
8850139	S	Look-Down, Pass. Door, Black 11x6	0	0
8850842	S	Mirror Shell: Dual Aero In-Mold Black	0	0

Price Level: January 1, 2022

Deal: T480

Printed On: 7/27/2023 3:09:47 PM

Date: July 27, 2023

Quote Number: QUO-968394-F6B9K9



Sales Code	Std/Opt	Description	\$ List	Weight
8860852	O	Mirror: Dual KW Aero Rear View Motor, heated with Integral CX	67	0
8871447	O	Rear cab stationary window with dark tint 19in x 36in.	43	0
8890038	O	3.5in x 11.5in Plastic Records Holder:Mounted On Rear Cab Panel. Not available With Sleeper Or 2 Person Bench Seat.	49	0
8890101	S	One-piece bonded-in windshield with curved glass. Standard.	0	0
8890135	O	Exterior stainless steel sunvisor.	700	11
8890874	S	Kenworth Cab Air Suspension.	105	0
8891011	O	Roof: Raised Profile, Stamped Aluminum w/ Additional Head Room & Interior Overhead Storage	60	0
Lights & Instruments				
9010813	S	Headlamps: Single Halogen Complex Reflector w/ Turn Indicator, Reflector and w/o DRL. Fender Mtd.	-8	0
9010951	S	Daytime Running Lights Located in Bumper. Driven by Chassis Height.	288	3
9022137	S	Marker Lights: Five, rectangular, LED	0	0
9030052	S	LED Stop,Turn,Tail: With Two LED Backup Lights and With An LED License Plate.	0	0
9080206	O	Switch and Wiring:Cust. Installed Beacon Lights With Additional 20ft Jumper Harness Shipped Loose	193	1
9090049	S	Omit Brake Light with Engine Brake. Can only be selected when chassis also has engine brake. Cannot be used with options to delete engine brake.	0	0
9090142	O	Wiring Only: For customer-installed backup alarm.	50	0
9090849	O	Polyswitches replacing fuses. Switch will automatically reset after removal of excess load.	43	0
Air Equipment				
9101218	S	Air Dryer: Bendix AD-HF Puraguard Heated	0	0
9108001	S	Moisture ejection valve w/ pull cable drain.	0	0
9110020	S	Full Truck Kit Gladhands mounted at end-of-frame. Seven-way female receptacle mounted at end-of-frame in taillamp bracket. Kit includes dash mounted trailer air supply valve, trailer hand control valve, and hoses/fittings for the valves. Dash mounted parking brake valve, tractor protection valve, and spring brake inversion/relay valves are standard.	894	15
9140020	S	Nylon air tubing in frame & cab, excluding hoses subject to excessive heat or flexing.	0	0
9140200	S	Delete trailer hand valve. Must code for tractor	-45	0

Price Level: January 1, 2022

Deal: T480

Printed On: 7/27/2023 3:09:47 PM

Date: July 27, 2023

Quote Number: QUO-968394-F6B9K9



Sales Code	Std/Opt	Description	\$ List	Weight
		kit.		
9140321	S	Additional 7-way ISO 3731 connector for trailer ABS power One additional, w/ o light line, for full truck & tractor.	131	6
Extended Warranty				
9200008	S	Base Warranty - PACCAR PX-9 Engine 24 months / 250,000 miles / 402,336 km / 6250 hours.	0	0
9200022	O	Base Warranty - Standard Service Medium Duty 12 months / Unlimited miles & km	0	0
9210159	U	Sourcewell <i>Narr Sourcewell Sourcewell price program</i>	0	0
9220001	O	Base Warranty: Emissions 5YR/100K MI - EPA Engine	0	0
Miscellaneous				
9409852	S	GHG Secondary Manufacturer: Does Not Apply	0	0
9490003	S	Additional lead time required for off highway & /or specialty component truck.	0	0
9490206	O	Warning triangle reflector kit: Shipped loose. Kit consists of 3 triangles in plastic carrying case. Not floor mounted.	43	4
9490404	O	One 5 lb. dry chemical type fire extinguisher mounted outboard of driver seat. Class ABC.	119	11
9490645	O	Zinc Phosphate frame rail paint processing. Requires frame rail code. Code is for 1 pair of rails.	304	0
9490647	O	Zinc Phosphate frame insert paint processing. Requires any 1st frame insert code. Code is for 1 pair of any frame inserts.	304	0
9491659	S	VMUX Architecture	0	0
Promotions				
Paint				
9700000	S	Paint color number(s). N9702 A - L0006 WHITE N9770 BUMPER L0006 WHITE N9720 FRAME N0001 BLACK	0	0
9943001	O	Bumper Painted Color A	75	0
9943048	O	Day Cab Bulk Paint	0	0
9943050	S	Day Cab Standard Paint	0	0
9944820	S	1 - Color Paint - Day Cab Color will be White if no other color is specified.	0	0
9965510	S	Base coat/clear coat.	0	0

Price Level: January 1, 2022

Deal: T480

Printed On: 7/27/2023 3:09:47 PM

Date: July 27, 2023

Quote Number: QUO-968394-F6B9K9



Sales Code	Std/ Opt	Description	\$ List	Weight
		The Kenworth Color Selector contains additional instructions, as well as information on Kenworth paint guidelines and surface finish applications. Kenworth is standard with Dupont Imron Elite paint.		

Order Comments



Total List Price (W/O Freight & Warranty & Surcharges)	\$157,984	CHASSIS ONLY
Marketing and Service Support Fee	\$1,040	
Prepaid Freight	\$2,825	
Total Surcharge/Options Not Subject To Discount	\$0	
Total Weight	15,481	

Prices and Specifications Subject to Change Without Notice.

Unpublished options may require review/approval.
Dimensional and performance data for unpublished options may vary from that displayed in CRM.

PRICING DISCLAIMER

While we make every effort to maintain the web site to preserve pricing accuracy, prices are subject to change without notice. Although the information in this price list is presented in good faith and believed to be correct at the time of printing, we make no representations or warranties as to the completeness or accuracy of this information. We reserve the right to change, delete or otherwise modify the pricing information which is represented herein without any prior notice. We carefully check pricing specifications, but occasionally errors can occur, therefore we reserve the right to change such prices without notice. We disclaim all liability for any errors or omissions in the materials. In no event will we be responsible for any damages of any nature whatsoever from the reliance upon information from these materials. Please check your order prebills to confirm your pricing information

? \$ 161,849 ⁵ JUST THE CHASSIS

+
Dump Bed + ~~\$ 25,000~~ ~~\$ 30,000~~

\$ 27,381.92

\$ 189,230.92

+ 376 ←

194,907.85

CHRIS ERCKHARDT 317 941 8173

Price Level: January 1, 2022

Deal: T480

Printed On: 7/27/2023 3:09:47 PM

Date: July 27, 2023

Quote Number: QUO-968394-F6B9K9



Shipping Destinations

Intermediate Destination: NONE

Final Destinations	Quantity
Palmer Trucks Indianapolis 2929 S. Holt Road Indianapolis , Indiana 46241	1

May 03, 2024

INTERNATIONAL®

Prepared For:
Noblesville Utilities
Benjamin French
197 Washington St.
Noblesville, IN 46060-3254
(317)773 - 6353
Reference ID: N/A

Presented By:
RUSH TRK CTR OF IN
Joshua Clines
1325 W THOMPSON RD.
INDIANAPOLIS IN 46217 - 9267
(317)677-9200

Thank you for the opportunity to provide you with the following quotation on a new International truck. I am sure the following detailed specification will meet your operational requirements, and I look forward to serving your business needs.

Model Profile
2025 HV613 SBA (HV613)

AXLE CONFIG:	6X4
APPLICATION:	Construction Dump
MISSION:	Requested GVWR: 54000. Calc. GVWR: 60320. Calc. GCWR: 130000 Calc. Start / Grade Ability: 20.39% / 2.93% @ 55 MPH Calc. Geared Speed: 102.6 MPH
DIMENSION:	Wheelbase: 207.00, CA: 139.90, Axle to Frame: 67.00
ENGINE, DIESEL:	{International A26} EPA 2021, 430HP @ 1700 RPM, 1550 lb-ft Torque @ 900 RPM, 2100 RPM Governed Speed, 430 Peak HP (Max)
TRANSMISSION, AUTOMATIC:	{Allison 4000 RDS} 6th Generation Controls, Close Ratio, 6-Speed with Double Overdrive, with PTO Provision, Less Retarder, Includes Oil Level Sensor, On/Off Highway
CLUTCH:	Omit Item (Clutch & Control)
AXLE, FRONT NON-DRIVING:	{Meritor MFS-16-143A} Wide Track, I-Beam Type, 16,000-lb Capacity
AXLE, REAR, TANDEM:	{Meritor RT-46-160P} Single Reduction, 46,000-lb Capacity, with Lube Oil Pump, Driver Controlled Locking Differential in Rear-Rear Axle, 200 Wheel Ends Gear Ratio: 4.10
CAB:	Conventional, Day Cab
TIRE, FRONT:	(2) 11R24.5 Load Range H ECOPLUS HS3+ (CONTINENTAL), 473 rev/mile, 75 MPH, All-Position
TIRE, REAR:	(8) 11R24.5 Load Range H HDL2 DL+ (CONTINENTAL), 468 rev/mile, 75 MPH, Drive
SUSPENSION, REAR, TANDEM:	{Hendrickson RT-463} Walking Beam, 46,000-lb Capacity, 54" Axle Spacing, Multileaf Springs, with Bronze Center Bushings
PAINT:	Cab schematic 100WN Location 1: 9219, Winter White (Std) Chassis schematic N/A

<u>Code</u>	<u>Description</u>
HV61300	Base Chassis, Model HV613 SBA with 207.00 Wheelbase, 139.90 CA, and 67.00 Axle to Frame.
1570	TOW HOOK, FRONT (2) Frame Mounted
1AND	AXLE CONFIGURATION {Navistar} 6x4
	<u>Notes</u> : Pricing may change if axle configuration is changed.
1CAW	FRAME RAILS Heat Treated Alloy Steel (120,000 PSI Yield); 12.250" x 3.380" x 0.375" (304.8mm x 85.6mm x 9.5mm); 480.0" (12192mm) Maximum OAL
1LEH	LICENSE PLATE HOLDER Single Plate, Swing Type, Mounted Below Front Bumper
1LLA	BUMPER, FRONT Swept Back, Steel, Heavy Duty
1MEJ	FRAME DIMPLE Dimple on Left and Right Top Flange of Frame Rail to Reference Rear Axle Centerline
1WHP	WHEELBASE RANGE 183" (465cm) Through and Including 248" (630cm)
1WMA	CROSSMEMBER, INTERMEDIATE (1) 5-Piece in lieu of Each Single Dogbone with 4x2 & 4x4 Chassis; Each Double Dogbone with 6x4, 6x6 & 8x6 Tridem Chassis
2ARU	AXLE, FRONT NON-DRIVING {Meritor MFS-16-143A} Wide Track, I-Beam Type, 16,000-lb Capacity
3ADE	SUSPENSION, FRONT, SPRING Parabolic Taper Leaf, Shackle Type, 16,000-lb Capacity, with Shock Absorbers
4091	BRAKE SYSTEM, AIR Dual System for Straight Truck Applications
	<u>Includes</u> : BRAKE LINES Color and Size Coded Nylon : DRAIN VALVE Twist-Type : GAUGE, AIR PRESSURE (2) Air 1 and Air 2 Gauges; Located in Instrument Cluster : PARKING BRAKE CONTROL Yellow Knob, Located on Instrument Panel : PARKING BRAKE VALVE For Truck : QUICK RELEASE VALVE On Rear Axle for Spring Brake Release: 1 for 4x2, 2 for 6x4 : SPRING BRAKE MODULATOR VALVE R-7 for 4x2, SR-7 with relay valve for 6x4/8x6
4732	DRAIN VALVE {Berg} with Pull Chain, for Air Tank
4AZA	AIR BRAKE ABS {Bendix AntiLock Brake System} 4-Channel (4 Sensor/4 Modulator) Full Vehicle Wheel Control System
4EBD	AIR DRYER {Wabco System Saver 1200} with Heater
4EXR	BRAKE CHAMBERS, REAR AXLE {Bendix EverSure} 30/36 Sqli Spring Brake
4EXV	BRAKE CHAMBERS, FRONT AXLE {Bendix} 24 Sqli
4GBM	BRAKE, PARKING Manual Push-Pull Pneumatic Parking Brake
4LAG	SLACK ADJUSTERS, FRONT {Gunitite} Automatic
4LGG	SLACK ADJUSTERS, REAR {Gunitite} Automatic
4SPM	AIR COMPRESSOR {Bendix BA-921 Head Unload} 15.9 CFM
4VHT	AIR DRYER LOCATION Mounted Outside Left Rail, on Fuel Water Separator Bracket
4VKJ	AIR TANK LOCATION (2) Mounted Under Battery Box, Outside Left Rail, Back of Cab, Perpendicular to Rail
4WBX	DUST SHIELDS, FRONT BRAKE for Air Cam Brakes
4WDM	DUST SHIELDS, REAR BRAKE for Air Cam Brakes

<u>Code</u>	<u>Description</u>
4XDS	BRAKES, REAR {Meritor 16.5X8.625 Q-PLUS CAST} Air S-Cam Type, Cast Spider, Fabricated Shoe, Double Anchor Pin, Size 16.5" X 8.625", 23,000-lb Capacity per Axle
4XDT	BRAKES, FRONT {Meritor 16.5X6 Q-PLUS CAST} Air S-Cam Type, Cast Spider, Fabricated Shoe, Double Anchor Pin, Size 16.5" X 6", 23,000-lb Capacity
4XEE	PARK BRAKE CHAMBERS, ADDITIONAL (2) Spring Brake Type
5710	STEERING COLUMN Tilting and Telescoping
5CAW	STEERING WHEEL 4-Spoke; 18" Dia., Black
5PTB	STEERING GEAR (2) {Sheppard M100/M80} Dual Power
6DGU	DRIVELINE SYSTEM {Dana Spicer} SPL250 Main Driveline with SPL170 Interaxle Shaft, for 6x4
7BEU	AFTERTREATMENT COVER Aluminum
7BLV	EXHAUST SYSTEM Horizontal Aftertreatment System, Frame Mounted Right Side Under Cab, for Single Short Horizontal Tail Pipe, Frame Mounted Right Side Back of Cab
7SDK	ENGINE COMPRESSION BRAKE by Jacobs; for N13/A26 Engines, with Selector Switch and On/Off Switch
7WDR	TAIL PIPE (1) Horizontal, Short
8000	ELECTRICAL SYSTEM 12-Volt, Standard Equipment
	<u>Includes</u>
	: DATA LINK CONNECTOR For Vehicle Programming and Diagnostics In Cab
	: HAZARD SWITCH Push On/Push Off, Located on Instrument Panel to Right of Steering Wheel
	: HEADLIGHT DIMMER SWITCH Integral with Turn Signal Lever
	: PARKING LIGHT Integral with Front Turn Signal and Rear Tail Light
	: STARTER SWITCH Electric, Key Operated
	: STOP, TURN, TAIL & B/U LIGHTS Dual, Rear, Combination with Reflector
	: TURN SIGNAL SWITCH Self-Cancelling for Trucks, Manual Cancelling for Tractors, with Lane Change Feature
	: WINDSHIELD WIPER SWITCH 2-Speed with Wash and Intermittent Feature (5 Pre-Set Delays), Integral with Turn Signal Lever
	: WINDSHIELD WIPERS Single Motor, Electric, Cowl Mounted
	: WIRING, CHASSIS Color Coded and Continuously Numbered
8GXJ	ALTERNATOR {Leece-Neville AV1160P2013} Brush Type, 12 Volt, 160 Amp Capacity, Pad Mount
8HAH	ELECTRIC TRAILER BRAKE/LIGHTS Accommodation Package to Rear of Frame; for Combined Trailer Stop, Tail, Turn, Marker Light Circuits; Includes Electric Trailer Brake Accommodation Package with Cab Connections for Mounting Customer Installed Electric Brake Unit, Less Trailer Socket
8MSG	BATTERY SYSTEM {Fleetrite} Maintenance-Free, (3) 12-Volt 1980CCA Total, Top Threaded Stud
8RMV	SPEAKERS (2) 6.5" Dual Cone Mounted in Doors
8RPP	ANTENNA Shark Fin, Roof Mounted
8RPS	RADIO AM/FM/WB/Clock/Bluetooth/USB Input/Auxiliary Input
8THB	BACK-UP ALARM Electric, 102 dBA
8TKK	TRAILER AUXILIARY FEED CIRCUIT for Electric Trailer Brake Accommodation/Air Trailer ABS; with 30 Amp Fuse and Relay, Controlled by Ignition Switch
8VAY	HORN, ELECTRIC Disc Style
8VUL	BATTERY BOX Steel, with Plastic Cover, 18" Wide, 2-4 Battery Capacity, Mounted Left Side Back of Cab
8WBW	JUMP START STUD, 12V Remote Mounted

<u>Code</u>	<u>Description</u>
8WPH	CLEARANCE/MARKER LIGHTS (5) {Truck Lite} Amber LED Lights, Flush Mounted on Cab or Sunshade
8WTL	STARTING MOTOR {Delco Remy 39MT} 12 Volt, Gear Reduced, with Thermal Over-Crank Protection
8XAH	CIRCUIT BREAKERS Manual-Reset (Main Panel) SAE Type III with Trip Indicators, Replaces All Fuses
8XGT	TURN SIGNALS, FRONT Includes LED Side Turn Lights Mounted on Fender
8XHN	HORN, AIR Single Trumpet, Black, with Lanyard Pull Cord
8XNZ	HEADLIGHTS Halogen, with Daytime Running Lights
9585	FENDER EXTENSIONS Rubber
9AAB	LOGOS EXTERIOR Model Badges
9AAE	LOGOS EXTERIOR, ENGINE Badges
9HBM	GRILLE Stationary, Chrome
9WAC	BUG SCREEN Mounted Behind Grille
9WBK	FRONT END Tilting, Fiberglass, with Three Piece Construction, Includes Long Hood
10060	PAINT SCHEMATIC, PT-1 Single Color, Design 100
	<u>Includes</u>
	: PAINT SCHEMATIC ID LETTERS "WN"
10761	PAINT TYPE Base Coat/Clear Coat, 1-2 Tone
10AGB	COMMUNICATIONS MODULE Telematics Device with Over the Air Programming; Includes Five Year Data Plan and International 360
11001	CLUTCH Omit Item (Clutch & Control)
12703	ANTI-FREEZE Red, Extended Life Coolant; To -40 Degrees F/ -40 Degrees C, Freeze Protection
12850	PTO EFFECTS, ENGINE FRONT for N13/A26/S13 Engines, Less PTO, Unit, Includes Adapter Plate on Engine Front Mounted
12BEW	ENGINE, DIESEL {International A26} EPA 2021, 430HP @ 1700 RPM, 1550 lb-ft Torque @ 900 RPM, 2100 RPM Governed Speed, 430 Peak HP (Max)
12THT	FAN DRIVE {Horton Drivemaster} Two-Speed Type, Direct Drive, with Residual Torque Device for Disengaged Fan Speed
	<u>Includes</u>
	: FAN Nylon
12VBC	AIR CLEANER Single Element
12VJU	EMISSION, CALENDAR YEAR {International A26} EPA, OBD and GHG Certified for Calendar Year 2024
12WTA	FAN DRIVE SPECIAL EFFECTS Fan Cooling Ring with Fan Shroud Effects, Engine Mounted
12WVH	EPA IDLE COMPLIANCE Low NOx Idle Engine, Complies with EPA Clean Air Regulations; Includes "Certified Clean Idle" Decal on Door
12WZE	CARB IDLE COMPLIANCE Does Not Comply with California Clean Air Idle Regulations
12XBD	RADIATOR Aluminum, Welded, Cross Flow, Front to Back System, 1292 SqIn, with 1008 SqIn Charge Air Cooler
	<u>Includes</u>
	: DEAERATION SYSTEM with Surge Tank
	: HOSE CLAMPS, RADIATOR HOSES Gates Shrink Band Type; Thermoplastic Coolant Hose Clamps
	: RADIATOR HOSES Premium, Rubber

<u>Code</u>	<u>Description</u>
12XCS	CARB EMISSION WARR COMPLIANCE Does Not Comply with CARB Emission Warranty
13BDY	TRANSMISSION, AUTOMATIC {Allison 4000 RDS} 6th Generation Controls, Close Ratio, 6-Speed with Double Overdrive, with PTO Provision, Less Retarder, Includes Oil Level Sensor, On/Off Highway
13WAW	OIL COOLER, TRANSMISSION {Modine} Water to Oil Type
13WET	TRANSMISSION SHIFT CONTROL Column Mounted Stalk Shifter, Not for Use with Allison 1000 & 2000 Series Transmission
13WLM	TRANSMISSION OIL Synthetic; 63 thru 76 Pints
13WUC	ALLISON SPARE INPUT/OUTPUT for Rugged Duty Series (RDS) and Regional Haul Series (RHS), General Purpose Trucks, Construction, Package Number 223
13WVV	NEUTRAL AT STOP Allison Transmission Shifts to Neutral When Service Brake is Depressed and Vehicle is at Stop; Remains in Neutral Until Service Brake is Released
13WYU	SHIFT CONTROL PARAMETERS {Allison} 3000 or 4000 Series Transmissions, Performance Programming
13XAT	PTO LOCATION Dual, Customer Intends to Install PTO at Left Side and/or Top of Transmission
14GRS	AXLE, REAR, TANDEM {Meritor RT-46-160P} Single Reduction, 46,000-lb Capacity, with Lube Oil Pump, Driver Controlled Locking Differential in Rear-Rear Axle, 200 Wheel Ends . Gear Ratio: 4.10
14UHK	SUSPENSION, REAR, TANDEM {Hendrickson RT-463} Walking Beam, 46,000-lb Capacity, 54" Axle Spacing, Multileaf Springs, with Bronze Center Bushings
15DYP	DEF TANK 9.5 US Gal (36L) Capacity, Frame Mounted Outside Left Rail, Under Cab
15LLP	LOCATION FUEL/WATER SEPARATOR Mounted Inside Left Rail, Back of Cab
15LPR	FUEL/WATER SEPARATOR {Racor 6600} 12 VDC Electric Heater, Includes Pre-Heater, Fuel Heated with Fuel Blender Valve, with Sight Bowl, Includes Water-In-Fuel Sensor
15SJZ	FUEL TANK Top Draw, Non-Polished Aluminum, 26" Dia, 80 US Gal (303L), Mounted Left Side, Under Cab
16030	CAB Conventional, Day Cab
16BAM	AIR CONDITIONER with Integral Heater and Defroster
16GEG	GAUGE CLUSTER Premium Level; English with English Electronic Speedometer <u>Includes</u> : GAUGE CLUSTER DISPLAY: Base Level (3" Monochromatic Display), Premium Level (5" LCD Color Display); Odometer, Voltmeter, Diagnostic Messages, Gear Indicator, Trip Odometer, Total Engine Hours, Trip Hours, MPG, Distance to Empty/Refill for : GAUGE CLUSTER Speedometer, Tachometer, Engine Coolant Temp, Fuel Gauge, DEF Gauge, Oil Pressure Gauge, Primary and Secondary Air Pressure : WARNING SYSTEM Low Fuel, Low DEF, Low Oil Pressure, High Engine Coolant Temp, Low Battery Voltage (Visual and Audible), Low Air Pressure (Primary and Secondary)
16GHU	GRAB HANDLE, CAB INTERIOR (2) Safety Yellow
16HCS	GAUGE, TEMPERATURE, AMBIENT Sensor Wiring with Display Unit Mounted in Cluster
16HKT	IP CLUSTER DISPLAY On Board Diagnostics Display of Fault Codes in Gauge Cluster
16HLW	VIRTUAL GAUGE, OIL TEMP, ENG Requires Premium Cluster
16JYM	SEAT, DRIVER {National Model HP} Air Suspension, High Back, Vinyl Boxing with Cloth Facing, 2 Arm Rests, Isolator, 7.5 Adjuster, 3 Chamber Lumbar, 6 Way Front Adjust, 3 Way Rear Cushion Adjust, 3-14 Degree Back Angle Adjustment, Adj Side Bolster, Bellows, Back Cyclor
16RAN	SEAT, PASSENGER {National 2000 Model 192} Non Suspension, High Back, Vinyl Boxing with Cloth Facing, 11 Degree Back Angle Adjust

<u>Code</u>	<u>Description</u>
16SJW	MIRROR, CONVEX, HOOD MOUNTED {Lang Mekra} (2) Right and Left Sides, Black, Heated, 7.5" Sq.
16SNT	MIRRORS (2) Aero Pedestal, Power Adjust, Heated, Turn Signals, Black Heads and Arms, 6.5" x 14" Flat Glass, Includes 6.5" x 6" Convex Mirrors, for 102" Load Width
	<u>Notes</u> : Mirror Dimensions are Rounded to the Nearest 0.5"
16SNW	MIRROR, CONVEX, LOOK DOWN Right Side, Black, 6" x 10.5"
16VKB	CAB INTERIOR TRIM Classic, for Day Cab
	<u>Includes</u> : CONSOLE, OVERHEAD Molded Plastic with Dual Storage Pockets, Retainer Nets and CB Radio Pocket; Located Above Driver and Passenger : DOME LIGHT, CAB Door Activated and Push On-Off at Light Lens, Timed Theater Dimming, Integral to Overhead Console, Center Mounted : SUN VISOR (2) Padded Vinyl; 2 Moveable (Front-to-Side) Primary Visors, Driver Side with Toll Ticket Strap
16VLV	MONITOR, TIRE PRESSURE Omit
16WJU	WINDOW, POWER (2) and Power Door Locks, Left and Right Doors, Includes Express Down Feature
16WSK	CAB REAR SUSPENSION Air Bag Type
16XJP	INSTRUMENT PANEL Wing Panel
16XTM	ACCESS, CAB Aluminum, Driver & Passenger Sides, Two Steps per Door, for use with Day Cab or Sleeper Cab
27DPR	WHEELS, FRONT {Accuride 28827} DISC; 24.5x8.25 Rims, Powder Coat Steel, 2-Hand Hole, 10-Stud, 285.75mm BC, Hub-Piloted, Flanged Nut, with .472" Thick Increased Capacity Disc and Steel Hubs
28DPR	WHEELS, REAR {Accuride 28827} DUAL DISC; 24.5x8.25 Rims, Powder Coat Steel, 10-Stud, 285.75mm BC, Hub-Piloted, Flanged Nut, with .472" Thick Increased Capacity Disc and with Steel Hubs
60AKG	BDY INTG, PTO ACCOMMODATION for (3) Latched Rocker Switches, (1) PTO Switch, (2) Generic Switches to Control (3) 30 amp relays, with Programmable Interlocks, for Body Builder Hook up in the Engine Compartment Left Side, Recommended for Automatic Transmissions
7384225443	(2) TIRE, FRONT 11R24.5 Load Range H ECOPLUS HS3+ (CONTINENTAL), 473 rev/mile, 75 MPH, All-Position
7384225447	(8) TIRE, REAR 11R24.5 Load Range H HDL2 DL+ (CONTINENTAL), 468 rev/mile, 75 MPH, Drive
	Services Section:
40127	WARRANTY Standard for HV513, HV613 Models, Effective with Vehicles Built July 1, 2017 or Later, CTS-2030A
1	14ft Dump Body

(US DOLLAR)

Description

Price

Net Sales Price:

\$194,540.24

Please feel free to contact me regarding these specifications should your interests or needs change. I am confident you will be pleased with the quality and service of an International vehicle.

Approved by Seller:

Accepted by Purchaser:

Official Title and Date

Firm or Business Name

Authorized Signature

Authorized Signature and Date

This proposal is not binding upon the seller without Seller's Authorized Signature

Official Title and Date

The TOPS FET calculation is an estimate for reference purposes only. The seller or retailer is responsible for calculating and reporting/paying appropriate FET to the IRS.

The limited warranties applicable to the vehicles described herein are Navistar, Inc.'s standard printed warranties which are incorporated herein by reference and to which you have been provided a copy and hereby agree to their terms and conditions.