

**BID SUBMITTAL FORM**  
**Alabama County Joint Bidding Program**  
**BID ITEM – HEAVY DUTY DUMP TRUCK CHASSIS - OPTION A**

Company Name: Nextran Truck Centers  
Address: 1801 Fulton Road  
Fultondale, AL 35068  
Bid Submitted by: Bruce Graham  
(Name of company representative)  
Title: Municipal Sales Consultant E-mail address: bgraham@nextranusa.com  
Phone: 205-337-7724 Fax: 205-841-4430

By submitting this bid, we agree: Initials

That the equipment model number identified below meets the bid specs for this bid item BG

That the bid price will be honored for all counties for the period from **January 1, 2026** to **June 30, 2026**. **Due to uncertainties with material & component cost and potential additional tariff impact fees- all new orders must be received by 3/31/2026** BG

That the equipment will be delivered at the bid price to all counties participating in the joint bid program BG

That the company representative listed above will be the contact person for purchasing this bid item under the joint bid program BG

That the bid is accompanied by a current catalog or model specification document for the model number identified below BG

That the bid is accompanied by a copy of the manufacturer's standard warranty as required in the bid specifications BG

That the bid includes the E-Verify documentation required by Alabama law BG

We comply with, and if awarded the contract, we will comply with, the requirements of Section 41-16-50 and Sections 41-16-160 to -166, Code of Alabama 1975. BG

That, if awarded the bid, a performance bond will be provided upon request BG

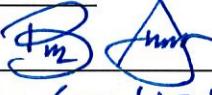
That an option sheet with individual pricing is attached BG

**\*Sixty (60) new chassis are available for final delivery before February 27, 2026\***

Total Bid Price including options: \$ 191,368.00

Equipment Model #: Mack Granite 64FR

Description: Mack Granite 64FR

Signature of company representative submitting bid: 

Title: Municipal Sales Consultant

## OPTION COST SHEET FOR HEAVY DUTY DUMP TRUCK CHASSIS OPT A

<u>Option</u>	<u>Option Price</u>
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Furnish, as an alternate transmission from the base bid, an Allison 4500-RDS-6 six speed automatic over drive Rugged Duty Series Gen 4 with transmission cooler, external oil cooler, internal filter, oil level sensor, temperature gauge and aluminum bell housing. Allison transmission to be factory filled with TRANSYND synthetic lubricant. Allison transmission low gear ratio = 4.70 and transmission high gear ratio = .67 over drive.

\$ 12,007

**NOTE:** Award will be made on the basis of the total cost of the machine with all options included. However, a county may, at its discretion, deduct one or more of the above-referenced options from the machine, and in such event, the cost of the option as stated on the bid shall be deducted from the total cost of the machine. There shall be no other deductions and no additions made to the machine by the purchasing county or by the vendor.

Equipment Model #: GR64FR

Description: Mack Granite 64FR

Signature of company representative submitting bid: 

Title: Municipal Sales Consultant

# **SPECIFICATION CHECKLIST**

# INVITATION TO BID HEAVY EQUIPMENT

## NOTICE OF BID OPENING

**NOTICE IS HEREBY GIVEN** that the Association of County Commissions of Alabama, which administers the Alabama County Joint Bid Program on behalf of Alabama's county governing bodies, shall receive and open bids for the purchase of zero (0) or more items of heavy road equipment at its office located at 2 North Jackson Street, Montgomery, Alabama, at **10:00 a.m. on Tuesday, November 18, 2025**. Bid specifications are available at <http://www.alabamacounties.org/heavy-equipment/> for each of the following items:

Track Mount Excavators  
Compact Excavators  
Mini Track Excavators  
Wheeled Excavators  
Highway Speed Truck Excavators  
Motor Graders  
Wheel Loaders  
Heavy Duty Dump Chassis  
Lowboy Tractors  
Lowboy Trailers  
Half Round End Dump  
Skid Steer Loader and Attachments  
Ride-on Industrial Boom Mowers  
Rubber Tire Roller  
Vibratory Roller  
One-man Pothole Patchers

Trailer Mount Mastic Patcher/Crack Sealer  
Trailer Mounted Patcher – Diesel  
Trailer Mounted Patcher – Air  
Compressor/Tools  
Chip Spreader  
Asphalt Distributor  
Asphalt Milling Attachments  
Asphalt Storage Tanks  
Backhoes  
Bulldozers  
Dump Bodies  
Road Wideners  
Ride On Industrial Boom Mowers

Time is of the essence in submitting bids and only bids received in the Association office by 10:00 a.m. Central Time on Tuesday, November 18, 2025 will be opened and considered. Bidders and any other interested individuals are invited to attend the bid opening.

## NOTICE OF BID OPENING PROCEDURES

All bids for Heavy Equipment will be opened and the name(s) of the bidders read aloud on the morning of the bid opening on Tuesday, November 18, 2025 at 10:00 a.m. at 2 North Jackson Street, Montgomery, AL. The specifics of each bid submitted will be compiled by the Association staff thereafter and will be available, upon written or emailed request, one week after the bid opening. Requests should be emailed to [jointbid@alabamacounties.org](mailto:jointbid@alabamacounties.org).

## **THE INVITATION PACKAGE**

The invitation package for each item to be bid includes: this invitation to bid, the written bid specifications for the particular item of heavy road equipment, and a Bid Submittal Form to be used in submitting a bid for that particular item. Bidders should verify that they have received all pages of the invitation package. If there are any omissions, the bidder should contact **Kenya Howard** in the Association office by mail, fax, or e-mail ([jointbid@alabamacounties.org](mailto:jointbid@alabamacounties.org)) to request missing pages. It is the responsibility of the bidder to make this request in sufficient time to prepare and submit the bid in time for the bid opening. Bidders should carefully read and comply with all parts of the invitation package, including all attachments and/or any addendum.

## **PREPARING AND SUBMITTING BIDS**

All bids must be typed or handwritten in ink on the attached Bid Submittal Form. **The completed Bid Submittal Form shall be placed in front of and separated from all other documents included in the bid packet, such that it will be the first document viewed upon opening the bid packet.**

Bids submitted in pencil and bids not submitted on the Bid Submittal Form will **not** be considered. All bids shall include a current catalog or model specification document for the equipment model number being offered for consideration. Bids submitted without such documentation will **not** be considered. Only information contained on the attached Bid Submittal Form and in the model specification document will be considered in evaluating bids.

Each separate requirement in the bid specification includes a block for indicating whether or not the item bid meets the specification. The bidder shall indicate compliance with each requirement by checking "Yes" or "No" in the block to the right of each bid specification. In addition, the bidder shall indicate the page number in the supplied manufacturer's equipment literature on which compliance with the specification can be verified. Failure to complete this portion of the bid form may result in the subject bid not being considered. Additionally, all bidders are required to submit a factory build/order sheet showing all of the standard and option items for each piece of equipment bid in order to assist the bid review committee in assuring that each bid is in conformance with the required bid specifications.

Each bid for one of the heavy equipment items included in the bid package must be submitted on the Bid Submittal Form for that item and forwarded in a separate envelope with the bid item and item number clearly identified on the outside of the envelope. Envelopes containing a "no bid" shall also include the words "NO BID" on the outside of the envelope. Facsimiles and e-mails will not be accepted. Bids submitted by "Express/Overnight" services must be in a separate inner envelope or package sealed and identified as stated above. All bids must be received in the Association office prior to the bid opening. Bids received after the deadline will be returned unopened.

The County Joint Bid Program reserves the right to require a performance bond from successful bidders as permitted under Alabama law. However, **no bid bond is required for this bid offering.**

All bids should be mailed or hand-delivered to:

**ATTN: Alabama County Joint Bid Program  
Association of County Commissions of Alabama or ACCA  
2 North Jackson Street, FL 7, Montgomery, Alabama 36104 (Physical Address)  
P.O. Box 5040, Montgomery, Alabama 36103 (Mailing Address)**

## **BID SPECIFICATIONS**

Please note that each piece of heavy equipment available for bid may include several different sizes and categories of machines. You should read each set of specifications very carefully as the differences vary depending upon the piece and size of equipment.

Where applicable, each bid submission shall include the separate cost of each item listed in the "Options" section of the bid specifications. However, all bids will be awarded on the basis of the **total cost of the machine with all options included**. Therefore, the "Bid Price" stated on the Bid Submittal Form must be the total cost, including the cost of all options.

**Both parties agree that the Vendor SHALL extend to ALL counties purchasing this equipment any factory discounts, incentives or rebates that become available during the Contract Period; provided that there are no alterations from the bid specifications for this item required in order to receive the discount, incentive, or rebate. FURTHER, BOTH PARTIES AGREE THAT THE VENDOR SHALL EXTEND TO ALL COUNTIES PURCHASING THIS EQUIPMENT THE SAME PURCHASE PRICE AND DISCOUNTS AS THEY ARE AWARDED ON ANY OTHER NATIONAL PURCHASING COOPERATIVE APPROVED BY THE DEPARTMENT OF EXAMINERS OF PUBLIC ACCOUNTS FOR USE BY ALABAMA COUNTIES.**

Once the bids have been awarded, any county participant purchasing under this program may, at its discretion, deduct one or more of the options set out in the bid specifications, and in such event, the cost of the option as stated on the bid shall be deducted from the total cost of the machine. There shall be no other deductions and no additions made to the machine by the purchasing county or by the vendor.

Any use of specific names and/or model numbers in the attached specifications is not intended to restrict the bidder or any seller or manufacturer but is included solely for the purpose of indicating the type, size, and quality of materials, product services, or equipment considered best adapted to the use of the counties participating in the joint bid program.

## **BIDDER QUALIFICATIONS**

All bidders and all program participants must be in compliance with any applicable federal, state, county and municipal laws, regulations, resolutions and ordinances, including but not limited to, licensing, permitting, and taxation requirements. All bidders should be prepared to submit evidence or documentation as proof that they are properly licensed and permitted under any applicable laws upon request. Such evidence or documentation may be submitted with the bid. **Additionally, all bidders shall provide proof that they are in compliance with the E-Verify requirements of Alabama's Immigration Law (Ala. Code § 31-13-1 et seq.). All bidders shall also affirm that they are in compliance with, and will comply with, Alabama's anti-boycott law (Ala. Code § 41-16-5) and anti-economic boycott law (Ala. Code § 41-16-160 et seq.).**

## **BID AWARD**

The Houston County Commission will serve as the awarding authority for all bids and will award all contracts at a regular meeting of the Houston County Commission. Any and all bids submitted in compliance with this invitation to bid shall be considered, and award will be made to the lowest responsible bidder meeting bid specifications as determined by the awarding authority in compliance with Alabama law. All bids will be reviewed and evaluated by a committee created for that purpose, which committee will make comments and recommendations to the awarding authority regarding the award. All factors contained in each invitation package will be evaluated in determining the successful bidder, and any omissions of the stated requirements may be cause for rejection of the bid submitted. The awarding authority reserves the right to reject any and all bids, to waive any informality in bids, and to accept in whole or in part such bid or bids solely at its discretion.

**The contract period will be Six (6) months with an option to renew each Six (6) months not to exceed a period of Three (3) years under identical price, terms, and conditions upon the mutual consent of the vendor and the awarding authority.**  
Any renewal contract shall be approved in writing by the vendor and the awarding authority no later than **60 days** prior to the expiration of the existing contract.

## **CONTACT REGARDING BIDS AND INVITATION**

Contact initiated by a potential bidder with any county official, county employee, or member of the Association staff shall only be as specifically set out in this Invitation to Bid. Any questions related to the bid or the County Joint Bid Program shall be directed to Association staff in writing under the procedures set out in this Invitation to Bid. Additionally, a bidder may contact the Association in writing to request an appointment to review bid specifications following the bid opening. However, there shall be no communication with any county official or county employee regarding this bid between the date of this invitation and the date of bid award. Any contact other than as set out here shall be deemed as an attempt to unduly influence the bid award, and shall be grounds for rejection of the bid submitted by the bidder initiating such other contact.

Any questions or problems related to downloading or obtaining copies of this Invitation to Bid should be directed to Kenya Howard at [jointbid@alabamacounties.org](mailto:jointbid@alabamacounties.org) or **334-263-7594**.

Any other questions or requests for additional information regarding this invitation or the bid specifications shall be submitted **in writing** no later than five (5) days prior to bid opening to:

**ATTN: Patrick McDougald  
Association of County Commissions of Alabama  
P.O. Box 5040  
Montgomery, Alabama 36104**

**OR**

**Patrick McDougald  
Email: [pattymackdaddy@gmail.com](mailto:pattymackdaddy@gmail.com)**

# BID SPECIFICATIONS FOR HEAVY DUTY DUMP TRUCK CHASSIS - OPTION A

## GENERAL

These specifications shall be construed as the minimum acceptable standards for a heavy-duty dump truck chassis. Should the manufacturer's current published data or specifications exceed these standards, the manufacturer's standards shall be considered minimum and shall be furnished. All integral parts not specifically mentioned in the scope of these specifications that are necessary to provide a complete working unit shall be furnished. Additionally, the machine offered for bid shall include all standard manufacturers' equipment.

The use of specific names or numbers in the specifications is not intended to restrict the bidder or any seller or manufacturer but is intended solely for the purpose of indicating the type, size, and quality of equipment considered best adapted to the uses of counties participating in this joint bid.

Note all units offered for bid must be of manufacturer's current production model and must be fully compliant with EPA standard US GHG21. Chassis should be equipped with the appropriate diesel particulate filter and SCR after treatment system.

## BID SUBMITTAL FORM

Each bidder must submit his or her bid on the Bid Submittal Form included in the invitation to bid package. All written warranties to be submitted shall be attached to the Bid Submittal Form.

## BID PRICE

The price bid shall include all destination charges, delivery charges, title fees, rebates and all other applicable costs and refunds.

## REPLACEMENT PARTS AVAILABILITY

Parts must be available for 5 years or 500,000 miles of use for the piece of equipment bid.

## WARRANTY

Bidders shall submit a copy of the manufacturer's standard warranty along with a complete explanation of the warranty with their bid. Warranty must be transferable. Warranty must include the following minimum coverage:

Basic Vehicle: 1 Year or 100,000 miles

Diesel Engine: 2 year or 250,000 miles. However, counties will have the option to purchase additional coverage (an extended warranty) if negotiated between the purchasing county and successful bidder within the first 9 months of truck purchase.

Transmission: 3 Year or 300,000 miles

Rear Carriers: 3 Year or 300,000 miles

*Std Coverage increased to 5 yr 500,000 miles*

Yes  No \_\_\_\_\_

Page # \_\_\_\_\_

or

Attachment Warranty Info

## **ASSEMBLY AND DELIVERY**

The truck chassis will be purchased for use with a 16' dump body and optional body equipment that is to be bid separate and apart from the truck chassis. The dump body company will be responsible for assembly and installation of the dump body and related optional equipment, including the cost of the same. The selling truck chassis dealer will be responsible for delivery of the chassis to the dump Body Company for installation and for delivery of the complete dump truck unit to the county following installation and assembly of the dump body and related options onto the truck chassis. Freight to the Dump Body Company will be included in the truck bidder's proposal. Dump body installation and assembly costs will be included in the dump body bidder's proposal. Dump Body Bidder is responsible for Freight back to the Truck Bidder after Dump Body installation.

**DOT performed locally at Nextran Location**

## **DOT INSPECTION AND SAFETY EQUIPMENT**

Prior to delivery each unit shall be DOT inspected and include the appropriate documentation and decal. In addition each unit shall be equipped with the required fire extinguisher and reflective triangle kit.

**Factory Extinguisher page *5* of Factory Build Sheet (FBS), Triangle Kit page *6* of FBS**

## **ENGINE AND RELATED COMPONENTS**

Shall be an in line 6 design 13 liter, overhead cam, turbo charged diesel engine capable of developing 455HP with a torque rating of 1650FT (Standard Transmission) or 1750 FT# with optional Automatic Transmission.

Yes  No \_\_\_\_\_  
Page # *1 of FBS and Engine Spec Sheet (ESS)*

Engine shall have full wet replaceable cylinder liners, fuel injection system to be electronic common rail injection.

Yes  No \_\_\_\_\_  
Page # *2 of ESS*

Air intake system shall have a single dry element with a restriction indicator.

**Restriction Indicator page *5* of FBS/ boost press gauge eliminated to accomodate**

Turbo air shall flow through a chassis mounted charge air cooler, engine cooling system to have a minimum 1,000 square inches of frontal area, aluminum core radiator with silicone hoses throughout and coolant protection to -34 degrees F.

**Frontal area increased to 1,345 square inches**

Yes  No \_\_\_\_\_  
Page # *2 of FBS and 1 of Standard Equipment*

Fan drive to be electronically modulated multi-speed viscous type with a poly V Belt with automatic tension control.

Yes  No \_\_\_\_\_  
Page # *2 of FBS and pg 1 of Standard Equipment*

Single vertical Exhaust, Cab Mounted for clear back of cab with bright finish heat shield and stack.

Yes  No \_\_\_\_\_  
Page # *2 of FBS and pg 1 of Standard Equipment*

Yes  No \_\_\_\_\_  
Page # *2 of FBS*

DPF element/SCR catalyst combined in a single unit mounted on passenger side frame rail under passenger door.

Yes  No   
Page # 1 of FBS

Factory installed integral Engine Brake.

Yes  No   
Page # 2 of FBS

Engine electronics to have: Also refer to Co-Pilot Brochure

Full diagnostic capability

Yes  No   
Page # 8 of FBS

Road Speed limiting and Cruise control feature

Yes  No   
Page # 9 of FBS

Shutdown capabilities for critical engine functions

Yes  No   
Page # 8-9 of FBS

### **STARTING AND ELECTRICAL SYSTEM**

12-Volt system fuse/circuit breaker protected

Yes  No   
Page # 2 of standard equipment

12V gear reduction starter, 12V 160 Amp alternator (28si)

Yes  No   
Page # 2 of FBS

(3) 12V maintenance free group 31 batteries with 650 cold cranking amps each, batteries to be mounted in a single steel box with polished aluminum cover.

CCA increased to 760 each

Yes  No   
Page # 2 of FBS

### **TRANSMISSION AND DRIVELINE**

A manual ten (10) speed Fuller RT-16989LL or equivalent over drive design with a minimum first gear ratio of 14.6 to 1

specs have a misprint. Actual Model is RTO-16908LL

Yes  No   
Page # 2 of FBS and Transmission Brochure

Transmission should have oil cooler with dash mounted temperature gauge, left and RH side PTO access gears with appropriate clearance

Yes  No   
Page # Transmission Brochure

Eaton advantage easy pedal manually adjusting 15.5" two plate ceramic clutch 9 spring, 6 paddle design with AIR assist feature and remote lube fittings for clutch release bearing and both crosses mounted on LH side under cab or hood

Clutch has been upgraded to Eaton/Advantage Solo Self Adjusting

Yes  No   
Page # 3 of FBS

Main drivelines Spicer 1810HD or equivalent with coated splines/ inter axle 1810 with coated splines. Drivelines upgraded to Meritor RPL25HD and RPL20 with Permalube U Joints

Yes  No   
Page # 3 of FBS and Driveline Brochure  
2 of 3

## CAB EXTERIOR

Cab to be Class 8 design welded Galvanized steel cab shell for construction and vocational applications.

<https://www.macktrucks.com/trucks/granite-series/#specs>

Yes  No   
Page # Website

Cab doors should also be of Galvanized steel and have high visibility windows with a Peep window in the passenger side. In additions both doors should have power window Controls and door locks.

Yes  No   
Page # 2 of Standard Equipment

Cab mounting should be air suspended at rear on dual air bags mounted outside the frame rails.

Cab should feature:

Dual air horns in addition to the standard electric signal horn

Yes  No   
Page # 2 of Standard Equipment

Yes  No   
Page # 6 of FBS

Chrome bullet style marker lights

Yes  No   
Page # 4 of FBS

Bright finish heated West Coast mirrors with 8" convex mirrors mounted below the West Coast mirrors. Mirrors to be mounted on break away brackets to protect door skin. Brackets are standard equipment

Yes  No   
Page # 6 of FBS

Stainless Steel Exterior sun visor

Yes  No   
Page # 6 & of FBS

Cab glass to be safety tinted

Yes  No   
Page # 6 of FBS and 2 of Standard equipment

Cab to have grab handles of both sides of cab

Yes  No   
Page # 6 of FBS and 2 of Standard Equipment

Cab exterior and chassis to have all required DOT and ICC lighting (turn signal indicators, emergency flashers, rear stop, tail, turn and backup lighting.)

Yes  No   
Page # 2 of standard equipment

Hood is to be a full tilting fiberglass design with safety latch to include bright finished grill, bright finish air intakes, and bright finish full hood surround.

Yes  No   
Page # 6 of FBS and 2 of Standard Equipment

Cab and hood paint color to be selected from manufacturer's standard non-metallic paint chart.

Yes  No   
Page # 9 of FBS

### **CAB INTERIOR**

Cab interior to include the following:

Storage tray on back wall of cab and in overhead console

Yes  No   
Page # 2 standard equipment and 6 of FBS  
5 of 6

Cab interior is to be PREMIUM level fully groomed with headliner, back wall and windshield pillar post and door panels covered

*Interior of Trim Brochure*

Yes  No   
Page # 6 of FBS

Cab should have interior sun visors on both sides of cab.

Yes  No   
Page # 2 of Standard Equipment

Cab floor should be covered with black polyurethane mat.

Yes  No   
Page # 5 of FBS and 2 of Standard Equipment

Dash features to include:

Brushed Nickel appearance

*Interior Trim Brochure*

Yes  No   
Page # 2 of Interior Trim

Center mount console with cup holders

Yes  No   
Page # 5 of FBS and 2 of Standard Equipment

Full adjusting tilt and telescopic steering column

Yes  No   
Page # 2 of Standard Equipment

Full instrumentation with all standard gauges and a secondary gauge package with: (Engine Oil Temp, Trans Oil Temp, Exhaust Pyrometer, Boost Pressure)

*Air Restriction*

Yes  No   
Page # 5 of FBS

Cab seats should be:

PREMIUM High Back air ride design with arm rest

Yes  No   
Page # 6 of FBS

Passenger seat to be fixed design with arm rest

Yes  No   
Page # 6 of FBS

Both seats to have fabric covering with required lap and shoulder belts.

Yes  No   
Page # 6 of FBS

Factory installed integral air conditioning with R134A refrigerant and rotary type air conditioner compressor.

Yes  No   
Page # 6 of FBS  
5

AM/FM/CD radio with clock, weather band and Blue Tooth capability, two- way radio power leads with mounting plate installed in overhead console with mirror mounted antenna LH side

Yes  No   
Page # 6 of FBS  
5 of 6

Two additional dash mounted power outlets to be furnished.

Yes  No   
Page # 6 of FBS  
Pg 2 std equip

Windshield wipers to be two (2) speed electric with washer and intermittent feature.

Yes  No   
Page # 2 of standard equipment

#### AIR BRAKES

**4 FBS**

Brake system to be full dual antilock air design with heated air dryer.

Yes  No   
Page # 2 of FBS/ 4 of FBS/ 2 of standard equipment

Air compressor should have 37.4 CFM capacity and increased air reservoir capacity for the local installation of a pusher style third axle.

Yes  No   
Page # 2 of FBS and 5 of FBS

System to include an in cab control valve for rear service brakes.

Yes  No   
Page # 5 of FBS

#### FRAME/BUMPER/FUEL TANKS

Steel 120,000 PSI steel frame rails 11.81" x 4.13" x 0.44" with a section modulus of 26.3 and a RBM per rail of 3,160,000.

Yes  No   
Page # 4 of FBS

222"-226" wheelbase with a 135"-139" cab to axle and a 197"-201" load platform.

Yes  No   
Page # 4 of FBS

Heavy-duty back to back channel cross members with huck bolt fasteners throughout.

Yes  No \_\_\_\_\_  
Page # 4 of FBS

Front bumper Bright Finish steel swept back channel design with Bright Finish plate type radiator guard and right and left hand bumper recessed tow hooks.

Yes  No \_\_\_\_\_  
Page # 5 of FBS

Fuel tank(s) to be aluminum with a minimum of 100-gallon capacity.

Yes  No \_\_\_\_\_  
Page # 5 of FBS

### **FRONT AXLE**

20,000 Reverse Elliot design steel I beam axle with 20,000# multi leaf suspension and shock absorbers

Yes  No \_\_\_\_\_  
Page # 3 of FBS and Axle Brochure

20,000# integral power steering (Master/Slave assist design)

Yes  No \_\_\_\_\_  
Page # 3 of FBS

Maximum of 34.5" spring centers

Yes  No \_\_\_\_\_  
Page # Axle Brochure

**SET FORWARD** front axle position only. Model GR64FR  
F designate axle forward design

Yes  No \_\_\_\_\_  
Page # \_\_\_\_\_

Unitized sealed (maintenance free) front wheel hubs.

Yes  No \_\_\_\_\_  
Page # Axle Brochure

Sealed tapered kingpins and bearings.

Yes  No \_\_\_\_\_  
Page # Axle Brochure

Meritor "S" cam design 16.5" x 6" Q+ brakes with:  
Outboard mounted drums and Dust Shields

Yes  No \_\_\_\_\_  
Page # 3 of FBS

Automatic slack adjusters

Yes  No \_\_\_\_\_  
Page # 3 of FBS

Front wheels to be Aluminum ten (10) hole bud style, hub piloted 22.5" x 12.25".

Yes  No \_\_\_\_\_  
Page # 8 of FBS

Front tires to be 425/65R22.5 radials Bridgestone, Goodyear, Michelin, Firestone, Continental, General, or Yokohama.

Yes  No   
Page # 8 of FBS  
7

### **REAR AXLE**

46,000# capacity (4.19-4.30) ratio double reduction design tandem rear axle with top loaded carriers and 46,000# multi leaf rear suspension with Heavy Duty Anti Sway spring package. Rear spring insulators to be Urethane Heavy Duty shock insulators. transverse torque rod and bronze center bushings. Leaf over walking beam design with bronze center bushings will be accepted as a substitute, however no REYCO, AIR RIDE or T RIDE suspensions will be accepted.

Driver controlled inner wheel power divider and differential lock in both rear axles with manual air valve and warning light.

Yes  No   
Page # 3 of FBS and Rear Axle brochure

Meritor "S" cam design 16.5" x 7" Q+ brakes with:

Outboard drums and dust shields

Yes  No   
Page # 8 of FBS and Rear Axle Brochure  
3

Automatic slack adjusters

Yes  No   
Page # 4 of FBS  
3

Brake chambers shall be (4) 30/30 style chambers with raised chambers on rear axle.

Yes  No   
Page # 4 of FBS  
3

Rear wheels to be Alum Disc (10) hole bud style, hub piloted 24.5x 8.25 inside and out.

Yes  No   
Page # 8 of FBS  
7

Rear tires to be 14 ply minimum traction tread 11R24.5 Bridgestone, Michelin, Goodyear, Continental, General, Firestone, or Yokohama

Yes  No   
Page # 8 of FBS  
7

### **Options**

In addition to the above options related to the tri-axle or heavy duty dump truck chassis, the bid must also include the cost for each of the following options, itemized separately on the bid:

Allison 4500-RDS-6 six speed automatic over drive Rugged Duty Series Gen 4 with transmission cooler, external oil cooler, internal filter, oil level sensor, temperature gauge and aluminum bell housing. Allison transmission to be factory filled with TRANSYND synthetic lubricant. Allison transmission low gear ratio = 4.70 and transmission high gear ratio = .67 over drive.

Yes  No   
Page # 2 of Allison Brochure  
1 FBS

# **FACTORY BUILD SHEET**

# **ALLISON TRANSMISSION**

# TECHNICAL SPECIFICATION

## GRANITE 64FR MACK SPEC



				WEIGHT (LB)	
MODEL DEFINING			DESCRIPTION	FRONT	REAR
S	PB100M	PRICE BOOK LEVEL	2008-10-07	0	0
S	LAX05X	VOLTAGE	ELECTRICAL SYSTEM 12 VOLT	0	0
APPLICATION PACKAGES				WEIGHT (LB)	
	MPK07K	CHASSIS CONFIGURATION PACKAGE	ONEBOX EATS, LH BATTERY BOX, 6.6 GALLON (25L) SLEEVED DEF, 22" SLEEVED LH FUEL TANK	0	0
CUSTOMER/VEHICLE INFO				WEIGHT (LB)	
S	002F52	CHASSIS (BASE MODEL)	GRANITE 64FR MACKSPEC	4,853	1,764
	MP2001	CUSTOMER FLEET SIZE	DEALER FLEET WITH LESS THAN 25 VEHICLES IN OWN FLEET OF ANY VEHICLE BRAND	0	0
	013002	TYPE OF SERVICE	MUNICIPAL	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, INTENDED REGISTRATION LOCATION	Including but not Limited to Applicable CARB and/or Section 177 States' Regulation requirements	0	0
	M84001	INTENDED REGISTRATION LOCATION	ALABAMA	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
	2KEZ1X	TRAILER TYPE	WITHOUT TRAILER TYPE	0	0
S	DKX99X	GROSS COMBINATION WEIGHT (CA in PC29 only)	TRUCK ONLY - NO TRAILER TOWING PROVISIONS PROVIDED	0	0
S	70BB1X	BRAKE REGULATION	BRAKE REGULATION, STOPPING DISTANCE 94M (310FT)	0	0
	QCXB1X	TOPOGRAPHY	GRADES <6% GREATER THAN 98% OF DRIVING DISTANCE MAX GRADE 16%	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
ENGINE/TRANSMISSIONS				WEIGHT (LB)	
	100490	ENGINE / MOTOR	MP8-455C MACK 455HP @ 1400-1700 RPM (PEAK) 2100 RPM (GOV) 1750 LB-FT, US'21	2,108	530
S	3GCB1X	GHG APPLICATION, VEHICLE	GREEN HOUSE GAS VOCATIONAL APPLICATION	0	0
	136206	TRANSMISSION	4500 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.)



			WEIGHT (LB)		
EXHAUST/EMISSIONS		DESCRIPTION	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
	Q0AC1X	EXHAUST - BRIGHT FINISH	SINGLE, BRIGHT FINISH HEAT SHIELD, STACK	0	0

			WEIGHT (LB)		
ENGINE EQUIPMENT		DESCRIPTION	FRONT	REAR	
	125055	AIR CLEANER	UNDER HOOD SINGLE ELEMENT DRY TYPE W/AIR INTAKE FROM BOTH SIDES OF HOOD&DASH MTD AIR RESTRICTION IND	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	851004	AIR DRYER POSITION (CA)	STANDARD AIR DRYER LOCATION	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	393AA2	BATTERY BOX - MOUNTING (x)	LH RAIL UNDER CAB FORWARD OF FUEL TANK (3 BATTERY MAX)	-8	-4
	L5XF1X	BATTERY BOX COVER	POLISHED ALUMINUM	5	0
S	NCXA5X	STARTER MOTOR	12 VOLT DELCO 39MT-MXT	31	0
	110AA6	ENGINE BRAKE	MACK MP8 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 VISCOS FAN DRIVE	0	0
S	119AI9	COOLANT PROTECTION	ETHYLENE GLYCOL FULLY FORMULATED COOLANT (50/50 MIX DYED PINK) TO -34DEG, W/ FILTER	0	0
	H9XK1X	RADIATOR TYPE	RADIATOR, CORE AREA W/O FEPTO 1345sq in (86sq dm), CORE AREA W/ FEPTO 1296sq in (83sq dm)	0	0
	124AA2	HOSES - RADIATOR/HEATER	SILICONE RADIATOR AND HEATER HOSES	0	0
S	293043	FUEL-WATER SEPARATOR	MACK W/MANUAL DRAIN VALVE V2 (INTEGRAL W/ PRIMARY FUEL FILTER)	0	0
S	MCA04A	ENGINE HEATERS	120v 1500w BLOCK HEATER ONLY	0	0
	5NXA1X	ENGINE BLOCK HEATER	120V 1500W ENGINE BLOCK HEATER	5	0
	MAH01I	PLUG QUANITY & TYPE	SINGLE (1) 120V-15A PLUG	0	0
S	QHXC1X	OIL SUMP	OIL PAN	0	0
S	2YBZ1X	EMERGENCY ENGINE STOP (CA)	WITHOUT ENGINE STOP, EMERGENCY	0	0

			WEIGHT (LB)		
CLUTCH/TRANS EQUIPMENT		DESCRIPTION	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
	195AA6	DRIVELINE - MAIN	MERITOR RPL25 W/PERMALUBE U-JOINTS (PROPS-M)	12	12

# TECHNICAL SPECIFICATION (cont.)



CLUTCH/TRANS EQUIPMENT				WEIGHT (LB)	
		DESCRIPTION		FRONT	REAR
	204AA4	DRIVELINE - INTERAXLE	MERITOR RPL20 W/PERMALUBE	0	0
	76AA1X	DRIVESHAFT MAIN U-JOINT	UNIVERSAL JOINT HALF-ROUND TYPE (where applicable)	0	0
S	8WAAAX	DRIVESHAFT INTERAXLE U-JOINT	HALF-ROUND UNIVERSAL JOINT	0	0
S	4LDA1X	TRANSMISSION OUTPUT TORQUE	TRANSMISSION OUTPUT TORQUE BASIC	0	0
	7RXAEX	LUBRICANTS, TRANSMISSION	TRANSYND SYNTHETIC LUBE FOR ALLISON TRANS	0	0
	139008	TRANSMISSION OIL COOLER	ALLISON 4xxx SERIES TRANSMISSION W/DIRECT MOUNT COOLER & SS COOLANT TUBES	0	0

FRONT AXLE EQUIPMENT				WEIGHT (LB)	
		DESCRIPTION		FRONT	REAR
	240AA3	FRONT AXLE	20000# (9100 KG) MACK FXL20 STRAIGHT SPINDLE/UNITIZED BEARINGS	428	0
	244AC3	SPRINGS - FRONT	MACK MULTILEAF 20000# (9100 KG) GROUND LOAD RATING, EQUAL BIAS	155	0
	241081	BRAKES - FRONT	MERITOR "S" CAM TYPE 16.5" x 6" Q+	29	0
	U3XC9X	BRAKE DRUMS - FRONT	BRAKE, FRONT, DRUM LIGHT WEIGHT TRUTURN	0	0
S	UDXA1X	DUST SHIELDS - FRONT	DUST SHIELDS FOR FRONT AXLE	5	0
	U0AB1X	SLACK ADJUSTERS - FRONT	MERITOR - AUTOMATIC	3	0
	V7AB1X	BRAKE CHAMBERS - FRONT	FRONT BRAKE CHAMBER MANUFACTURER, HALDEX	0	0
	0KXA1X	HUBS - FRONT	FERROUS	157	0
S	61500A	FRONT AXLE LUBRICANT	FRONT AXLE LUBE, FAG NLGI2 GREASE	0	0
S	1KAA1X	SHOCK ABSORBERS - FRONT	DOUBLE ACTING TYPE	0	0
	245AB0	STEERING	SHEPPARD SD110 + HD94	206	0

REAR AXLE EQUIPMENT				WEIGHT (LB)	
		DESCRIPTION		FRONT	REAR
	268AA9	REAR AXLE	46000# (20900kg) MACK S462R CAST DUCTILE IRON HOUSING	0	1,614
	617002	DRIVE AXLE LUBRICANT	DRIVE AXLE LUBE, SHELL 80W90 MINERAL OIL	0	0
S	01800R	CARRIER - REAR AXLE	150/151 SERIES (Tandem Mack Rear Axles up to 150,000lb GCW)	0	0
	254013	TRACTION DIFFERENTIAL	INTERWHEEL DIFFERENTIAL LOCK, ALL REAR AXLES	0	18
S	3LAC1X	POWER DIVIDER LOCKOUT	INTERAXLE POWER DIVIDER LOCKOUT, W/BUZZER & LIGHT	0	40
	TAXAWX	REAR AXLE RATIO	4.19 RATIO	0	0
	1860K6	REAR SUSPENSION	SS46 MACK CAMELBACK MULTILEAF 46,000 lb, HEAVY DUTY	0	1,991
	402AA3	SPRINGS - ANTI-SWAY	SPRINGS, ANTI-SWAY	0	104
	XZXA1X	TRUNNION BUSHING	BRONZE	0	36
S	GWXABX	BOGIE SPREAD, REAR	50" AXLE SPACING (BOGIE WHEELBASE)	0	3
	2AAABX	SHOCK INSULATORS	URETHANE SHOCK INSULATORS, HEAVY DUTY, HIGHLY RECOMMENDED W/SS582 & SS652 REAR SUSP	0	5
S	XYXB1X	TRANSVERSE TORQUE RODS	TRANSVERSE TORQUE ROD (REAR AXLE ONLY)	0	0
S	237037	AUX.SPRING BRAKE QTY	AUX SPRING BRAKE QTY, 4 CHAMBERS	0	20
S	253AA4	BRAKES - REAR	MERITOR "S" CAM 16.5"x7" Q+ (Total for QTY = 2)	0	-35
S	U4XC9X	BRAKE DRUMS - REAR	BRAKE, DRIVE REAR, DRUM LIGHT WEIGHT TRUTURN	0	0
	U1AB1X	SLACK ADJUSTERS - REAR	MERITOR - AUTOMATIC (Total for QTY = 2)	0	0
	UEXA1X	DUST SHIELDS - REAR BRAKE	DUST SHIELDS FOR REAR AXLE	0	12
	V1AB1X	REAR BRAKE CHAMBER SIZE	REAR SPRING BRAKE CHAMBERS 30/30 TYPE	0	0
	N5FAJX	BRAKE ORI REAR-MOST DRIVE AXLE	DRUM BRAKE CHAMBER ORIENTATION: High Mount - Rear of Axle - Chamber Down	0	0

# TECHNICAL SPECIFICATION (cont.)



			WEIGHT (LB)		
REAR AXLE EQUIPMENT		DESCRIPTION	FRONT	REAR	
	300AL0	PARKING BRAKE CHAMBER	HALDEX "LIFE SEAL PLUS" (3" STROKE) BRAKE CHAMBERS (Total for QTY = 2)	0	0
S	0LXI5X	HUBS - REAR	IRON PRESET REAR HUB W/INTEGRATED SPINDLE NUT	0	318
	698078	ANTILOCK BRAKE SYSTEM	BENDIX WITH TRACTION CONTROL 4S4M	0	0
S	URXD1X	AIR SYSTEM VALVE VENDOR	BENDIX SWITCHES AND VALVES WHERE POSSIBLE	0	0
S	3ZAA1X	SPRING BRAKE INVERSION VALVE	TRACTOR SPRING BRAKE INVERSION VALVE	5	0

			WEIGHT (LB)		
FRAME EQUIPMENT/FUEL TANKS		DESCRIPTION	FRONT	REAR	
	271226	WHEELBASE	226"	183	183
	374063	AF (OVERHANG)	63"	-19	258
	MCE0FE	FRAME RAILS & LINERS	11.1 x 105 x 300mm - (0.437" x 4.13" x 11.81"); RBM 3,160,000 LB-IN	0	0
S	5CAAX	BOLT ON FRONT FRAME EXTENSION	6" BOLT ON FRAME EXTENSION	155	-2
S	A0XH1X	FRONT FRAME LENGTH	FRONT FRAME LENGTH 725MM	45	-2
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
	4DXN6X	FRONT BUMPER	EXTENDED-SWEPT BACK-STEEL BRIGHT FINISH	0	0
	5FXA2X	RADIATOR GUARD	PLATE TYPE BRIGHT FINISH	45	-11
S	4ZAAAX	TRUNNION BRACKET	BASIC SOLUTION TRUNNION BRACKET, STD HEIGHT	0	0
S	4EXG1X	TOWING DEVICE, FRONT	HOOKS	0	0
S	2RAA1X	FUEL LEVEL SENDER UNIT, LIQUID	BASIC FUEL LEVEL SENDER MOUNTED ON L.H TANK	0	0
	288AF7	FUEL TANK - LH	111 GALLON (420 L) 22" ALUMINUM, SLEEVED D-SHAPED	223	100
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 TANK MATERIAL & FINISH	STEEL AIR TANK PAINTED CHASSIS COLOR	0	0
S	VSXB1X	INCREASE AIR CAPACITY	AUXILIARY AIR TANK CAPACITY FOR (1) EXTRA LIFT AXLE	20	16
S	1JAAAX	PARKING BRAKE VALVE	SINGLE VALVE SYSTEM	0	0

			WEIGHT (LB)		
ELECTRICAL		DESCRIPTION	FRONT	REAR	
S	3120A2	ROOF & SIDE MARKER LIGHTS	(5) TRUCKLITE CHROME BULLET ROOF MARKER & STANDARD MARKER / DIRECTIONAL SIGNAL	0	0
S	LJXCAX	HEADLAMP BULB TYPE	HEADLAMP BULB TYPE, LED, HEATED	0	0

# TECHNICAL SPECIFICATION (cont.)



				WEIGHT (LB)	
ELECTRICAL			DESCRIPTION	FRONT	REAR
S	LSXJ7X	DAYTIME RUNNING LIGHTS	W/OVERRIDE SWITCH, PARK BRAKE & ENGINE RUNNING ACTIVATED	0	0
S	X2AA1X	DRL OVERRIDE SPEED THRESHOLD	DRL OVERRIDE SPEED THRESHOLD 8 KMPH (5 MPH)	0	0
S	NEXC1X	TAIL LAMPS	INCANDESCENT TAIL LAMPS	0	7
				WEIGHT (LB)	
TRAILER CONNECTIONS			DESCRIPTION	FRONT	REAR
	WGXA1X	HAND CONTROL VALVE	HAND CONTROL VALVE FOR TRAILER BRAKES W/ AIR CONNECTIONS OR SERVICE BRAKES W/O AIR CONNECTIONS	0	0
S	3SAZ1X	TRAILER CONNECTORS HOLDER	OMIT TRAILER CONNECTORS HOLDER	3	0
				WEIGHT (LB)	
PTO			DESCRIPTION	FRONT	REAR
	TYXE1X	PTO - CONTROL	TRANSMISSION PTO SWITCH AND LIGHT WITH WIRING AND PIPING FOR LOCAL INSTALLATION	3	0
S	B83083	BODY BUILDER INTERFACE	BODY LINK III W/CAB PASS-THRU	5	5
				WEIGHT (LB)	
SPECIALTY EQUIPMENT			DESCRIPTION	FRONT	REAR
S	MCQ01Q	LANE SUPPORT SYSTEM (LSS)	WITHOUT LANE SUPPORT SYSTEM	0	0
S	2PEZ1X	DATA CAPTURE	WITHOUT DATA CAPTURE	0	0
S	1PAZ1X	SURVEILLANCE CAMERA OPTIONS (CA)	WITHOUT CAMERA	0	0
				WEIGHT (LB)	
CAB INTERIOR (A THRU G)			DESCRIPTION	FRONT	REAR
S	198048	SPEEDOMETER -& GAUGES - UNIT(s) OF MEASURE	U.S. UNITS (PREDOMINANT)	0	0
	CCXE1X	GAUGE - PACKAGE, SECONDARY	2ND GA PKG W/ENG OIL TEMP,TRANS OIL TEMP,PYRO,AIR RESTRICT	0	0
	E1AAAX	GAUGE OIL TEMP-REAR AXLE	REAR AXLE OIL TEMP GAUGE IN DID (DRIVER INFORMATION DISPLAY)	0	0
S	4AXC1X	CLIMATE UNIT	ELECTRONIC CONTROLLED CLIMATE CONTROL AIR CONDITION	0	0
S	EEXA1X	CUPHOLDER	CUPHOLDER	0	0
S	I0XAHX	DOME LAMP, INTERIOR	(4) DOME LAMPS - DOOR AND SWITCH ACTIVATED	0	0
S	3XAA1X	DASH INDICATOR - LAMP BODY OUT OF POS	DASH MTD, INDICATOR BODY/HOIST UP "BODYBUILDER LAMP"	0	0
	7860E6	FIRE EXTINGUISHER	5LB (ABC RATED) MOUNTED BETWEEN DRIVER SEAT BASE AND DOOR VALVE AIMED REARWARD	9	0
	184AA3	FLOOR COVERING	POLYURETHANE FLOOR MAT W/ REMOVABLE INSERTS	16	0
				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 KEYED 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

# TECHNICAL SPECIFICATION (cont.)



CAB INTERIOR (H THRU R)			DESCRIPTION	WEIGHT (LB)	
				FRONT	REAR
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
	784034	REFLECTOR KIT	W/O SLEEPER BOX FURNISH KIT PARALLEL TO INSIDE SURFACE OF RIDER'S SEAT BASE	12	3

CAB INTERIOR (S THRU Z)			DESCRIPTION	WEIGHT (LB)	
				FRONT	REAR
	004034	INTERIOR TRIM LEVELS	PREFERRED TRIM PACKAGE, STEEL GRAY (Package 12A)	0	0
	196ABQ	SEAT - DRIVER'S	MACK-AIR, HIGH BACK, 4 CHAMBER AIR LUMBAR, BOLSTER, EXTENSION	67	16
	MAP06P	SEAT COVERING - DRIVER'S	DRIVER'S SEAT - BLENDED BLACK & GREY VINYL / CLOTH MIX	0	0
S	197AA1	SEAT - PASSENGER'S	MACK-FIXED, HIGH BACK	40	9
	MAQ07Q	SEAT COVERING - PASSENGER'S	PASSENGER'S SEAT - BLENDED BLACK & GREY VINYL / CLOTH MIX	0	0
	0HAA1X	SEAT - DUST COVER(S)	SEAT, DUST COVER FOR DRIVER'S SEAT	3	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
	161021	STEERING WHEEL	2 SPOKE LEATHER 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

CAB EXTERIOR			DESCRIPTION	WEIGHT (LB)	
				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
	40000E	GRILLE	BRIGHT FINISH BARS W/BRIGHT FINISH SURROUND GRILL MOUNTED	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
	154AB3	HORN - AIR	(2) ROUND SINGLE TRUMPET (ONE EACH SIDE CAB ROOF)	9	0
S	LXXD1X	HORN - ELECTRICAL	DUAL TONE	5	0
	1520C2	MIRRORS - EXTERIOR	FLAT MIRROR - POLISHED ALUMINUM FINSH, HEATED, W/O LAMPS	0	0
	153AA3	MIRRORS - CONVEX TYPE CAB DOORS	BRIGHT FINISH, LH & RH, 8" DIAMETER HEATED CONVEX	3	0
	157037	SUN VISOR - EXTERIOR	SUN VISOR, EXTERIOR, STAINLESS STEEL (UNPAINTED)	9	0

# TECHNICAL SPECIFICATION (cont.)



AERODYNAMIC DEVICES				WEIGHT (LB)	
		DESCRIPTION		FRONT	REAR
S	MCM998	FRONT CHASSIS AERODYNAMIC PACKAGE	WITHOUT FRONT AERODYNAMIC FAIRINGS	0	0
WHEELS & TIRES				WEIGHT (LB)	
	9004X0	TIRES BRAND/TYPE - FRONT	425/65R22.5 L BRIDGESTONE M870 (22800 lbs) (Total for QTY = 2)	384	0
	5314D1	WHEELS - FRONT	22.5x12.25 ACCURIDE ACCU-SHIELD 29374x EXTRA POLISHED ALUMINUM, 5.88" OFFSET, 10 HAND HOLE (Total for QTY = 2)	133	0
	901091	TIRES BRAND/TYPE - REAR	11R24.5 G BRIDGESTONE M760 ECOPIA (24020 lbs) (DRIVE ONLY) (Total for QTY = 8)	0	1,112
	346306	WHEELS - REAR	24.5x8.25 ACCURIDE ACCU-LITE 42362x POLISHED ALUMINUM, 6.59" OFFSET, 10 HAND HOLE (Total for QTY = 8)	0	441
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
COMMUNICATION SYSTEMS				WEIGHT (LB)	
	3YAB1X	CO-PILOT - DISPLAY FEATURES ACCESS LEVEL	CO-PILOT DISPLAY, FULL DRIVER ACCESS	0	0
	3RAA1X	FLEET TRIP MANAGEMENT	FLEET TRIP MANAGEMENT DRIVER CONTROL	0	0
S	M30060	TELEMATIC GATEWAY	TELEMATICS GATEWAY, 4G/LTE AND WLAN SYSTEM WITH DIAGNOSTIC SERVICES	0	0
ENGINE ELECTRONICS				WEIGHT (LB)	
S	WOXA1X	SHUTDOWN-ENG.OIL PRESSURE	OIL PRESSURE, 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
	K7XH3X	LOW IDLE ENGINE RPM	IDLE CONTROL, 650 RPM	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
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	B3ABAX	EHT, MAX ROAD SPEED	ELECTRONIC HAND THROTTLE, MAX ROAD SPEED, 16 KMH (10 MPH)	0	0
	B6ACEX	EHT, MAX ENG SPEED	ELECTRONIC HAND THROTTLE, MAX ENGINE SPEED, 2100 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

# TECHNICAL SPECIFICATION (cont.)



				WEIGHT (LB)	
TRANSMISSION ELECTRONICS		DESCRIPTION		FRONT	REAR
S	7790U9	TRANSMISSION ELECTRONICS PACKAGE	SPECIALTY USE (221) - SPLIT SHAFT WITH SOFT START FOR HIGH INERTIA PUMPS (ex. VACUUM TRUCKS)	0	0
	B1EB1X	TRANSM AUTO NEUTRAL ON P-BRAKE	ALLISON PARK BRAKE AUTO NEUTRAL-REQUIRES PARK BRAKE TO BE DISENGAGED PRIOR TO SELECTING A GEAR TO DR	0	0
	MAV01V	TRANSMISSION ELECTRONIC SHIFTING PROPERTIES	W/O ALLISON FUELSENSE 2.0 PROGRAMMING	0	0
				WEIGHT (LB)	
VEHICLE ELECTRONICS		DESCRIPTION		FRONT	REAR
S	JCXE6X	ROAD SPEED LIMIT (RSL)	105 KM/H ROAD SPEED LIMITER (65MPH)	0	0
	Y3CC5X	PEDAL SPEED LIMITER	105 KM/H PEDAL ROAD SPEED LIMITER (65MPH)	0	0
S	JDXA1X	CRUISE CONTROL	CRUISE CONTROL	0	0
S	JFXLLX	CRUISE CONTROL, MAX SPEED	MAX CRUISE, 105 KPH (65 MPH)	0	0
S	E3AACX	CRUISE CONTROL MIN SPEED	MIN CRUISE, 32 KPH (20 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
	Q6FAHX	DIFF LOCK SPEED LIMIT	DIFFERENTIAL LOCK ROAD SPEED LIMIT 24KMH (15MPH)	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
				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

# TECHNICAL SPECIFICATION (cont.)



				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	MPA998	ROOF FAIRING COLOR	WITHOUT ROOF FAIRING	0	0
S	95103K	CHASSIS RUNNING GEAR	MACK BLACK (60 GLOSS); 250-12370	0	0
	958028	BUMPER	W/O OPTIONAL BUMPER PAINT	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 COVERAGE			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
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 (804,672 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

				WEIGHT (LB)	
CONNECTED SERVICES			DESCRIPTION	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

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**FRONT / REAR AXLE WEIGHTS (LB)**

10144 8863

**TOTAL WEIGHT (LB)**

19007

**PRICELIST DATE**  
20250818

**QUOTATION**  
NEXT2025000527C614

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# MACK®



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# **FACTORY BUILD SHEET**

# **MANUAL TRANSMISSION**

# TECHNICAL SPECIFICATION

## GRANITE 64FR MACK SPEC



			WEIGHT (LB)		
MODEL DEFINING			DESCRIPTION	FRONT	REAR
S	PB100M	PRICE BOOK LEVEL	2008-10-07	0	0
S	LAX05X	VOLTAGE	ELECTRICAL SYSTEM 12 VOLT	0	0
APPLICATION PACKAGES			DESCRIPTION	WEIGHT (LB)	
MPK07K	CHASSIS CONFIGURATION PACKAGE		ONEBOX EATS, LH BATTERY BOX, 6.6 GALLON (25L) SLEEVED DEF, 22" SLEEVED LH FUEL TANK	0	0
CUSTOMER/VEHICLE INFO			DESCRIPTION	FRONT	REAR
S	002F52	CHASSIS (BASE MODEL)	GRANITE 64FR MACKSPEC	4,853	1,764
	MP2001	CUSTOMER FLEET SIZE	DEALER FLEET WITH LESS THAN 25 VEHICLES IN OWN FLEET OF ANY VEHICLE BRAND	0	0
	013002	TYPE OF SERVICE	MUNICIPAL	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, INTENDED REGISTRATION LOCATION	Including but not Limited to Applicable CARB and/or Section 177 States' Regulation requirements	0	0
	M84001		ALABAMA	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
	2KEZ1X	TRAILER TYPE	WITHOUT TRAILER TYPE	0	0
S	DKX99X	GROSS COMBINATION WEIGHT (CA in PC29 only)	TRUCK ONLY - NO TRAILER TOWING PROVISIONS PROVIDED	0	0
S	70BB1X	BRAKE REGULATION	BRAKE REGULATION, STOPPING DISTANCE 94M (310FT)	0	0
	QCXB1X	TOPOGRAPHY	GRADES <6% GREATER THAN 98% OF DRIVING DISTANCE MAX GRADE 16%	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
ENGINE/TRANSMISSIONS			DESCRIPTION	WEIGHT (LB)	
	100480	ENGINE / MOTOR	MP8-455C (LT) MACK 455HP @ 1500-1700 RPM (PEAK) 2100 RPM (GOV) 1650 LB-FT, US'21	2,108	530
S	3GCB1X	GHG APPLICATION, VEHICLE	GREEN HOUSE GAS VOCATIONAL APPLICATION	0	0
	136AE0	TRANSMISSION	FULLER RTO-16908LL (14.56/0.74)	605	201
S	V4EZ9X	GEARBOX 12TH GEAR LOCK-OUT	WITHOUT 12TH GEARBOX GEAR LOCK-OUT	0	0

# TECHNICAL SPECIFICATION (cont.)



				WEIGHT (LB)	
EXHAUST/EMISSIONS		DESCRIPTION		FRONT	REAR
	Z8FT1X	NOX LIMITS	CARB LEGACY / EPA (200MG/HP/HR), 50 State Idle Compliance	0	0
<b>S</b>	Y7BC1X	IDLE EMISSION LABEL LOCATION (CA in PC29 only)	IDLE EMISSION LABEL LOCATION, LOWER LH CORNER OF DRIVER DOOR	0	0
<b>S</b>	DPF04F	DPF DIESEL PARTICULATE FILTER	CLEARTECH ONE BOX E.A.T.S. RH SIDE UNDER CAB US17 / US21	0	0
<b>S</b>	MCF07F	CHASSIS MOUNTED EMISSIONS FINISH	W/O DEF COVER & PAINTED DPF COVER	0	0
<b>S</b>	DF10O1	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
	Q0AC1X	EXHAUST - BRIGHT FINISH	SINGLE, BRIGHT FINISH HEAT SHIELD, STACK	0	0
				WEIGHT (LB)	
ENGINE EQUIPMENT		DESCRIPTION		FRONT	REAR
	125055	AIR CLEANER	UNDER HOOD SINGLE ELEMENT DRY TYPE W/AIR INTAKE FROM BOTH SIDES OF HOOD&DASH MTD AIR RESTRICTION IND	0	0
<b>S</b>	121AA5	BUG SCREEN	BLACK ALUMINUM BUG SCREEN MOUNTED BEHIND GRILLE, WITHOUT WINTER FRONT COVER	0	0
<b>S</b>	1130G3	AIR COMPRESSOR/DRYER	WABCO HEATED SS-HP AIR DRYER W/ WABCO 636 (37.4 CFM) AIR COMPRESSOR	0	0
<b>S</b>	851004	AIR DRYER POSITION (CA)	STANDARD AIR DRYER LOCATION	0	0
<b>S</b>	KOXA1X	AIR DRYER POSITION (CA)	AIR DRYER POSITION STANDARD	0	0
<b>S</b>	132AB9	ALTERNATOR	DELCO 12V 160A (28SI) BRUSH-TYPE	16	0
<b>S</b>	316AA5	BATTERIES	(3) MACK 12V 760/2280 CCA THREADED STUD TYPE	7	3
<b>S</b>	393AA2	BATTERY BOX - MOUNTING (x)	LH RAIL UNDER CAB FORWARD OF FUEL TANK (3 BATTERY MAX)	-8	-4
	L5XF1X	BATTERY BOX COVER	POLISHED ALUMINUM	5	0
	NCXD1X	STARTER MOTOR	12 VOLT MELCO STARTER (MITSUBISHI ELECTRIC)	31	0
	110AA6	ENGINE BRAKE	MACK MP8 POWERLEASH	0	0
<b>S</b>	JMXB1X	VEHICLE/TRAILER STOP LAMP APPLICATION (CA)	VEHICLE AND TRAILER (IF APPLICABLE) STOP LAMPS ACTIVATE UPON SERVICE BRAKE APPLICATION ONLY(3899000)	0	0
<b>S</b>	J2EAAK	ENGINE BRAKE ACTIVATION	ENGINE BRAKE ACTIVATION, BASIC	0	0
<b>S</b>	118AB8	FAN DRIVE	BEHR FAN AND ELECTRONIC MODULATING VISCOS FAN DRIVE	0	0
<b>S</b>	119AI9	COOLANT PROTECTION	ETHYLENE GLYCOL FULLY FORMULATED COOLANT (50/50 MIX DYED PINK) TO -34DEG, W/ FILTER	0	0
	H9XK1X	RADIATOR TYPE	RADIATOR, CORE AREA W/O FEPTO 1345sq in (86sq dm), CORE AREA W/ FEPTO 1296sq in (83sq dm)	0	0
	124AA2	HOSES - RADIATOR/HEATER	SILICONE RADIATOR AND HEATER HOSES	0	0
<b>S</b>	293043	FUEL-WATER SEPARATOR	MACK W/MANUAL DRAIN VALVE V2 (INTEGRAL W/ PRIMARY FUEL FILTER)	0	0
<b>S</b>	MCA04A	ENGINE HEATERS	120v 1500w BLOCK HEATER ONLY	0	0
	5NXA1X	ENGINE BLOCK HEATER	120V 1500W ENGINE BLOCK HEATER	5	0
	MAH01I	PLUG QUANTITY & TYPE	SINGLE (1) 120V-15A PLUG	0	0
<b>S</b>	QHXC1X	OIL SUMP	OIL PAN	0	0
<b>S</b>	2YBZ1X	EMERGENCY ENGINE STOP (CA)	WITHOUT ENGINE STOP, EMERGENCY	0	0
				WEIGHT (LB)	
CLUTCH/TRANS EQUIPMENT		DESCRIPTION		FRONT	REAR
	492032	GEAR SHIFTER	EATON/FULLER SHIFTER	0	0
	133AD6	CLUTCH	EATON ADVANTAGE SOLO 9-SPRING,2PLATE 15.5" CERAMIC 6 PADDLES, SELF ADJUST	0	0
	MCB03B	CLUTCH ACTUATION SYSTEM & PEDAL PAD	AIR ASSIST CLUTCH CABLE SYSTEM WITH RUBBER PEDAL	0	0
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# TECHNICAL SPECIFICATION (cont.)



			WEIGHT (LB)	
CLUTCH/TRANS EQUIPMENT		DESCRIPTION	FRONT	REAR
	2XAB1X	CLUTCH PEDAL	RUBBER PAD	3 0
	IUXC1X	CLUTCH ASSIST (AIR)	AIR OPERATED CLUTCH ASSIST	-2 0
	RBXD1X	CLUTCH RELEASE HOSE	REMOTE LUBE FTGS:CLUTCH REL. BRG & BOTH CROSS-SHAFTS;MTD UNDER LH DOOR	0 0
	195AA7	DRIVELINE - MAIN	MERITOR RPL25HD W/PERMALUBE U-JOINTS (PROPS-L)	20 20
	204AA4	DRIVELINE - INTERAXLE	MERITOR RPL20 W/PERMALUBE	0 0
	76AA1X	DRIVESHAFT MAIN U-JOINT	UNIVERSAL JOINT HALF-ROUND TYPE (where applicable)	0 0
S	8WAAAX	DRIVESHAFT INTERAXLE U-JOINT	HALF-ROUND UNIVERSAL JOINT	0 0
S	4LDA1X	TRANSMISSION OUTPUT TORQUE	TRANSMISSION OUTPUT TORQUE BASIC	0 0
	7RXB1X	LUBRICANTS, TRANSMISSION	SYNTHETIC OIL IN TRANSMISSION	0 0
	139AA2	TRANSMISSION OIL COOLER	TRANS OIL COOLER (INTEGRAL OIL PUMP)	45 3

			WEIGHT (LB)	
FRONT AXLE EQUIPMENT		DESCRIPTION	FRONT	REAR
	240AA3	FRONT AXLE	20000# (9100 KG) MACK FXL20 STRAIGHT SPINDLE/UNITIZED BEARINGS	428 0
	244AC3	SPRINGS - FRONT	MACK MULTILEAF 20000# (9100 KG) GROUND LOAD RATING, EQUAL BIAS	155 0
	241081	BRAKES - FRONT	MERITOR "S" CAM TYPE 16.5" x 6" Q+	29 0
	U3XC9X	BRAKE DRUMS - FRONT	BRAKE, FRONT, DRUM LIGHT WEIGHT TRTURN	0 0
S	UDXA1X	DUST SHIELDS - FRONT	DUST SHIELDS FOR FRONT AXLE	5 0
	U0AB1X	SLACK ADJUSTERS - FRONT	MERITOR - AUTOMATIC	3 0
	V7AB1X	BRAKE CHAMBERS - FRONT	FRONT BRAKE CHAMBER MANUFACTURER, HALDEX	0 0
	0KXA1X	HUBS - FRONT	FERROUS	157 0
S	61500A	FRONT AXLE LUBRICANT	FRONT AXLE LUBE, FAG NLGI2 GREASE	0 0
S	1KAA1X	SHOCK ABSORBERS - FRONT	DOUBLE ACTING TYPE	0 0
	245AB0	STEERING	SHEPPARD SD110 + HD94	206 0

			WEIGHT (LB)	
REAR AXLE EQUIPMENT		DESCRIPTION	FRONT	REAR
	268AA9	REAR AXLE	46000# (20900kg) MACK S462R CAST DUCTILE IRON HOUSING	0 1,614
	617002	DRIVE AXLE LUBRICANT	DRIVE AXLE LUBE, SHELL 80W90 MINERAL OIL	0 0
S	01800R	CARRIER - REAR AXLE	150/151 SERIES (Tandem Mack Rear Axles up to 150,000lb GCW)	0 0
	254013	TRACTION DIFFERENTIAL	INTERWHEEL DIFFERENTIAL LOCK, ALL REAR AXLES	0 18
S	3LAC1X	POWER DIVIDER LOCKOUT	INTERAXLE POWER DIVIDER LOCKOUT, W/BUZZER & LIGHT	0 40
	TAXAWX	REAR AXLE RATIO	4.19 RATIO	0 0
	1860K6	REAR SUSPENSION	SS46 MACK CAMELBACK MULTILEAF 46,000 lb, HEAVY DUTY	0 1,991
	402AA3	SPRINGS - ANTI-SWAY	SPRINGS, ANTI-SWAY	0 104
	XZXA1X	TRUNNION BUSHING	BRONZE	0 36
S	GWXABX	BOGIE SPREAD, REAR	50" AXLE SPACING (BOGIE WHEELBASE)	0 3
	2AAABX	SHOCK INSULATORS	URETHANE SHOCK INSULATORS, HEAVY DUTY, HIGHLY RECOMMENDED W/SS582 & SS652 REAR SUSP	0 5
S	XYXB1X	TRANSVERSE TORQUE RODS	TRANSVERSE TORQUE ROD (REAR AXLE ONLY)	0 0
S	237037	AUX. SPRING BRAKE QTY	AUX SPRING BRAKE QTY, 4 CHAMBERS	0 20
S	253AA4	BRAKES - REAR	MERITOR "S" CAM 16.5"x7" Q+ (Total for QTY = 2)	0 -35
S	U4XC9X	BRAKE DRUMS - REAR	BRAKE, DRIVE REAR, DRUM LIGHT WEIGHT TRTURN	0 0

# TECHNICAL SPECIFICATION (cont.)



			WEIGHT (LB)		
REAR AXLE EQUIPMENT		DESCRIPTION	FRONT	REAR	
	U1AB1X	SLACK ADJUSTERS - REAR	MERITOR - AUTOMATIC (Total for QTY = 2)	0	0
	UEXA1X	DUST SHIELDS - REAR BRAKE	DUST SHIELDS FOR REAR AXLE	0	12
	V1AB1X	REAR BRAKE CHAMBER SIZE	REAR SPRING BRAKE CHAMBERS 30/30 TYPE	0	0
	N5FAJX	BRAKE ORI REAR-MOST DRIVE AXLE	DRUM BRAKE CHAMBER ORIENTATION: High Mount - Rear of Axle - Chamber Down	0	0
	300AL0	PARKING BRAKE CHAMBER	HALDEX "LIFE SEAL PLUS" (3" STROKE) BRAKE CHAMBERS (Total for QTY = 2)	0	0
S	0LXI5X	HUBS - REAR	IRON PRESET REAR HUB W/INTEGRATED SPINDLE NUT	0	318
	698078	ANTILOCK BRAKE SYSTEM	BENDIX WITH TRACTION CONTROL 4S4M	0	0
S	URXD1X	AIR SYSTEM VALVE VENDOR	BENDIX SWITCHES AND VALVES WHERE POSSIBLE	0	0
S	3ZAA1X	SPRING BRAKE INVERSION VALVE	TRACTOR SPRING BRAKE INVERSION VALVE	5	0

			WEIGHT (LB)		
FRAME EQUIPMENT/FUEL TANKS		DESCRIPTION	FRONT	REAR	
	271226	WHEELBASE	226"	183	183
	374063	AF (OVERHANG)	63"	-19	258
	MCE0FE	FRAME RAILS & LINERS	11.1 x 105 x 300mm - (0.437" x 4.13" x 11.81"); RBM 3,160,000 LB-IN	0	0
S	5CAAXX	BOLT ON FRONT FRAME EXTENSION	6" BOLT ON FRAME EXTENSION	155	-2
S	A0XH1X	FRONT FRAME LENGTH	FRONT FRAME LENGTH 725MM	45	-2
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
	4DXN6X	FRONT BUMPER	EXTENDED-SWEPT BACK-STEEL BRIGHT FINISH	0	0
	5FXA2X	RADIATOR GUARD	PLATE TYPE BRIGHT FINISH	45	-11
S	4ZAAAX	TRUNNION BRACKET	BASIC SOLUTION TRUNNION BRACKET, STD HEIGHT	0	0
S	4EXG1X	TOWING DEVICE, FRONT	HOOKS	0	0
S	2RAA1X	FUEL LEVEL SENDER UNIT, LIQUID	BASIC FUEL LEVEL SENDER MOUNTED ON L.H TANK	0	0
	288AF7	FUEL TANK - LH	111 GALLON (420 L) 22" ALUMINUM, SLEEVED D-SHAPED	223	100
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 TANK MATERIAL & FINISH	STEEL AIR TANK PAINTED CHASSIS COLOR	0	0
	VSXB1X	INCREASE AIR CAPACITY	AUXILIARY AIR TANK CAPACITY FOR (1) EXTRA LIFT AXLE	20	16
S	1JAAAX	PARKING BRAKE VALVE	SINGLE VALVE SYSTEM	0	0

# TECHNICAL SPECIFICATION (cont.)



				WEIGHT (LB)	
ELECTRICAL			DESCRIPTION	FRONT	REAR
S	3120A2	ROOF & SIDE MARKER LIGHTS	(5) TRUCKLITE CHROME BULLET ROOF MARKER & STANDARD MARKER / DIRECTIONAL SIGNAL	0	0
S	LJXCA	HEADLAMP BULB TYPE	HEADLAMP BULB TYPE, LED, HEATED	0	0
S	LSXJ7X	DAYTIME RUNNING LIGHTS	W/OVERRIDE SWITCH, PARK BRAKE & ENGINE RUNNING ACTIVATED	0	0
S	X2AA1X	DRL OVERRIDE SPEED THRESHOLD	DRL OVERRIDE SPEED THRESHOLD 8 KMPH (5 MPH)	0	0
S	NEXC1X	TAIL LAMPS	INCANDESCENT TAIL LAMPS	0	7
				WEIGHT (LB)	
TRAILER CONNECTIONS			DESCRIPTION	FRONT	REAR
	WGXA1X	HAND CONTROL VALVE	HAND CONTROL VALVE FOR TRAILER BRAKES W/ AIR CONNECTIONS OR SERVICE BRAKES W/O AIR CONNECTIONS	0	0
S	3SAZ1X	TRAILER CONNECTORS HOLDER	OMIT TRAILER CONNECTORS HOLDER	3	0
				WEIGHT (LB)	
PTO			DESCRIPTION	FRONT	REAR
	TYXE1X	PTO - CONTROL	TRANSMISSION PTO SWITCH AND LIGHT WITH WIRING AND PIPING FOR LOCAL INSTALLATION	3	0
S	B83083	BODY BUILDER INTERFACE	BODY LINK III W/CAB PASS-THRU	5	5
				WEIGHT (LB)	
SPECIALTY EQUIPMENT			DESCRIPTION	FRONT	REAR
S	MCQ01Q	LANE SUPPORT SYSTEM (LSS)	WITHOUT LANE SUPPORT SYSTEM	0	0
S	2PEZ1X	DATA CAPTURE	WITHOUT DATA CAPTURE	0	0
S	1PAZ1X	SURVEILLANCE CAMERA OPTIONS (CA)	WITHOUT CAMERA	0	0
				WEIGHT (LB)	
CAB INTERIOR (A THRU G)			DESCRIPTION	FRONT	REAR
S	198048	SPEEDOMETER & GAUGES - UNIT(s) OF MEASURE	U.S. UNITS (PREDOMINANT)	0	0
	CCXE1X	GAUGE - PACKAGE, SECONDARY	2ND GA PKG W/ENG OIL TEMP, TRANS OIL TEMP, PYRO, AIR RESTRICT	0	0
	E1AAAX	GAUGE OIL TEMP-REAR AXLE	REAR AXLE OIL TEMP GAUGE IN DID (DRIVER INFORMATION DISPLAY)	0	0
S	4AXC1X	CLIMATE UNIT	ELECTRONIC CONTROLLED CLIMATE CONTROL AIR CONDITION	0	0
S	EEXA1X	CUPHOLDER	CUPHOLDER	0	0
S	I0XAHX	DOME LAMP, INTERIOR	(4) DOME LAMPS - DOOR AND SWITCH ACTIVATED	0	0
S	3XAA1X	DASH INDICATOR - LAMP BODY OUT OF POS	DASH MTD, INDICATOR BODY/HOIST UP "BODYBUILDER LAMP"	0	0
	7860E6	FIRE EXTINGUISHER	5LB (ABC RATED) MOUNTED BETWEEN DRIVER SEAT BASE AND DOOR VALVE AIMED REARWARD	9	0
	184AA3	FLOOR COVERING	POLYURETHANE FLOOR MAT W/ REMOVABLE INSERTS	16	0
				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 KEYED AT RANDOM	0	0
S	13AA1X	KEYLESS ENTRY	W/O ELECTRONIC KEYLESS ENTRY	0	0

PRICELIST DATE

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QUOTATION

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DATE

11/17/2025

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# TECHNICAL SPECIFICATION (cont.)



				WEIGHT (LB)	
CAB INTERIOR (H THRU R)			DESCRIPTION	FRONT	REAR
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
	784034	REFLECTOR KIT	W/O SLEEPER BOX FURNISH KIT PARALLEL TO INSIDE SURFACE OF RIDER'S SEAT BASE	12	3

				WEIGHT (LB)	
CAB INTERIOR (S THRU Z)			DESCRIPTION	FRONT	REAR
	004034	INTERIOR TRIM LEVELS	PREFERRED TRIM PACKAGE, STEEL GRAY (Package 12A)	0	0
	196ABQ	SEAT - DRIVER'S	MACK-AIR, HIGH BACK, 4 CHAMBER AIR LUMBAR, BOLSTER, EXTENSION	67	16
	MAP06P	SEAT COVERING - DRIVER'S	DRIVER'S SEAT - BLENDED BLACK & GREY VINYL / CLOTH MIX	0	0
S	197AA1	SEAT - PASSENGER'S	MACK-FIXED, HIGH BACK	40	9
	MAQ07Q	SEAT COVERING - PASSENGER'S	PASSENGER'S SEAT - BLENDED BLACK & GREY VINYL / CLOTH MIX	0	0
	0HAA1X	SEAT - DUST COVER(S)	SEAT, DUST COVER FOR DRIVER'S SEAT	3	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
	161021	STEERING WHEEL	2 SPOKE LEATHER 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
	40000E	GRILLE	BRIGHT FINISH BARS W/BRIGHT FINISH SURROUND GRILL MOUNTED	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
	154AB3	HORN - AIR	(2) ROUND SINGLE TRUMPET (ONE EACH SIDE CAB ROOF)	9	0
S	LXXD1X	HORN - ELECTRICAL	DUAL TONE	5	0
	1520C2	MIRRORS - EXTERIOR	FLAT MIRROR - POLISHED ALUMINUM FINSH, HEATED, W/O LAMPS	0	0
	153AA3	MIRRORS - CONVEX TYPE CAB DOORS	BRIGHT FINISH, LH & RH, 8" DIAMETER HEATED CONVEX	3	0

# TECHNICAL SPECIFICATION (cont.)



				WEIGHT (LB)	
CAB EXTERIOR		DESCRIPTION		FRONT	REAR
157037	SUN VISOR - EXTERIOR	SUN VISOR, EXTERIOR, STAINLESS STEEL (UNPAINTED)		9	0
AERODYNAMIC DEVICES				WEIGHT (LB)	
<b>S</b>	MCM998	FRONT CHASSIS AERODYNAMIC PACKAGE	WITHOUT FRONT AERODYNAMIC FAIRINGS	0	0
WHEELS & TIRES				WEIGHT (LB)	
9004X0	TIRES BRAND/TYPE - FRONT	425/65R22.5 L BRIDGESTONE M870 (22800 lbs) (Total for QTY = 2)		384	0
5314D1	WHEELS - FRONT	22.5x12.25 ACCURIDE ACCU-SHIELD 29374x EXTRA POLISHED ALUMINUM, 5.88" OFFSET, 10 HAND HOLE (Total for QTY = 2)		133	0
901091	TIRES BRAND/TYPE - REAR	11R24.5 G BRIDGESTONE M760 ECOPIA (24020 lbs) (DRIVE ONLY) (Total for QTY = 8)		0	1,112
346306	WHEELS - REAR	24.5x8.25 ACCURIDE ACCU-LITE 42362x POLISHED ALUMINUM, 6.59" OFFSET, 10 HAND HOLE (Total for QTY = 8)		0	441
<b>S</b>	15XABX	VALVE STEMS & CAPS	STANDARD VALVE STEMS AND CAPS	0	0
<b>S</b>	MCH03H	FRONT HUB/WHEEL TRIM	WITHOUT FRONT HUB/WHEEL TRIM	0	0
<b>S</b>	MCI03I	REAR HUB/WHEEL TRIM	WITHOUT REAR HUB/WHEEL TRIM (Total for QTY = 2)	0	0
COMMUNICATION SYSTEMS				WEIGHT (LB)	
3YAB1X	CO-PILOT - DISPLAY FEATURES ACCESS LEVEL	CO-PILOT DISPLAY, FULL DRIVER ACCESS		0	0
3RAA1X	FLEET TRIP MANAGEMENT	FLEET TRIP MANAGEMENT DRIVER CONTROL		0	0
<b>S</b>	M30060	TELEMATIC GATEWAY	TELEMATICS GATEWAY, 4G/LTE AND WLAN SYSTEM WITH DIAGNOSTIC SERVICES	0	0
ENGINE ELECTRONICS				WEIGHT (LB)	
<b>S</b>	WOXA1X	SHUTDOWN-ENG.OIL PRESSURE	OIL PRESSURE, ENGINE SHUTDOWN	0	0
<b>S</b>	WMXA1X	SHUTDOWN-ENG.COOLANT TEMP	COOLANT TEMP, ENGINE SHUTDOWN	0	0
<b>S</b>	K5XA2X	ENG /OIL TEMP SHUTDOWN	ENGINE PROTECTION (SHUTDOWN)	0	0
	K7XH3X	LOW IDLE ENGINE RPM	IDLE CONTROL, 650 RPM	0	0
<b>S</b>	X0AB0X	IDLE RPM UP W/LOW VOLTAGE	INCREASE 10 MINUTE MAXIMUM TIME	0	0
<b>S</b>	M3CA1X	IDLE S/D ABS TAMPER CHECK	IDLE SHUTDOWN ABS TAMPER CHECK, ENABLED	0	0
<b>S</b>	B1ACAX	IDLE S/D WARNING TIME	30 SEC IDLE S/D WARNING TIME	0	0
<b>S</b>	A8AALX	IDLE S/D IF WARM-UP TEMP	38C DEG (100F), WARM UP TEMP DELAY	0	0
<b>S</b>	A4AAEX	IDLE S/D WARM-UP TIMER	5 MIN. WARM UP TIME DELAY	0	0
<b>S</b>	A6AABX	IDLE S/D IF PTO ACTIVE	ENGINE IDLE SHUTDOWN TIME OVERRIDDEN IF PTO ACTIVE	0	0
<b>S</b>	B0AAAX	IDLE SHUTDOWN IF POWER > LIMIT	ENG IDLE SHUTDOWN TIME OVERRIDDEN IF TORQUE > THAN LIMIT	0	0
<b>S</b>	M4CB1X	IDLE S/D OVERRIDE %ENGINE LOAD	IDLE SHUTDOWN OVERRIDE UPTO 20% ENGINE LOAD THRESHOLD	0	0
<b>S</b>	D2AAFX	AMBIENT TEMP MIN TRESHOLD	AMBIENT TEMP MIN TRESHOLD, 16 DEG C, (60 DEG F)	0	0
<b>S</b>	D3AAEX	AMBIENT TEMP MAX TRESHOLD	AMBIENT TEMP MAX TRESHOLD, 27 DEG C, (80 DEG F)	0	0
<b>S</b>	B3ABAX	EHT, MAX ROAD SPEED	ELECTRONIC HAND THROTTLE, MAX ROAD SPEED, 16 KMH (10 MPH)	0	0
<b>S</b>	B6ACEX	EHT, MAX ENG SPEED	ELECTRONIC HAND THROTTLE, MAX ENGINE SPEED, 2100 RPM	0	0

# TECHNICAL SPECIFICATION (cont.)



				WEIGHT (LB)	
ENGINE ELECTRONICS			DESCRIPTION	FRONT	REAR
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

				WEIGHT (LB)	
TRANSMISSION ELECTRONICS			DESCRIPTION	FRONT	REAR
S	779001	TRANSMISSION ELECTRONICS PACKAGE	W/O ELEC TRANS PACKAGE OPTION (all non-Allison transmissions)	0	0
S	MAV01V	TRANSMISSION ELECTRONIC SHIFTING PROPERTIES	W/O ALLISON FUELSENSE 2.0 PROGRAMMING	0	0

				WEIGHT (LB)	
VEHICLE ELECTRONICS			DESCRIPTION	FRONT	REAR
S	JCXE6X	ROAD SPEED LIMIT (RSL)	105 KM/H ROAD SPEED LIMITER (65MPH)	0	0
	Y3CC5X	PEDAL SPEED LIMITER	105 KM/H PEDAL ROAD SPEED LIMITER (65MPH)	0	0
S	JDXA1X	CRUISE CONTROL	CRUISE CONTROL	0	0
S	JFXLLX	CRUISE CONTROL, MAX SPEED	MAX CRUISE, 105 KPH (65 MPH)	0	0
S	E3AACX	CRUISE CONTROL MIN SPEED	MIN CRUISE, 32 KPH (20 MPH)	0	0
S	E4AAAX	CRUISE RESUME WITH CLUTCH	CRUISE RESUME WITH CLUTCH	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 24KM/H (15MPH)	0	0
	Q6FAHX	DIFF LOCK SPEED LIMIT	DIFFERENTIAL LOCK ROAD SPEED LIMIT 24KM/H (15MPH)	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 (121KM/H)	0	0
S	G3AAPX	DATAMAX VEHICLE OVERSPEED-FUEL	VEHICLE OVERSPEED, FUELED, TIME LOG IF ABOVE 70MPH (113KM/H)	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

				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

# TECHNICAL SPECIFICATION (cont.)



				WEIGHT (LB)	
PTO ELECTRONICS			DESCRIPTION	FRONT	REAR
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	MPA998	ROOF FAIRING COLOR	WITHOUT ROOF FAIRING	0	0
S	95103K	CHASSIS RUNNING GEAR	MACK BLACK (60 GLOSS); 250-12370	0	0
	958028	BUMPER	W/O OPTIONAL BUMPER PAINT	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
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
	M54094	TRANSMISSION WARRANTY	36/350K MI: EATON TRANSMISSION STANDARD NORMAL AND HEAVY DUTY COVERAGE	0	0
S	M550G7	CARRIER & AXLE HOUSING WARRANTY	STANDARD MACK HEAVY DUTY COVERAGE 60 MONTHS / 500,000 (804,672 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

# TECHNICAL SPECIFICATION (cont.)



				WEIGHT (LB)	
CONNECTED SERVICES			DESCRIPTION	FRONT	REAR
<b>S</b>	S03011	MACK INTEGRATED UPTIME	MACK INTEGRATED UPTIME - 24 MONTHS	0	0
	S04011	MACK CONNECT LOCATION & REPORTING	MACK CONNECT LOCATION & REPORTING - 24 MONTHS	0	0
<b>S</b>	S05010	FLEET INTEGRATION	WITHOUT FLEET INTEGRATION	0	0
<b>S</b>	S06400	PARTNERED SERVICES	NO PARTNERED SERVICES PROVIDED	0	0
				FRONT / REAR AXLE WEIGHTS (LB)	10069 8830
				TOTAL WEIGHT (LB)	18899

# MACK®



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# **STANDARD EQUIPMENT**

**MACKSPEC**



**GR64F**



**BUILT  
FOR THE JOB**

# GR64F



## STANDARD POWERTRAIN SPECIFICATIONS

### ENGINE: MACK MP7-345C

Peak Horsepower - 345 HP at 1400-1700 RPM  
Horsepower - 295 HP at 2000 Gov. RPM  
Max. Torque - 1360 lb. ft. at 1000-1300 RPM  
V-MAC IV - Total Vehicle Electronics  
Air Compressor - Meritor/Wabco 318 (18.7 CFM)  
Air Cleaner - 11" Single Element  
Alternator - Delco 12V 130A (24SI)  
Batteries - (3) Mack 12V 650/1950 CCA Threaded Stud Type  
Coolant Protection: -34 degrees F (-37 C)  
Mack Coolant Conditioner  
ClearTech One DPF/SCR Emission System  
Mack PowerLeash Engine Brake  
Silicone Engine Hoses and Tubing  
Poly-V Fan Belt with Automatic Tensioner  
Fan Drive: Electronically Modulated Multi-Speed Viscous Flywheel Housing - Aluminum (Lightweight)  
Mack Fuel/Water Separator with Manual Drain Valve  
Radiator - Aluminum Core  
Starter - Delco 12V 39MT-MTX  
Electronic Starter Interlock

### TRANSMISSION: MACK mDRIVE TMD13AFD-HD

13-Speed, Ratios: 17.54 Low - 0.78 High  
Overdrive  
Clutch - Single Plate 17" Organic Material  
Transmission Bell Housing - Aluminum  
Transmission Oil Cooler - mDRIVE Gear Box Mounted, Water to Oil Cooler  
Grade Gripper  
Mackcellerator  
Main Driveline - Meritor RPL25 Series with Permalube U-Joints

### REAR AXLE: MACK S38R

38,000 Pound Capacity  
Suspension - Multileaf (Mack Camelback)  
38,000 Pound Capacity  
Tires - 11R22.5  
Carrier - Malleable Housing  
Wheels - Aluminum Disc, 22.5" x 8.25", 10-Hole, Hub Piloted  
Hub Material - Iron Preset w/ Integrated Spindle Nut  
Brakes - Bendix 16.5" x 7"  
Brake Drums - Cast Outboard Mounted  
Premium Rear Wheel Seals  
Slack Adjusters - Automatic  
Spring Brake Chambers - 30/30 Double Diaphragm Type, Mechanical Spring Release  
Shock Absorbers - (4) Mounted on Forward and Rear Axles Each Side

### FRONT AXLE: MACK FXL12

12,000 Pound Capacity  
Suspension - Mack Taperleaf Springs, 12,000 Pound Rating, (2 Springs)  
Tires - 295/75R22.5 (Low Profile)  
Wheels - Aluminum Disc, 22.5" x 8.25", 10-Hole, Hub Piloted  
Hub Material - Iron  
Integrated Front Wheel Seals  
Brakes - Bendix 16.5" x 5"  
Brake Drums - Cast Outboard Mounted  
Shock Absorbers - Double Acting Type  
Slack Adjusters - Automatic  
Steering - Sheppard SD110 Power Steering

## STANDARD CAB INTERIOR/EXTERIOR SPECIFICATIONS

### CAB: CONVENTIONAL

Air Conditioning with Integral Heater  
Cab Mounting - 4 Point, Air Bags and Shocks at Rear  
12 Volt and USB Outlets  
Coat Hook  
Co-Pilot Driver Display with GuardDog Maintenance, Stalk Controls  
Cup Holders  
Dome Lamps - 2RH / 2LH  
Galvanized Steel Visibility Doors  
Door Trim - Padded Armrests and Map Pockets  
Floor Mats - Polyurethane  
Gauges - Air Pressure (Primary and Secondary)  
Engine Coolant Temperature, Engine Oil Pressure, Speedometer, Tachometer, Fuel Level, DEF Level  
Optional Gauges - Exhaust Pyrometer, Boost Pressure, Transmission Oil Temperature, Engine Oil Temperature, Air Application  
Grab Handles, Exterior - RH & LH Behind Door  
Hood - DCPD Material, Insulated  
Horn - Electric, Single Tone  
Identification and Clearance Lights (5)  
Instrument Panel - Gunmetal Trim  
Interior Trim: Standard - Steel Gray

Keys - (2) Keyed at Random  
Key Type Starter Switch  
Low Pressure Indicator Light and Buzzer  
Exterior Mirrors - RH & LH Aerodynamic  
Overhead Console with Storage Compartments  
Parking Brake "On" Indicator Light  
AM/FM Premium Stereo, CD Player, MP3 Weather Band, Bluetooth  
CB Connections - 5 way Binding Posts  
Driver Seat - High Back, 1 Chamber Lumbar, Air Suspension  
Rider Seat - High Back, Non-Suspension  
Seat Belts - Lap and Shoulder  
Steering Column - Tilt and Telescopic  
Steering Wheel - Urethane Foam Grip, Gunmetal Spokes  
Rear Storage Pouch  
Right Hand Door Peep Window  
Sunvisors - Interior, RH & LH  
Window Controls - Power  
Windshield - Tinted, 2 Piece  
Cab Glass - Tinted  
Windshield Wipers - 2 Speed Electric Motor with Intermittent Feature  
Paint Color - Mack White (Cab, Hood, and Fenders), Mack Black (Chassis and Running Gear)

## ADDITIONAL STANDARD SPECIFICATIONS

### AIR/BRAKE

Dual Air Brake System  
Air Dryer - 1200UP w/ Coalescing Filter  
Air Reservoirs - Steel  
Manual Drain Valves

### ELECTRICAL

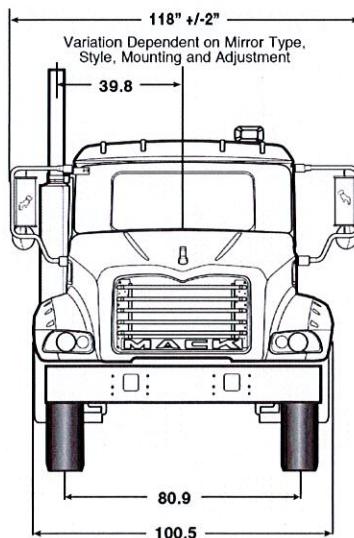
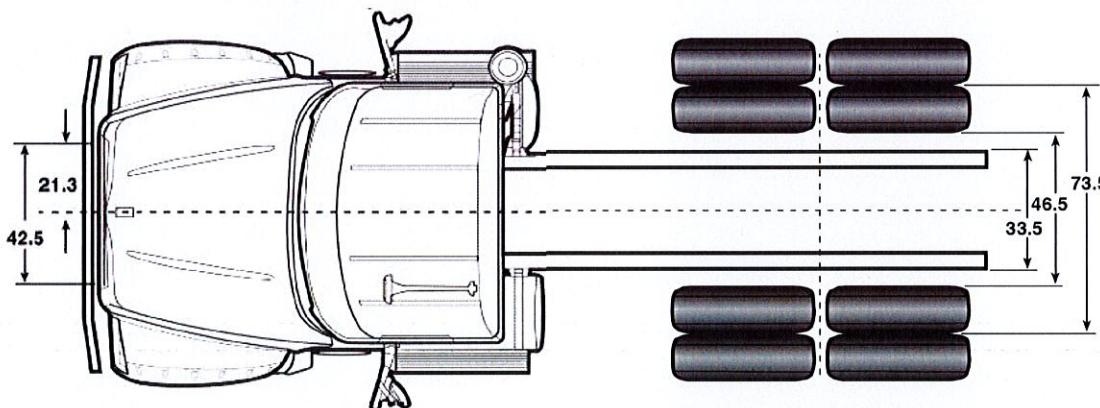
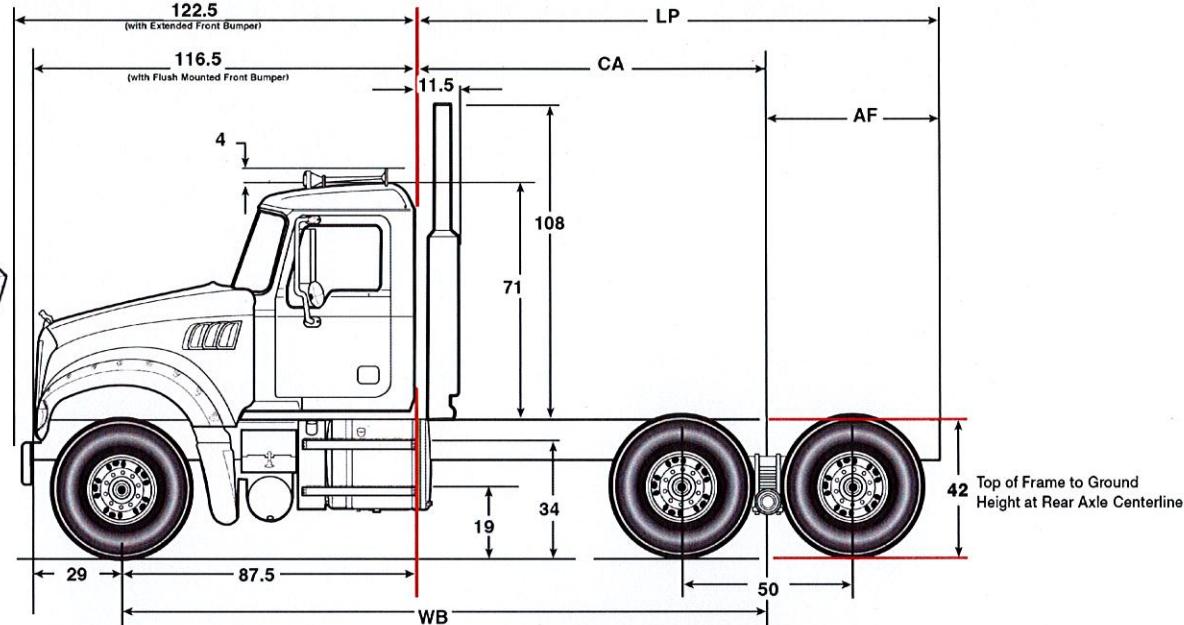
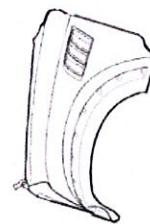
12 Volt Electrical System  
Battery Box - Steel with Molded Plastic Cover  
Courtesy Light Switch - Headlamp and Clearance  
GuardDog connect Services  
Daytime Running Lights  
Electric Circuit Protection Package  
Waterproof Electrical Connections  
Headlights - Flush Mounted Halogen Lights  
Rear Lighting - (2) Combination Stop, Tail, Directional, and Back-Up Lights  
Solid State Turn Signal Flasher

# GR64F



## STANDARD CHASSIS DIMENSIONS

Hood Tilt  
73 degrees +/- 7  
Snow Plow limited  
to 35 degrees +/- 7



### FRAME EQUIPMENT/FUEL TANKS

- Frame Rail w/out Liner – 11.81" x 3.54" x .32" Steel
- Section Modulus – 17.7 in<sup>3</sup>
- RBM (per rail) – 2,120,000 lb. in.
- Front Bumper – Extended Swept Back Steel Channel
- Bumper to Back of Cab (BBC) – 122.5"
- Crossmembers – BOC & Intermediate(s) Steel HD Back-to-Back Channel
- Front Frame Extension
- Front Tow Hooks
- Fuel Tanks – 50 Gallon LH Steel 22" dia.
- Diesel Exhaust Fluid (DEF) Tank - 11.8 Gallon, 22" Diameter, Frame Mounted on Left Side with Painted Cover

### STANDARD WHEELBASE/LOAD PLATFORM

- For standard wheelbase and load platform information refer to your current version of MSS

## AVAILABLE DRIVELINE COMPONENTS

### MP7 ENGINES

MODEL	HORSEPOWER / TORQUE
MP7-355A	355 HP [265kW] @ 1500-1800 RPM 1360 lb. ft. [1843 nM] @ 1000-1300 RPM
MP7-345C	345 HP [267kW] @ 1400-1700 RPM 1360 lb. ft. [1843 nM] @ 1000-1300 RPM
MP7-365C	365 HP [272kW] @ 1400-1700 RPM 1460 lb. ft. [1980nM] @ 1000-1300 RPM
MP7-395C	395 HP [295kW] @ 1450-1700 RPM 1560 lb. ft. [2115 nM] @ 1050-1300
MP7-325M	325 HP [242kW] @ 1400-1900 RPM 1230 lb. ft. [1662 nM] @ 1000-1350 RPM
MP7-375M	375 HP [280kW] @ 1450-1900 RPM 1360 lb. ft. [1843 nM] @ 1000-1400 RPM
MP7-425M	425 HP [317kW] @ 1500-1800 RPM 1560 lb. ft. [2115nM] @ 1050-1200 RPM

### ALLISON TRANSMISSIONS

MODEL	SPEEDS	RATIOS	LOW/HIGH
3000-RDS	5	3.49 / 0.75	
3000-RDS [R]	5	3.49 / 0.75	
3000-RDS	6	3.49 / 0.65	
3000-RDS [R]	6	3.49 / 0.65	
4000-RDS	6	3.51 / 0.64	
4000-RDS [R]	6	3.51 / 0.64	
4500 RDS	5	4.70 / .076	
4500 RDS [R]	5	4.70 / .076	
4500 RDS	6	4.70 / .067	
4500 RDS [R]	6	4.70 / .067	

### MP8 ENGINES

MODEL	HORSEPOWER / TORQUE
MP8-415C	415 HP [309kW] @ 1400-1700 RPM 1660 lb. ft. [2251 Nm] @ 1050-1300 RPM
MP8-445C	445 HP [332kW] @ 1300-1800 RPM 1815 lb. ft. [2460 nM] @ 1150-1300 RPM
MP8-505C	505 HP [377 kW] @ 1500-1700 RPM 1860 lb. ft. [2508nM] @ 1100-1400 RPM
MP8-425M	425 HP [317kW] @ 1500-1800 RPM 1560 lb. ft. [2115 nM] @ 1050-1400 RPM
MP8-455M	455 HP [339kW] @ 1400-1700 RPM 1760 lb. ft. [2359 nM] @ 1050-1300 RPM
MP8-505M	505 HP [377kW] @ 1500-1700 RPM 1860 lb. ft. [2508nM] @ 1150-1400 RPM

### FRONT AXLES

MODEL	MAKE	CAPACITY
FXL12	MACK	12,000 lb. [5443 kg.]
FXL 14.6	MACK	14,600 lb. [6600 kg.]
FXL 16.5	MACK	16,500 lb. [7484 kg.]
FXL18	MACK	18,000 lb. [8165 kg.]
FXL20	MACK	20,000 lb. [9072 kg.]
FXL23	MACK	23,000 lb. [14,433 kg.]

### REAR AXLES - TANDEM

MODEL	MAKE	CAPACITY
S38R	MACK	38,000 lb. [17,237 kg.]
S40	MACK	40,000 lb. [18,100 kg.]
S402R	MACK	
MT-40-14X4D	MERITOR	
S440	MACK	44,000 lb. [19,958 kg.]
S460	MACK	46,0000 lb. [20,886 kg.]
S462	MACK	
S462R	MACK	
RT46-160	MERITOR	
RT46-164EH	MERITOR	
S522	MACK	52,000 lb. [23,600 kg.]
S522R	MACK	
S582	MACK	58,000 lb. [26,309 kg.]
S652	MACK	65,000 lb. [29,484 kg.]

### MACK *m* DRIVE TRANSMISSIONS

MODEL	SPEEDS	F. RATIOS	R. RATIOS
TmD12AFD-HD	12	14.94 / 1.00	17.49 / 13.73
TmD12AFO-HD	12	11.73 / 0.785	13.73 / 10.78
TmD13AFD-HD	13	19.34 / 1.00	37.49 / 8.62
TmD13AFO-HD	13	17.54 / 0.785	20.53 / 10.78
TmD14AFO-HD	14	32.04 / 0.785	37.49 / 8.62

August 1, 2017

Mack Sales Engineering

# **POWERTRAIN SPECIFICATION**

# Product Information



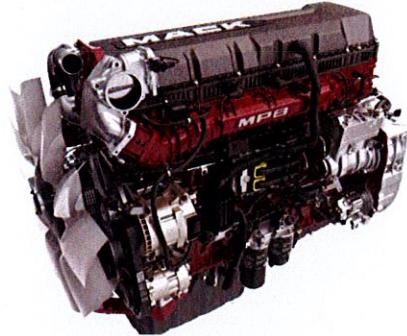
## 1001840 MP8-455C, MAXICRUISE DIESEL ENGINE – US '21

Updated: August 5, 2021

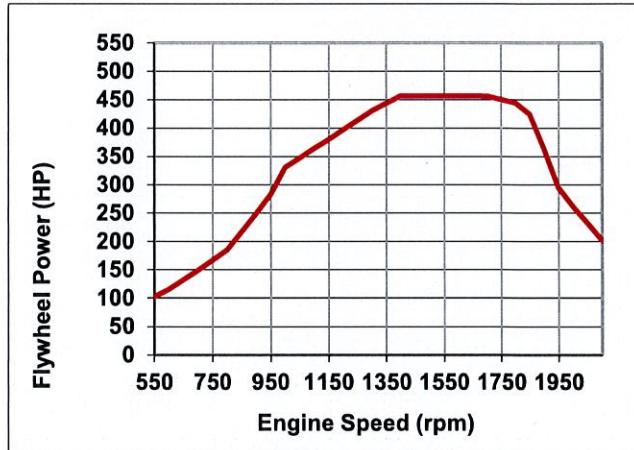
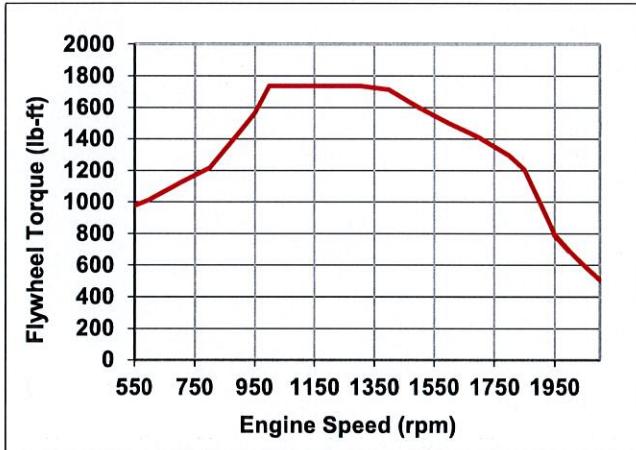
1750 Torque for use  
with Allison Transmission

### Performance summary

Peak HP [kW]	455 [339] @ 1400-1700 RPM
HP [kW] at governed RPM	206 [154] @ 2100 RPM
Peak torque lb. ft. [Nm],	1750 [2373] @ 1000-1300 RPM
Clutch engagement lb. ft. [Nm]	860 [1165] @ 800 RPM
Operating range	550 – 2100 RPM



### Torque and Power Curves:



### Gearing Recommendations / Recommended Cruise RPM

Proper gearing is essential to achieve optimum vehicle performance and economy. Vehicle specifications including engine, transmission, axle ratio, and tires should be selected to meet minimum startability and gradeability recommendations while balancing performance and economy with customer requirements. Dealers should refer to the **PAWS Performance Predictor** to gauge compliance to vehicle-specific minimum recommendations.

Recommended Cruise RPM: 1100 – 1300

# Product Information



## 1001840 MP8-455C, MAXICRUISE DIESEL ENGINE – US '21

Updated: August 5, 2021

### Features and benefits

#### 18:1 CR wave piston, 220 bar peak cylinder pressure

Our patented Wave piston delivers improved combustion and lower friction, resulting in cleaner emissions and better fuel economy. Six steel waves forged into the piston crown optimize fuel injection for increased combustion efficiency.

#### Electronic common rail fuel injection

The simplicity of Mack's electronic common fuel rail system eliminates external high-pressure lines as can be common with "one pump" common rail systems. This direct injection system delivers ultra-precise control over fuel injection pressure, timing and volume. The result is more power and efficiency, with less engine noise.

#### Intake throttle

MP Series engines are equipped with intake throttles that improve heat management, helping to increase the exhaust gas temperature at idle and low load, increasing the efficiency of the exhaust aftertreatment.

#### Dual-butterfly EGR valve

The MP8 Dual-butterfly EGR Valve reduces fuel consumption through higher EGR flow rates compared to other systems that incorporate single-poppet style EGR valves.

#### CLEARTECH™ ONE aftertreatment

Mack's re-engineered exhaust aftertreatment system is designed for MP series engines and features a sophisticated new design that delivers near-zero emissions and low maintenance in a lighter, more compact unit

# Product Information



1001840 MP8-455C, MAXICRUISE DIESEL ENGINE – US '21

Updated: August 5, 2021

**Base engine specifications:** All engine specifications are listed for the base engine model and do not include specifications found in optional engine equipment.

<b>Number of cylinders &amp; firing order</b>	6, In-Line: 1 – 5 – 3 – 6 – 2 – 4
<b>Bore and stroke, inches [mm]</b>	5.16 X 6.22 [131 X 158]
<b>Displacement, cubic inches [L]</b>	780 [13]
<b>Compression ratio</b>	18:1
<b>Torque rise</b>	34.0%
<b>Idle speeds:</b>	
Low	Adjustable, 650 RPM
High	2100 RPM
<b>Engine brake retarding power</b>	475 HP [355 kW] @ 2250 RPM
<b>Weight, dry [approximate] lbs. [kg]</b>	2711 [1230]
<b>Fuel filter</b>	Spin-on, disposable
<b>Fuel system</b>	High pressure F2 common rail
<b>Fuel supply pump</b>	Eccentric-style pump (no lifters or tappets)
<b>Lubrication system:</b>	
Type	Full pressure, wet sump
Oil filters	2 Spin-on full flow, disposable
Oil cooler	Stainless steel plate
Total oil capacity, includes filters	37 quarts [35 liters]
Drain plug	Magnetic
<b>Turbocharger</b>	Variable geometry turbocharger with journal bearings

# Product Information



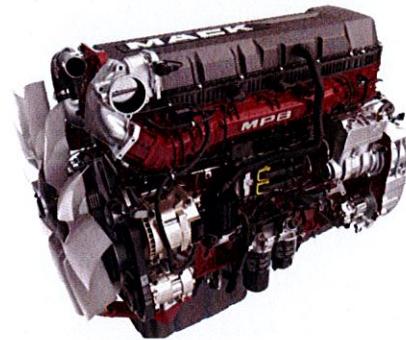
**1001839 MP8-455C (LT), MAXICRUISE DIESEL ENGINE – US '21  
LIMITED TORQUE VARIANT FOR EATON TRANSMISSIONS**

Updated: August 5, 2021

*1650 Torque for Use with Manual Transmission*

## Performance summary

Peak HP [kW]	455 [339] @ 1500-1700 RPM
HP [kW] at governed RPM	206 [154] @ 2100 RPM
Peak torque lb. ft. [Nm],	1650 [2237] @ 1000-1400 RPM
Clutch engagement lb. ft. [Nm]	860 [1165] @ 800 RPM
Operating range	550 – 2100 RPM



## Torque and Power Curves:



## Gearing Recommendations / Recommended Cruise RPM

Proper gearing is essential to achieve optimum vehicle performance and economy. Vehicle specifications including engine, transmission, axle ratio, and tires should be selected to meet minimum startability and gradeability recommendations while balancing performance and economy with customer requirements. Dealers should refer to the **PAWS Performance Predictor** to gauge compliance to vehicle-specific minimum recommendations.

**Recommended Cruise RPM: 1100 – 1300**

# Product Information



**1001839 MP8-455C (LT), MAXICRUISE DIESEL ENGINE – US '21  
LIMITED TORQUE VARIANT FOR EATON TRANSMISSIONS**

**Updated:** August 5, 2021

## Features and benefits

### **18:1 CR wave piston, 220 bar peak cylinder pressure**

Our patented Wave piston delivers improved combustion and lower friction, resulting in cleaner emissions and better fuel economy. Six steel waves forged into the piston crown optimize fuel injection for increased combustion efficiency.

### **Electronic common rail fuel injection**

The simplicity of Mack's electronic common fuel rail system eliminates external high-pressure lines as can be common with "one pump" common rail systems. This direct injection system delivers ultra-precise control over fuel injection pressure, timing and volume. The result is more power and efficiency, with less engine noise.

### **Intake throttle**

MP Series engines are equipped with intake throttles that improve heat management, helping to increase the exhaust gas temperature at idle and low load, increasing the efficiency of the exhaust aftertreatment.

### **Dual-butterfly EGR valve**

The MP8 Dual-butterfly EGR Valve reduces fuel consumption through higher EGR flow rates compared to other systems that incorporate single-poppet style EGR valves.

### **CLEARTECH™ ONE aftertreatment**

Mack's re-engineered exhaust aftertreatment system is designed for MP series engines and features a sophisticated new design that delivers near-zero emissions and low maintenance in a lighter, more compact unit

# Product Information



## 1001839 MP8-455C (LT), MAXICRUISE DIESEL ENGINE – US '21 LIMITED TORQUE VARIANT FOR EATON TRANSMISSIONS

Updated: August 5, 2021

**Base engine specifications:** All engine specifications are listed for the base engine model and do not include Specifications found in optional engine equipment.

<b>Number of cylinders &amp; firing order</b>	6, In-Line: 1 – 5 – 3 – 6 – 2 – 4
<b>Bore and stroke, inches [mm]</b>	5.16 X 6.22 [131 X 158]
<b>Displacement, cubic inches [L]</b>	780 [13]
<b>Compression ratio</b>	18:1
<b>Torque rise</b>	25.0%
<b>Idle speeds:</b>	
Low	Adjustable, 650 RPM
High	2100 RPM
<b>Engine brake retarding power</b>	475 HP [355 kW] @ 2250 RPM
<b>Weight, dry [approximate] lbs. [kg]</b>	2711 [1230]
<b>Fuel filter</b>	Spin-on, disposable
<b>Fuel system</b>	High pressure F2 common rail
<b>Fuel supply pump</b>	Eccentric-style pump (no lifters or tappets)
<b>Lubrication system:</b>	
Type	Full pressure, wet sump
Oil filters	2 Spin-on full flow, disposable
Oil cooler	Stainless steel plate
Total oil capacity, includes filters	37 quarts [35 liters]
Drain plug	Magnetic
<b>Turbocharger</b>	Variable geometry turbocharger with journal bearings

# Product Information



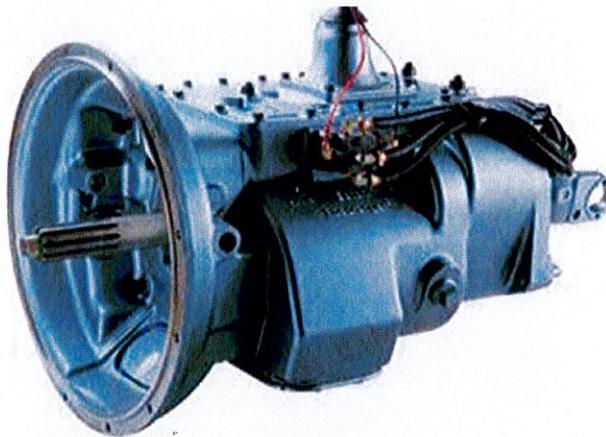
## 1362135 Transmission, Eaton RTO-16908LL

Related: Transmission (136), Driveline (195), Rear Axle (268)  
Updated: July 2, 2020

8 plus 2 versatility for on/ off-highway applications and demanding on-highway duty.

The 8LL transmissions provide drivers with the versatility they need for a mix of on- and off-highway applications.

These transmissions offer eight road-speed gears and two additional deep-reduction ratios in low and reverse.



- Eight road speed gears and two additional deep reduction ratios in low and reverse for on/off-highway versatility.
- Improved tolerance to driver abuse due to new mainshaft washer design.
- High capacity tapered roller bearings on both auxiliary countershafts for increased bearing life.
- Improved output seal system increases seal life and eliminates potential for seal damage during yoke service.
- Easy range shifting and long life due to proven heavy-duty synchronizer technology.
- Binocular-type range and deep reduction shift cylinder assembly for greater serviceability and fewer parts.
- Increased lubrication protection with optional integral oil pump.
- Standard SAE 6-bolt and 8-bolt PTO openings and optional thru-shaft PTO provision at rear.

### Applications at a Glance

Linehaul	Heavy Haul	Severe Duty							Constr.	P&D
		Logging	Mining	Oil Field	Refuse	Agriculture	Off-Hwy			
No	No	No	No	✓	✓	✓	✓	✓	✓	✓

# Product Information



## 1362135 Transmission, Eaton RTO-16908LL

Related: Transmission (136), Driveline (195), Rear Axle (268)  
 Updated: July 2, 2020

### Clutch Housing Type, Material and Weight

SAE No. 1			SAE No. 2		
Material	Aluminum [kg]	Iron [kg]	Material	Aluminum [kg]	Iron [kg]
Standard	23 lbs. [10]	76 lbs. [34]	Standard	21 lbs. [10]	68 lbs. [31]
Nodal	36 lbs. [16]	92 lbs. [42]	Nodal	N/A	88 lbs. [40]

### Quick Specs

Lbs.-Ft. Max TQ [Nm]	Integral Oil Pump	Thru- Shaft PTO	Integral Oil Cooler	External Oil-to- Water Cooler	External Oil Filter	Oil Capacity Pints [liters]	Length Inches [mm]	Weight (*) Lbs. [kg]	PTO Speed (% of engine)	Combined PTO Torque (Lbs.-ft.)
1650 [2237]	Yes	Optional	No	Optional	Optional	28 [13]	33.1 [841]	690 [313]	94%	500

(\*) Less clutch housing, lubricant and end yoke

### PTO Openings:

- Two SAE standard openings.
- Right side:** Regular duty, 6-bolt, short length.
- Bottom:** Heavy duty, 8-bolt.

### PTO Drive Gears:

- Right side:** A 45-tooth, 6/8 pitch gear.
- Left side:** A 47-tooth, 6/8 pitch gear.
- Both gears turn at 0.94 engine speed.

### Gear Ratios

Overall Ratio	Reverse Gear Ratios		
19.58	1	2	3
	15.22	9.95	2.89

LL	L	1	2	3	4	5	6	7	8
14.56	9.42	6.24	4.63	3.40	2.53	1.83	1.36	1.00	0.74
55%	51%	35%	36%	34%	38%	35%	36%	34%	Final

# Product Information

## 1362135      Transmission, Eaton RTO-16908LL

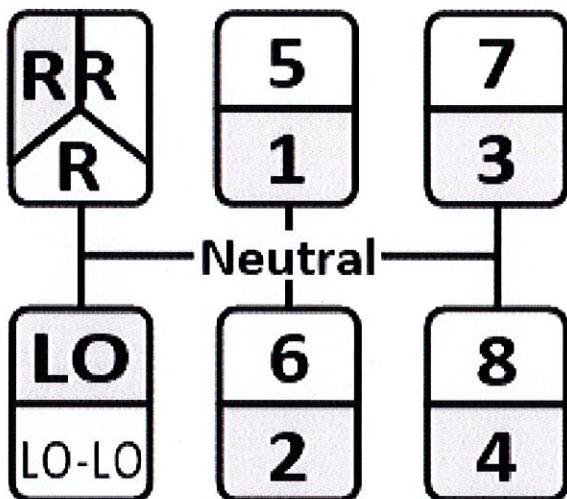
Related:

Transmission (136), Driveline (195), Rear Axle (268)

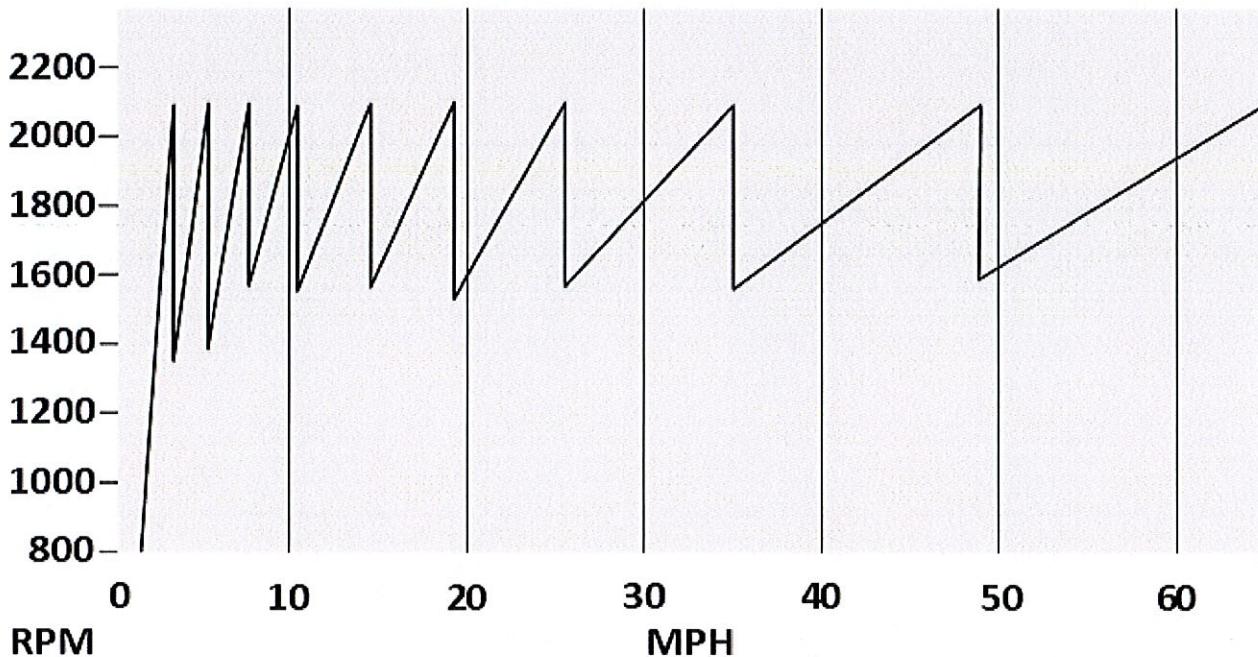
Updated:

July 2, 2020

### Shift Pattern



### Performance Chart (based on engine operating at 2100 RPM and top speed of 65 MPH)

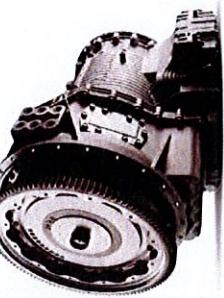


## Product Information

### 136- ALLISON TRANSMISSION RUGGED DUTY SERIES w/ GEN 6 ELECTRONICS

Updated: February 21, 2022

This product information bulletin applies to the following models:



Sales Code	Description
1364577	3000 RDS 6 SPD ALLISON GEN 6 W/PROGNOSTICS, WITH PTO PROVISION
1364578	3000 RDS R 6 SPD ALLISON GEN 6 W/PROG, W/OUTPUT RETARDER W/PTO
1364584	4000 RDS 6 SPD ALLISON GEN 6 W/PROGNOSTICS, WITH PTO PROVISION
1364585	4000 RDS R 6 SPD ALLISON GEN 6, W/PROG, W/OUTPUT RETARDER W/PTO
1364579	4500 RDS 5 SPD ALLISON GEN 6 W/PROGNOSTICS, WITH PTO PROVISION
1364581	4500 RDS 6 SPD ALLISON GEN 6 W/PROGNOSTICS, WITH PTO PROVISION
1364580	4500 RDS R 5 SPD ALLISON GEN 6 W/PROG, W/OUTPUT RETARDER W/PTO
1364582	4500 RDS R 6 SPD ALLISON GEN 6, W/PROG, W/OUTPUT RETARDER W/PTO
1364587	4700 RDS 7 SPEED ALLISON GEN 6 W/PROGNOSTICS (Customer Adaptation)

#### PTO Specifications

Series	Mounting Pad Positions Viewed from Rear	Drive Gear Rating with one PTO lb·ft (N·m)	Drive Gear Rating with two PTOS lb·ft (N·m)
3000 (4)	4 and 8 o'clock	485 (660)	685 (930)
4000 (4)	1 and 8 o'clock	685 (930)	1175 (1595)

(4) Minimum 600 rpm idle speed required when dual PTOS are used simultaneously

#### Ratios

Model	1st	2nd	3rd	4th	5th	6th	7th	Reverse	2nd Reverse
3000	3.49:1	1.86:1	1.41:1	1.00:1	0.75:1	0.65:1	—	-5.03:1	—
4000	3.51:1	1.91:1	1.43:1	1.00:1	0.74:1	0.64:1	—	-4.80:1	—
4500	4.70:1	2.21:1	1.53:1	1.00:1	0.76:1	0.67:1	—	-5.55:1	—
4700	7.63:1	3.51:1	1.91:1	1.43:1	1.00:1	0.74:1	0.64:1	-4.80:1	-17.12:1

Model	Length (1) inch (mm)	Depth (2) inch (mm)	Dry Weight lbs (kg) (3)
<b>3000</b>	28.30 (718.7)	535 (243)	
Basic model		575 (261)	
With PTO only	32.50 (825.4)	12.90 (327.7)	
With retarder only	28.29 (718.5)	615 (279)	
With PTO + retarder	32.49 (825.4)	655 (298)	
<b>4000 / 4500</b>			
Basic model	30.54 (775.8)	831 (377)	
With PTO only	33.41 (848.8)	893 (405)	
With retarder only	30.54 (775.8)	906 (411)	
With PTO + retarder	33.41 (848.8)	968 (439)	
<b>4700</b>			
Basic model	40.61 (1031.5)	1087 (493)	
With PTO only	43.49 (1104.5)	1149 (521)	
With retarder only	40.61 (1031.5)	1162 (527)	
With PTO + retarder	43.49 (1104.5)	1224 (555)	

Model	Torque Capacity lb·ft (N·m)	Power Capacity hp (kW)
3000 series	1300 (1763)	500 (373)
4000 series	1600 (2170)	600 (447)

(1) Length measured from flywheel housing to end of output shaft. (2) Depth measured below transmission centerline.  
(3) Weight does not include transmission cooler, piping, fluid, coolant and other installation components.

**Application Note:** Allison RDS Transmissions not approved for Oil Field Service on Pumps, Winches or Augers

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## Product Information

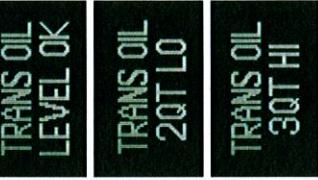
### 136- ALLISON TRANSMISSION RUGGED DUTY SERIES w/ GEN 6 ELECTRONICS

Updated: February 22, 2022

The 6th Gen Push Button Shift Selectors have been updated with hardware improvements to increase durability and in support of technologies such as cybersecurity and functional safety.



#### Allison shift controllers provide the driver with the following capabilities:



**In-cab Fluid Level Check:** Shift controller advises the driver of transmission fluid level without having to check a fluid level dipstick.

- CORRECT FLUID LEVEL – The fluid is within the correct fluid level zone when OK is shown
- LOW FLUID LEVEL – The display shows the number of quarts the transmission fluid is low.
- HIGH FLUID LEVEL – The display shows the number of quarts the transmission fluid is overfilled.

**Access to System Prognostics:** Shift controller advises the driver on the health and status of the following functions:

- **Fluid Life Monitor** – The status of the fluid life is displayed as a percentage until fluid is due for a change.
- **Filter Life Monitor** – The status of filter life is displayed as OIL FILTERS OK and alerts when filters are due for a change with REPLACE FILTERS.
- **Transmission Health Monitor** – The status of transmission health is displayed as OK or LO.
- **Access to System Diagnostics:** Shift controller allows driver access to display system diagnostic codes.



# SED

PRODUCT INFORMATION

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## Sales Engineering

Mack Trucks, Inc.  
Allentown, PA 18103  
United States

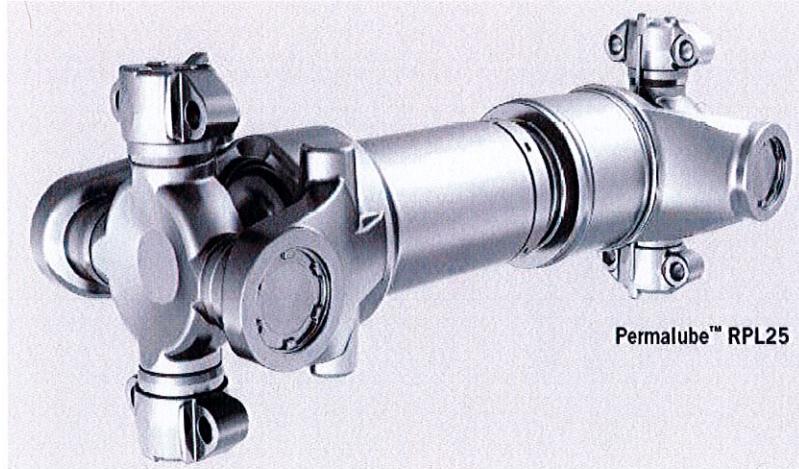
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Phone: 800 868 6225  
Fax: 610 351 8791

[MackTrucks.com](http://MackTrucks.com)

**PID Code/Condition: 195-1102**  
**Description: Meritor RPL25 Permalube Drivelines**  
**Models: ALL**  
**Date: September 11, 2015**

MERITOR PERMALUBE  
RPL SERIES DRIVELINES



Permalube™ RPL25

## Permanently Lubricated and Ready for Work

Meritor offers permanently lubricated driveline solutions to fit virtually any application, with a wide range of rated torque capacities and premium features.

Our driveline solutions offer the following benefits:

- Permanently lubricated and sealed for life
- High torque-rated models available
- Extended U-joint life
- 5-year/500,000-mile linehaul warranty

*The information in this document was accurate as of the date of release and pertains to the current version of Mack's Sales Tool. Mack Trucks, Inc. reserves the right to make changes in specifications, equipment or design, or to discontinue models or options without notice.*



# SED

PRODUCT INFORMATION

Specifications	High-Torque Rated				
	RPL20	RPL25	RPL25SD	RPL35	RPL35SD
Tube Size (inches)	4.095 x 0.18	4.59 x 0.18	4.69 x 0.23	4.69 x 0.23	5.204 x 0.236
Tubing I.D. (inches)	3.735	4.23	4.23	4.23	4.732
Swing Diameter (inches)	7.80	9.10	9.10	8.11	8.11
Driveline Rating (lb.-ft.)	12,000	17,200	18,500	21,500	25,820
Driveline Rating (n-m)	16,270	23,320	25,083	29,150	35,000
Application	Main & Inter-axle	Main & Inter-axle	Main	Main	Main

The RPL35 Series drivelines were designed for demanding applications, such as heavy service and downspeeding. These applications often place higher torque demands on the drivetrain system. The RPL35 Series drivelines accommodate the increased engine torques and distribute it more evenly throughout the system.

For more information on downspeeding, refer to Meritor Downspeeding Solutions spec sheet (SP-1589).



Secure flange connections throughout the RPL35 Series drivelines accommodate high torques.

## Features and Benefits

- 5-year/500,000-mile linehaul warranty
- High-torque-rated models available for demanding applications, including heavy service and downspeeding
- Four-bolt design for easy installation and service
- E-coated steel guard secures and protects the slip seal against contaminants and damage
- Extended U-joint life:
  - Triple lip seals provide the ultimate protection against contaminants
  - Nylon thrust washers eliminate metal-to-metal contact, preventing wear
- Self-aligning center bearing is standard
- Environmentally "green" because the need to grease the driveline is eliminated
- Partner with a leader – Meritor has been the industry's technology leader in drivetrain solutions for over 20 years

*The information in this document was accurate as of the date of release and pertains to the current version of Mack's Sales Tool. Mack Trucks, Inc. reserves the right to make changes in specifications, equipment or design, or to discontinue models or options without notice.*

## Product Information

204-

Updated:

**MERITOR® RPL DRIVELINES, INTERAXLE**

January 26, 2025

Meritor Permalube™ RPL Series drivelines were the first in the North American heavy-duty commercial vehicle industry to be permanently lubricated and sealed for life. The advantage? Reduced operating and maintenance costs, industry-leading warranties, easy serviceability, and extended U-joint life, particularly on gear-fast/run-slow drivetrains and higher torque applications.



RPL25 shown

### Features and Benefits

- High-torque-rated models available for demanding applications, including heavy service and engine downspeeding.
- Four-bolt design for easy installation and service.
- E-coated steel guard secures and protects the slip seal against contaminants and damage.
- Extended U-joint life:
  - Triple lip seals provide the ultimate protection against contaminants.
  - Nylon thrust washers eliminate metal-to-metal contact, preventing wear.
- Self-aligning center bearing is standard.



Real life examples of high mileage u-joints show virtually no wear

Specifications	Sales Code	
	2041101	2041102
Tube Size (in.)	4.095 x 0.18	4.59 x 0.18
Tubing ID (in.)	3.735	4.23
Swing Diameter (in.)	7.8	9.1
Driveline Rating (lb.-ft.)	12,000	17,200
Driveline Rating (n-m)	16,270	23,320

## FRONT AXLE

**MACK®**

# FXL20

20,000 LBS. [9 072 kg]





- **Unitized wheel hubs**—requires no maintenance—permanently sealed with grease.
- **Sealed tapered kingpins and bearings** keep out road splash, extend axle life and lower maintenance.
- **Forged I-Beam construction**, strong and lightweight.

## DETAIL SPECIFICATIONS

## MAKE: MACK

Type . . . . . Reverse Elliot, Drop-Forged & Heat Treated I-Beam  
 Size (Beam Center Height) . . . . . 4.75" [121 mm]  
 Flange Width . . . . . 3.50" [89 mm] Top & Bottom  
 Web Thickness . . . . . 0.75" [19 mm]  
 Section Modulus . . . . . 9.90" in<sup>3</sup> [172 cm<sup>3</sup>]

## STEERING KNUCKLE:

Material	Chromium Molybdenum Alloy Steel, Heat Treated
Spindle Diameter	
Inner Bearing	2.68" [68 mm]
Outer Bearing	2.68" [68 mm]
Steering Knuckle Pin:	
Material	Modified Carbon Steel, Heat Treated & Induction Hardened
Type	Tapered
Diameter	
Top	1.57" [40 mm]
Bottom	2.36" [60 mm]

## STEERING KNUCKLE: (Continued)

Inclination . . . . .	6°
Knuckle Pin Support	
Upper . . . . .	Tapered Roller Bearing
Lower . . . . .	Grooved bushing
Thrust Bearing	
Type . . . . .	Tapered Roller Bearing
Location . . . . .	Top of Knuckle Pin
Hub . . . . .	Ductile Iron
Bearings . . . . .	Tapered Roller (Unitized)
Lubrication . . . . .	Permanently lubed with Synthetic Grease

### Pivot Centers:

FXL20 ..... 69.92" [1 776 mm]  
Spring Centers ..... 33.5" [851 mm] MRU, LEU  
32.5" [826 mm] GU

**NOTE: FXL used with wide base type tires will exceed 96" [2 438 mm] overall width.**



**Mack Trucks, Inc.**, Allentown, Pennsylvania

## BRAKES

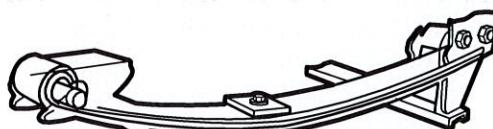
TYPE	CAM
SIZE	DIAMETER WIDTH
MAKE	Arvin Meritor
ACTUATION	Air
LINING THICKNESS	0.85" [22 mm] Tapered
LINING AREA, TOTAL	378 in <sup>2</sup> [2 439 cm <sup>2</sup> ]
CHAMBER SIZE— Sq. In. Per Wheel	1 @ 24 [155 cm <sup>2</sup> ]
SLACK ADJUSTER LENGTH	5.5" [140 mm]
BRAKE ADJUSTMENT	Self-Adjusting
DUST SHIELDS	Optional

## SUSPENSION

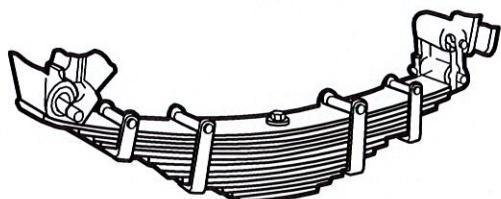
SPRING CAPACITY (GRD. LOAD RATING)	SPRING SIZE	SPRING SIZE		CHASSIS MODEL APPLICATION
		LENGTH	WIDTH	
20,000 LB. [9 072 KG] STD.	Taperleaf - Shackle	52.52" [1 334 mm]	4" [102 mm]	GU
	Taperleaf - Slipper	50.25" [1 276 mm]	3.5" [89 mm]	MRU/LEU
	Multileaf - Shackle	52.52" [1 334 mm]	4" [102 mm]	GU (OPT.)
	Multileaf - Slipper	50.25" [1 276 mm]	3.5" [89 mm]	MRU
18,000 lb. [8 165 kg]	Multileaf - Shackle	52.52" [1 334 mm]	4" [102 mm]	GU
	Multileaf - Slipper	50.25" [1 276 mm]	3.5" [89 mm]	MRU
20,000 lb. [9 072 kg] HD	Multileaf - Shackle	52.52" [1 334 mm]	4" [102 mm]	GU
	Multileaf - Slipper	50.25" [1 276 mm]	3.5" [89 mm]	MRU/LEU



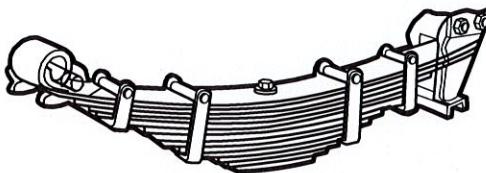
TAPERLEAF SHACKLE



TAPERLEAF EYE & SLIPPER



MULTILEAF SHACKLE



MULTILEAF EYE & SLIPPER



# SED

## PRODUCT INFORMATION

**Sales Code: 268-1026/ 268AA9**  
**Description: Mack S462R Tandem Rear Axle**  
**Date: August 31, 2016**

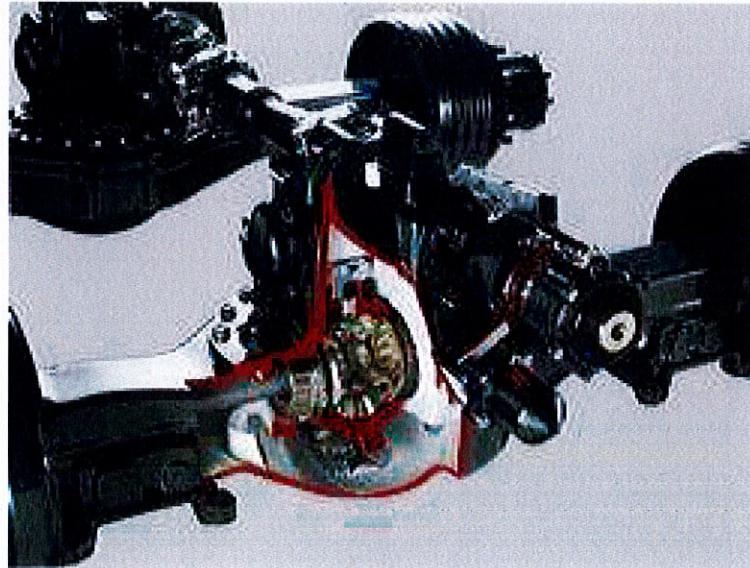
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### Sales Engineering

**Mack Trucks Inc.**  
2402 Lehigh Parkway South  
Allentown, PA 18103

**Phone:** 800-868-6225  
**Fax:** 610-351-8791  
**Email:** [sales.engineering@macktrucks.com](mailto:sales.engineering@macktrucks.com)

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**Mack Axle Model: ..... S462R**  
**Capacity ..... 46,000 lbs. [20,900 kg]**  
**Axle Creep Rating\* ..... 70,000 lbs. [31,800 kg]**

**\* Axle creep rating does not take into account the suspension creep rating which may be different. Check with the suspension supplier to be sure the suspension creep rating meets your application needs.**



# SED

## PRODUCT INFORMATION

### Gross Combination Weight Rating:

CRDP125/126 up to: . . . . . 125,000 lbs. [56,818 kg]

CRDP150/151 up to: . . . . . 150,000 lbs. [68,182 kg]

CRDP180/181 up to: . . . . . 180,000 lbs. [81,818 kg]

Refer to the Mack Carrier Application Guideline. Failure to follow these Guidelines may void the Mack Carrier Warranty.

### Carriers:

**Standard:** Dual Reduction Top Mounted with Inter-Axle Power Divider, Air Assisted Inter-Axle Power Divider Lockout and 4 Pinion Closed Differential.

**Optional:** Mechanical Interwheel Power Divider only available on CRDP1501/1511 & CRDP1801/1811.

**Optional:** Driver Controlled, Air Assisted Interwheel Differential Lock, available on Front Rear, Rear Rear, or Both Rear Axles. Available on CRDP125/126, CRDP150/151, and CRDP180/181.

### Ratios Available:

**CRDP125/126:** 2.54; 2.66; 2.83

**CRDP150/151:** 3.11; 3.25; 3.40; 3.56; 3.79; 3.98; 4.19; 4.50; 4.80; 5.04; 5.31; 5.66; 5.81; 6.12; 6.53

**CRDP180/181:** 3.79; 3.98; 4.19; 4.45; 4.68; 5.00; 5.31; 5.66; 6.12; 6.53; 7.08



# SED

## PRODUCT INFORMATION

### Oil Capacity:

**Carrier Bowl (each carrier) . . . . . 26 pints [12.3L]**

#### **Bevel Gear Compartment (each carrier):**

**CRDP125/126, CRDP150/151, CRDP1501/1511  
8 pints [3.8L]**

**CRDP180/181, CRDP1801/1811 . . 8.5 pints [4.0L]**

#### **Inter-Axle Power Divider:**

**CRDP125/126, CRDP150/151 . . . 1.0 pints [0.5L]**

**CRDP180/181 . . . . . 1.5 pints [0.7L]**

**Drain Plugs . . . . . Magnetic**

**Axle Housing . . . Cast Ductile Iron with Forged "R" Series  
Spindle Ends Welded to Housing Shell  
Inner Journal**

**Spindle . . . . . Induction Hardened Inner Journal**

#### **Dimensions:**

**Inner Bearing 3.75" [95mm]**

**Outer Bearing 3.25" [83mm]**

**Spindle Bore 2.67" [68mm]**



# SED

## PRODUCT INFORMATION

### Axle Shafts:

**Type: .....** Integral Flange

**Material: Induction Hardened Chromium Molybdenum Steel**

**Body Diameter: .....** 1.890" [48mm]

**Diameter Over Splines: .....** 2.200" [56mm]

**Splines, No. & Type: .....** 43 – Involute

### Brakes:

**Type: .....** "S" Cam or Disc

**Actuation: .....** Air

**Brake Adjustment: .....** Self Adjusting

**Parking Emergency Brake: .....** Spring Loaded Chamber

### Auxiliary Spring Brake:

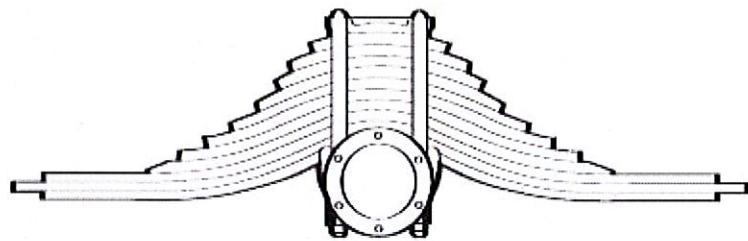
**Type: .. Spring Loaded Chambers [Double Diaphragm Type]**

**Spring Release: .....** Mechanical



# SED

## PRODUCT INFORMATION



### Mack Multileaf Camel-Back Spring Suspension

**Mack Suspension Model: .....** SS462

**Capacity .....** 46,000 lbs. [20,900 kg]

**Creep Rating .....** 62,000 lbs. [28,125 kg]

**Load Centers .....** 50" [1270mm] Standard

55" [1397mm] Optional

**Spring Centers (Chassis Width) .....** 39" [991mm]

**Spring Width .....** 4" [102mm]

#### Number of Leaves and Thickness:

50" Spacing: Standard Spring: ..... 10 @ .788"

50" Spacing: Anti-Sway: ..... 3 @ .788" & 7 @ .999"

55" Spacing: Standard Spring: ..... N/A

55" Spacing: Anti-Sway ..... 3 @ .788" & 8 @ .999"

**Axle Retention:** Upper and Lower Rubber Shock Insulators,  
Optional Urethane Insulators, Cast Steel  
Spring Brackets, Cast Iron Caps

**Trunnion Bracket & Crossmember:** One Piece Fabricated Steel  
with Integral Spindle and Collar Assembly

**Spindle:** ..... Solid

**Bushing:** ..... Standard – Bronze, Optional Urethane

**Transverse Torque Rods:** ..... Standard

# **CO-PILOT DRIVER DISPLAY**

# Product Information



## Co-Pilot

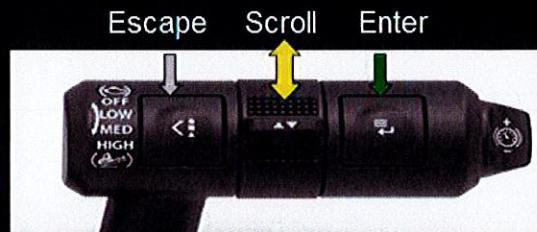
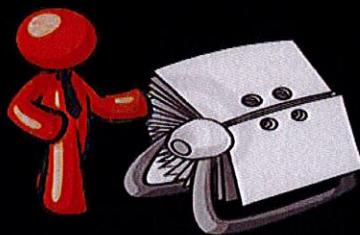
**Affects:** Anthem, Pinnacle, Granite  
**Related:** Interior Trim (004)  
**Updated:** May 30, 2017

# DRIVER INFORMATION DISPLAY

## Copilot Display Control - Driver Information Display (DID)

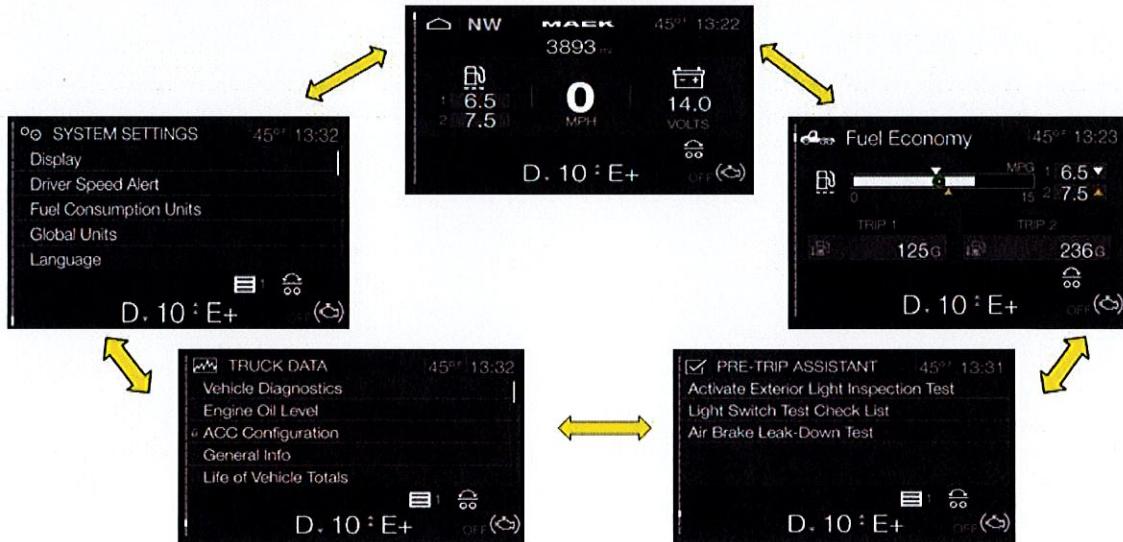
Simple and intuitive  
Meets FMCSA driver distraction guidelines  
One keystroke access

360 deg. scroll switch works like a Rolodex



# DID SCREEN NAVIGATION

Menu screen navigation is in a circular format



Page 1 of 10

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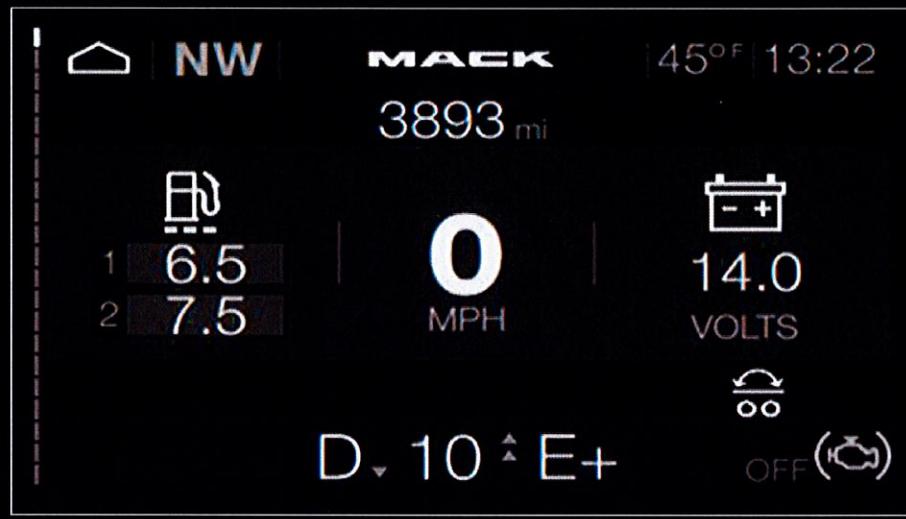


# Product Information

## Co-Pilot

**Affects:** Anthem, Pinnacle, Granite  
**Related:** Interior Trim (004)  
**Updated:** May 30, 2017

## HOME SCREEN



## FUEL ECONOMY

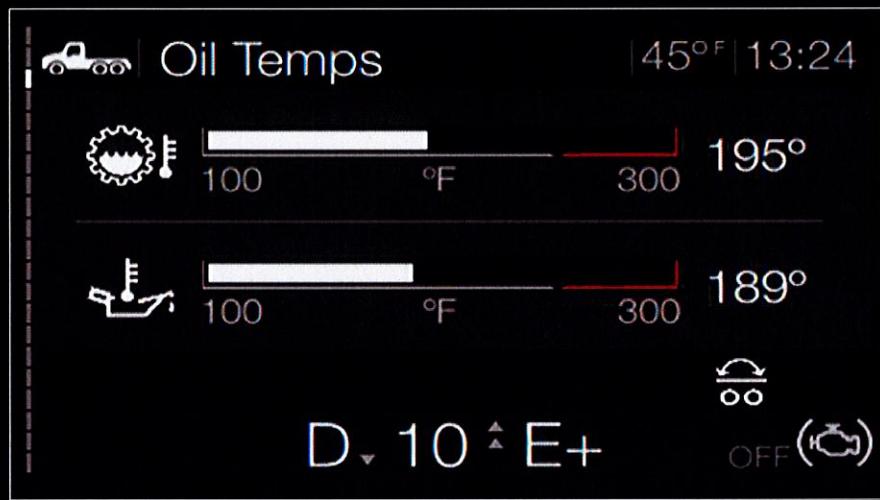


# Product Information

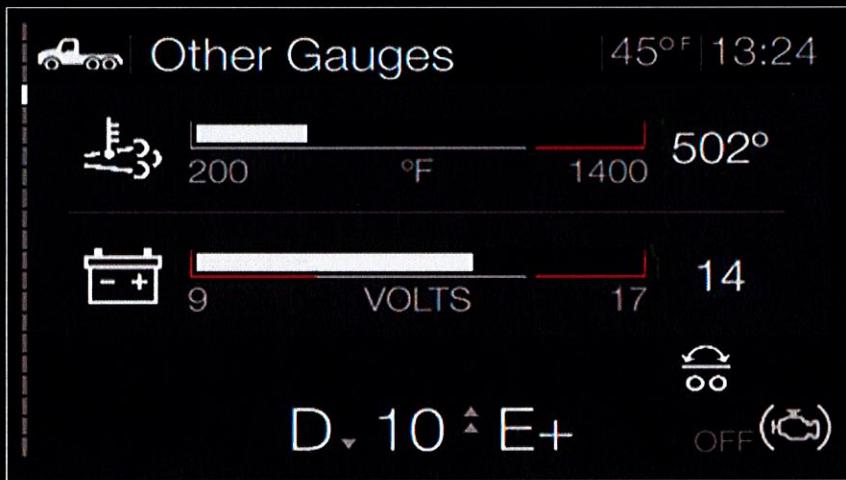
## Co-Pilot

**Affects:** Anthem, Pinnacle, Granite  
**Related:** Interior Trim (004)  
**Updated:** May 30, 2017

## OIL TEMPERATURES



## EXHAUST PYROMETER, VOLTMETER



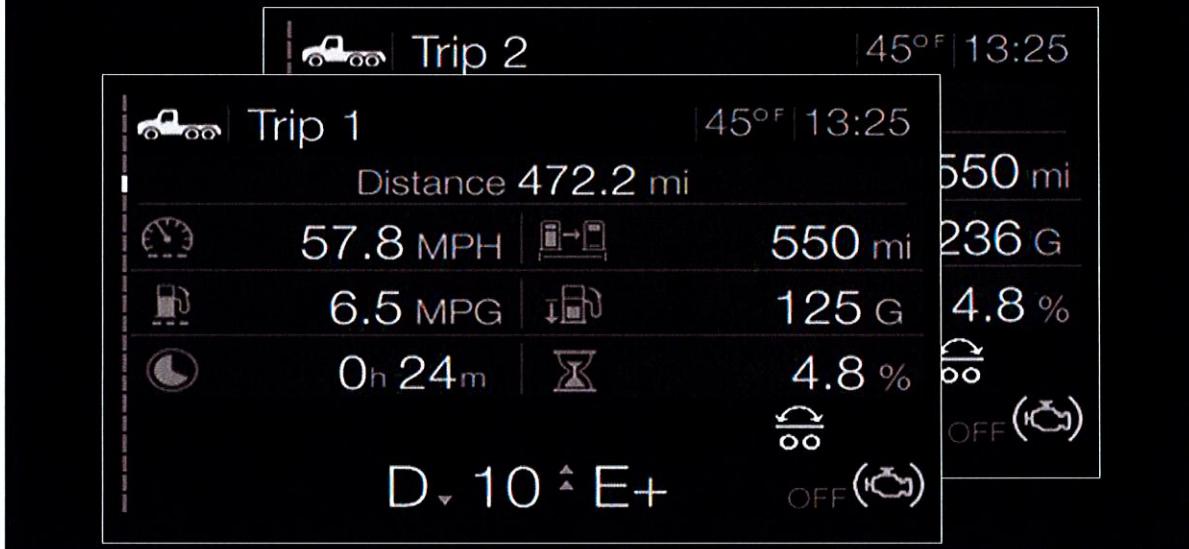


# Product Information

## Co-Pilot

**Affects:** Anthem, Pinnacle, Granite  
**Related:** Interior Trim (004)  
**Updated:** May 30, 2017

## TRIP ODOMETER 1 & 2



## EATS STATUS (ENGINE AFTERTREATMENT SYSTEM)



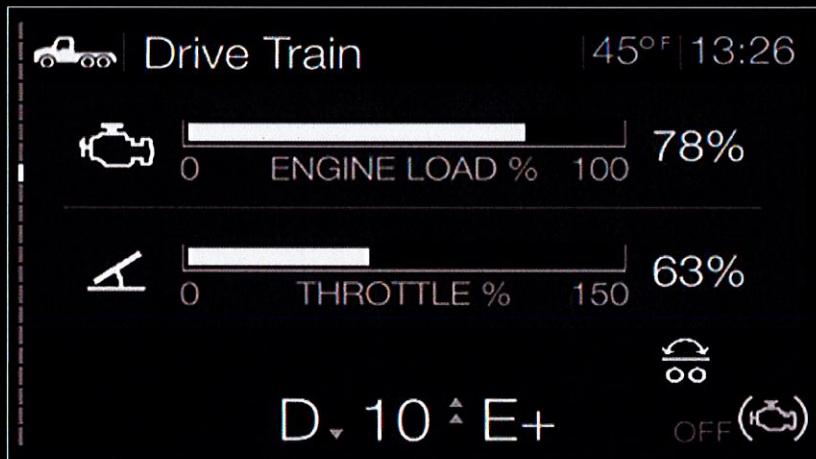
# Product Information



## Co-Pilot

**Affects:** Anthem, Pinnacle, Granite  
**Related:** Interior Trim (004)  
**Updated:** May 30, 2017

## DRIVE TRAIN LOAD, THROTTLE %



## AIR SUSPENSION



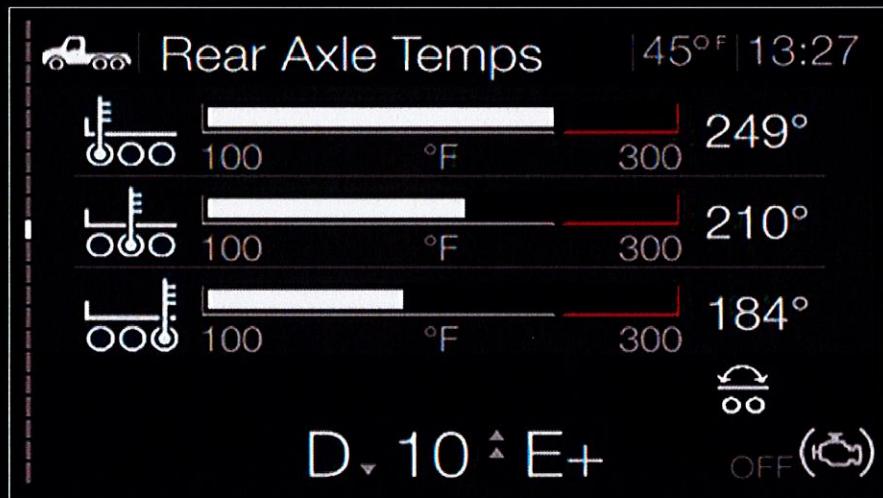


# Product Information

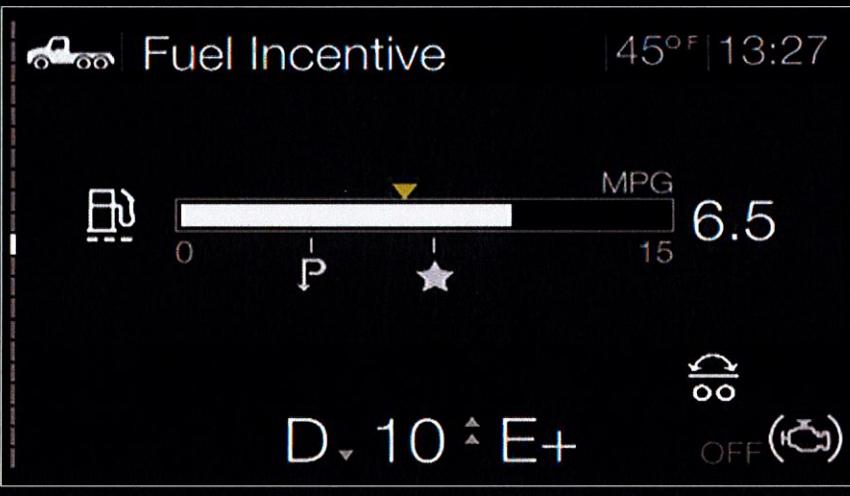
## Co-Pilot

**Affects:** Anthem, Pinnacle, Granite  
**Related:** Interior Trim (004)  
**Updated:** May 30, 2017

## AXLE TEMPERATURES



## FUEL INCENTIVE



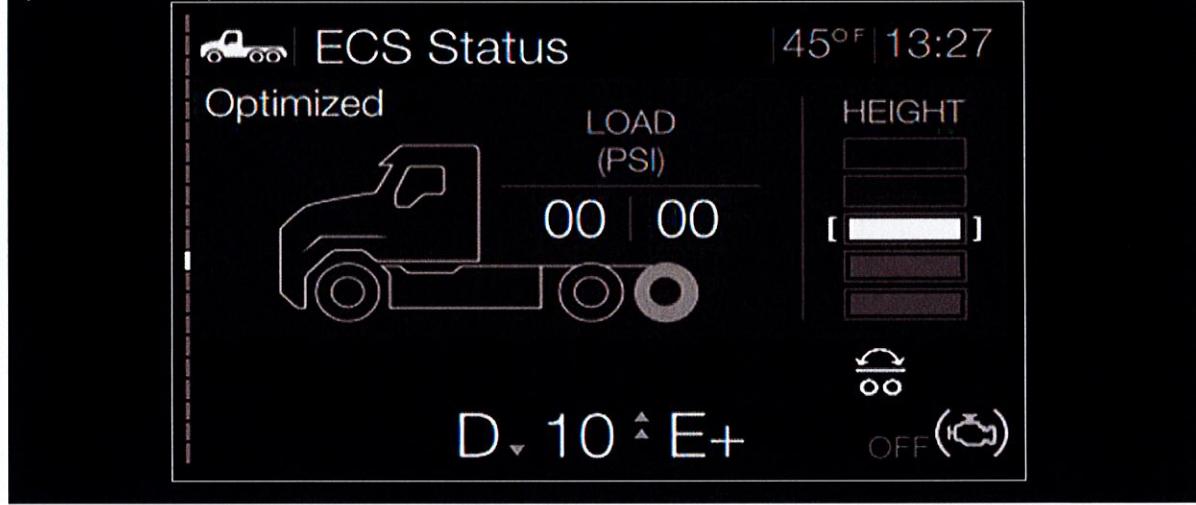


# Product Information

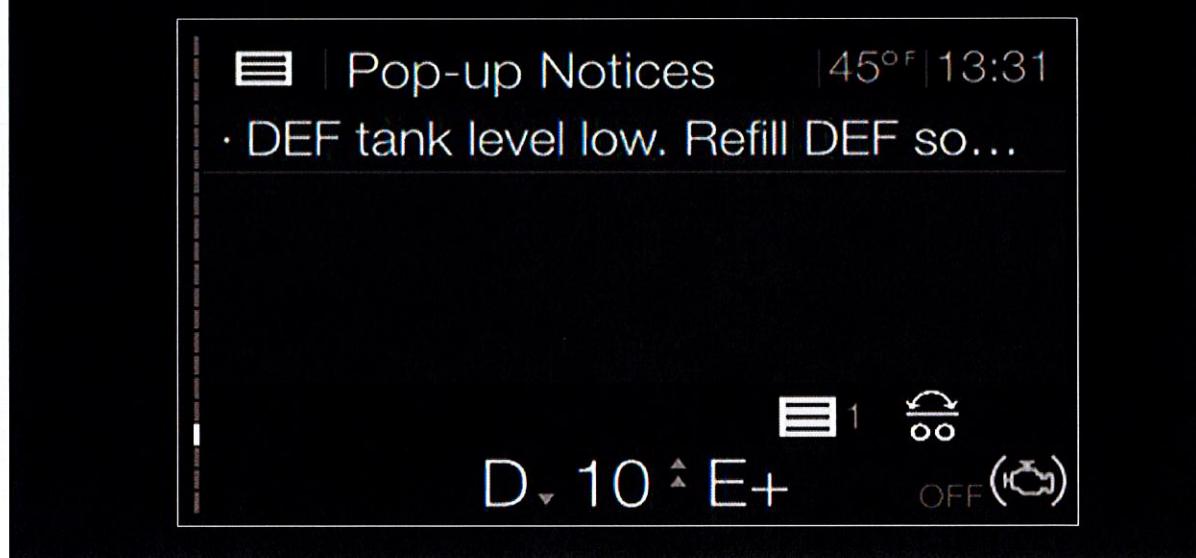
## Co-Pilot

**Affects:** Anthem, Pinnacle, Granite  
**Related:** Interior Trim (004)  
**Updated:** May 30, 2017

## ELECTRONIC CONTROLLED SUSPENSION (6X2 ONLY)



## POP-UP NOTICES



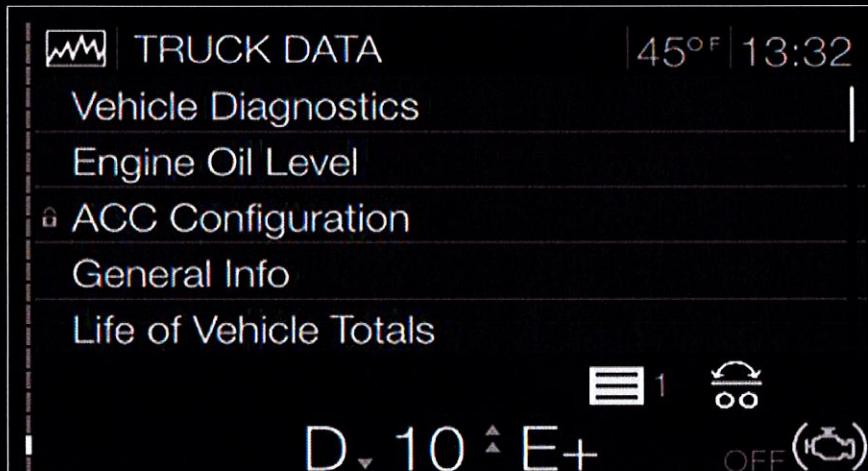
# Product Information



## Co-Pilot

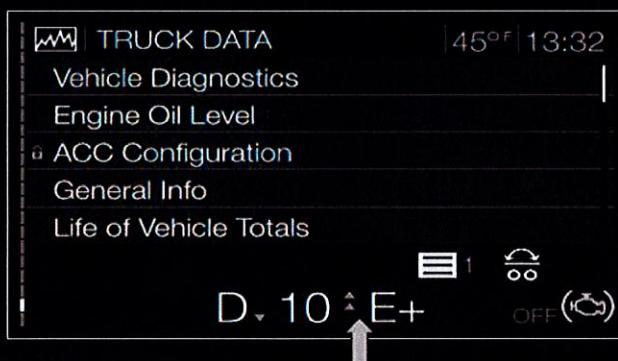
**Affects:** Anthem, Pinnacle, Granite  
**Related:** Interior Trim (004)  
**Updated:** May 30, 2017

## TRUCK DATA

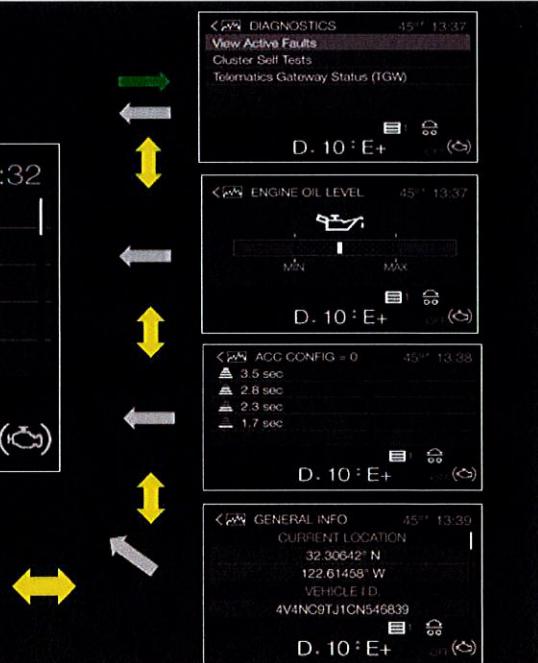
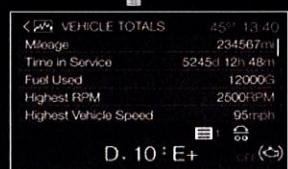


ONLY AVAILABLE WITH PARKING BRAKE APPLIED

## TRUCK DATA



Enter =   
Scroll =   
Escape =

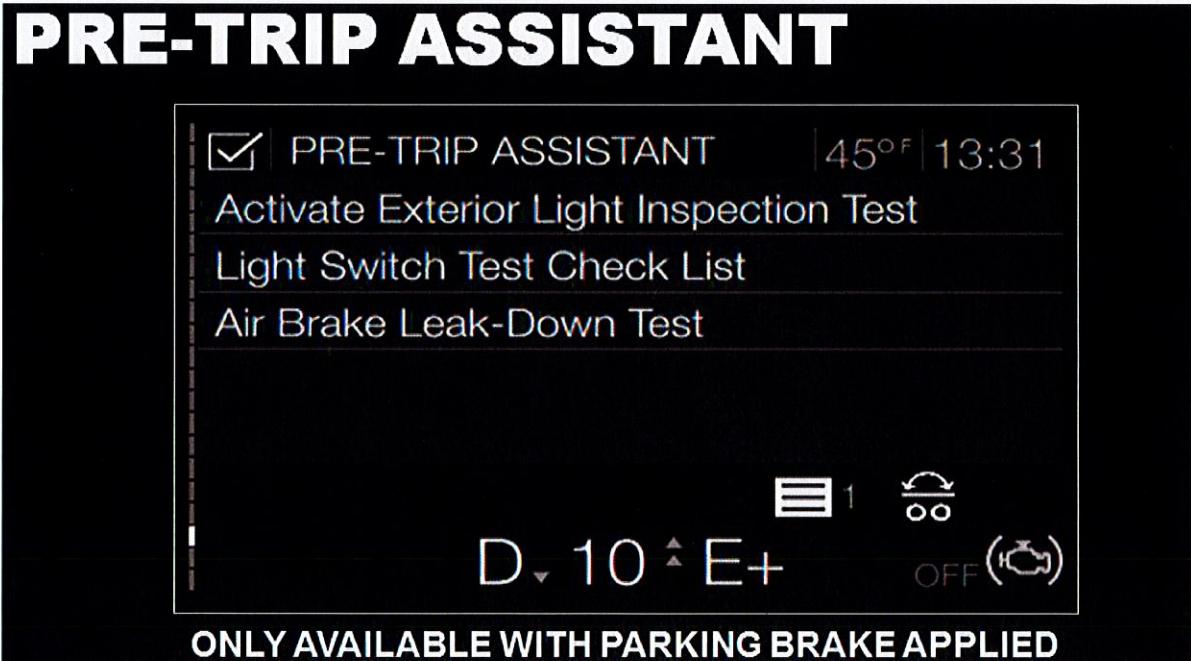
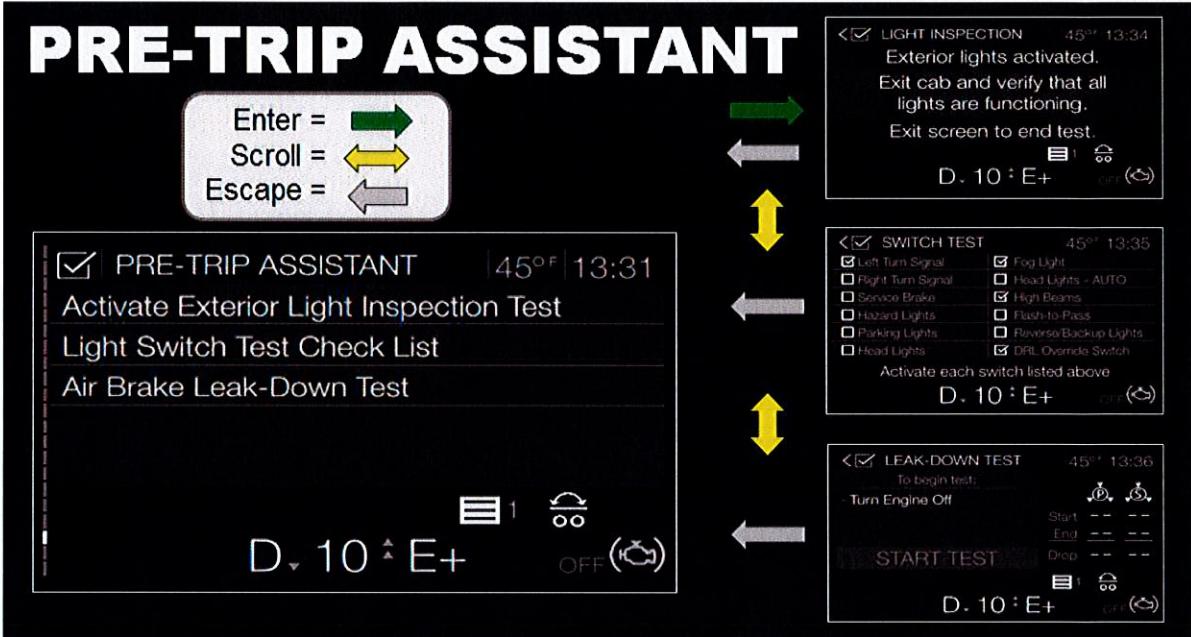


# Product Information



## Co-Pilot

**Affects:** Anthem, Pinnacle, Granite  
**Related:** Interior Trim (004)  
**Updated:** May 30, 2017



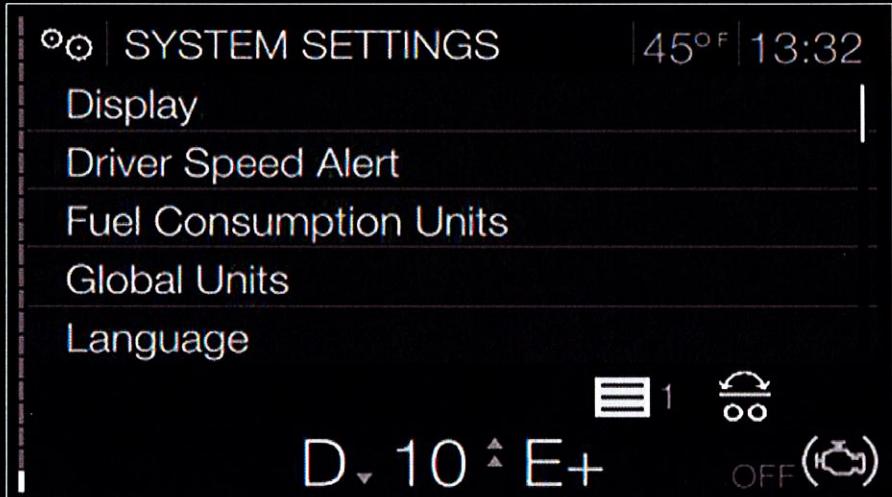
# Product Information



## Co-Pilot

**Affects:** Anthem, Pinnacle, Granite  
**Related:** Interior Trim (004)  
**Updated:** May 30, 2017

## SYSTEM SETTINGS



ONLY AVAILABLE WITH PARKING BRAKE APPLIED

**DFA-FULL:** This feature will allow the driver to access fault codes through the Co-Pilot display.

**DFA-LIM:** This feature will not allow the driver to access fault codes through the Co-Pilot display.

# **WARRANTY INFORMATION**

# 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 2026** trucks, AN, GR, LR, PI, PR, TE models, manufactured by Mack Trucks, operated in the United States and Canada with EPA 24 / CARB 24 and newer engines. Specific coverage is based on the application and weight class as described in the following chart:

	<b>Standard NORMAL DUTY</b>	<b>Standard HEAVY DUTY</b>	<b>Standard SEVERE DUTY</b>
<b>Typical Vocations</b>	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
<b>Weight Class Qualifications</b>	<i>Vehicle must have</i> GVWR ≤ 63,000 lbs. (≤ 28 metric tons) <i>or</i> GCWR ≤ 110,000 lbs. (≤ 50 mt.)	<i>Vehicle must have</i> GVWR ≤ 80,000 lbs. (≤ 36 mt.) <i>or</i> GCWR ≤ 143,000 lbs. (≤ 65 mt.)	<i>Vehicle must have</i> GAWR > 52,000 lbs. (> 23.5 mt.) <i>or</i> GVWR > 80,000 lbs. (> 36 mt.) <i>or</i> GCWR > 143,000 lbs. (> 65 mt.)
<b>Basic Coverage *</b>	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)
<b>Chassis Towing</b>	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
<b>Air Conditioning</b>	Air conditioning (sealed system only) is covered for 12 months with no mileage limitation.		
<b>Engine / Emission</b>	Not covered under this warranty certificate. See respective engine manufacturer's warranty certificate. See paragraph 19 on reverse side.		
<b>Transmission, Driveline, Rear Axle, Front Non-Drive Steer Axle</b>	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	12 months or 100,000 miles (160,934 km)
	Allison Automatic Transmissions are not covered under this warranty certificate. See paragraph 19 on reverse side.		
<b>Mack Carrier &amp; Axle Housing</b>	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)
<b>mDRIVE™ Transmission</b>	60 months or 750,000 miles (1,207,008 km) <i>mDRIVE™ and mDRIVE™ HD</i>	<i>mDRIVE™: 36 months or 250,000 miles (402,336 km); mDRIVE™ HD: 36 months with no mileage limitation</i>	12 months or 100,000 miles (160,934 km); <i>mDRIVE™ HD: 24 months with no mileage limitation</i>
<b>mDRIVE™ Clutch</b>	36 months or 350,000 miles (563,270 km) <i>mDRIVE™ and mDRIVE™ HD</i>	36 months or 250,000 miles (402,336 km) <i>mDRIVE™ and mDRIVE™ HD</i>	<i>mDRIVE™: 12 months or 100,000 miles (160,934 km); mDRIVE™ HD: 24 months or 250,000 miles (402,336 km)</i>
<b>mDRIVE™ Transmission Towing</b>	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
<b>Trunnion Bracket</b>	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)
<b>Cab Structure</b>	60 months or 500,000 miles (804,672 km)	24 months or 200,000 miles (321,869 km) PR Model Only: 60 months or 500,000 miles (804,672 km)	12 months or 100,000 miles (160,934 km) PR Model Only: 36 months or 250,000 miles (402,336 km)
<b>Internal Cab Corrosion</b>	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) PR Model Only: 48 months or 350,000 miles (563,270 km)
	Covered only where metal is perforated from the inside to the outside. See paragraph 18 on the reverse side.		
<b>Frame Rail / Crossmembers</b>	60 months or 500,000 miles (804,672 km) AN, PI, PR Models Only: 72 months or 750,000 miles (1,207,008 km)	36 months or 300,000 miles (482,803 km) GR and PR Models only: 60 months or 500,000 miles (804,672 km)	12 months or 100,000 miles (160,934 km) PR Model Only: 36 months or 250,000 miles (402,336 km)
<b>Noise Emission</b>	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:

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 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**®

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Greensboro, North Carolina 27409

# STANDARD ENGINE

## WARRANTY CERTIFICATE

(EPA 24 / CARB 24 and Newer, Truck Model Year 2026)



Mack Trucks warrants certain individual components of each new Mack® MP7, MP8, and MP13, EPA 24 / CARB 24 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 MP7, MP8, and MP13 engines meeting EPA 24 / CARB 24 and newer emission requirements in new Mack trucks operated in the United States and Canada installed in Model Year 2026 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. MACK DIESEL ENGINES REQUIRE THE USE OF ULTRA LOW SULFUR DIESEL (ULSD) FUEL AND OIL THAT MEETS API CK4 OR FA4 STANDARDS WHICH INCLUDES MACK SPECIFICATION EOS-4.5 OR EOS-5 HIGH PERFORMANCE DIESEL ENGINE OIL.**

**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, Post-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, Post-SCR Temperature Sensor
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, 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	Factory installed only. Includes: Control Valve and Rocker Arms. Turbo Compound (TC) engine: Closed Loop Butterfly (CLB)

Continued on Page 2

<b>Covered Standard Engine Components List: 24 Months or 250,000 miles (402,336 km)</b>		<b>Qualifications and Limitations</b>
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: Rockers and Non-Brake Rockers. Failures resulting from the valve and injector adjustments not being maintained properly are <u>NOT</u> covered. Normal maintenance adjustments are <u>NOT</u> 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 <u>NOT</u> covered. Normal maintenance adjustments are <u>NOT</u> covered.	
Valve Cover		
Valve Yokes (Bridge) and Pins	Failures resulting from the valve adjustments not being maintained properly are <u>NOT</u> covered. Normal maintenance adjustments are <u>NOT</u> covered.	
Vibration Dampers and Bolts		
Water Pump Assembly		
<b>Covered Major Engine Components List: 60 Months or 500,000 miles (804,672 km)</b>		<b>Qualifications and Limitations</b>
Camshaft, Caps, and Bolts	Failures resulting from the valve & injector adjustments not being maintained properly are <u>NOT</u> covered. Normal maintenance adjustments are <u>NOT</u> 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 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 from 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**®

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# STANDARD EMISSIONS COMPONENT WARRANTY CERTIFICATE

(EPA 24 / CARB 24 and Newer, Model Year 2026)



Mack Trucks warrants certain individual components of the Emission Control system in a new Mack truck equipped with a new Mack® MP®7, MP8 and MP13 engines meeting EPA 24 / CARB 24 and newer emission requirements 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 MP7, MP8 and MP13 engines meeting EPA 24 / CARB 24 and newer emission requirements in new Mack trucks operated in the United States and Canada installed in Model Year 2026 trucks.

**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 with a CARB emission label certification, are covered for 60 months or 350,000 miles (563,270 km), whichever first occurs.

**USE OF IMPROPER OR UNAPPROVED FUEL OR ENGINE OIL WILL VOID THE ENGINE AND AFTERTREATMENT SYSTEM (DIESEL PARTICULATE FILTER) WARRANTIES. MACK DIESEL ENGINES REQUIRE THE USE OF ULTRA LOW SULFUR DIESEL (ULSD) FUEL AND OIL THAT MEETS API CK-4 OR FA-4 STANDARDS WHICH INCLUDES MACK SPECIFICATION EOS-4.5 OR EOS-5 HIGH PERFORMANCE DIESEL ENGINE OIL.**

**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:**

<b>Covered Emission Components List:</b> <b>EPA: 60 Months or 100,000 Miles (160,934 km)</b> <b>CARB: 60 Months or 350,000 Miles (563,270 km)</b>	<b>Qualifications and Limitations</b>
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
California Certified Engines (CARB) Equipped with these Chassis Parts:	Includes: 48V Power Cable, 48V Ground Cable, Exhaust Piping, 48V Li-on Battery, Heater Control Unit, Cooling Fan;
California Certified Engines (CARB) Equipped with these Exhaust Aftertreatment System (EATS) Parts	Includes: 48V EATS e-Heater, EATS Harness, EATS Power Cable, EATS Ground Cable
California Certified Engines (CARB) Equipped with these Engine Parts	Includes: 48V P0 Machine, FEAD – Belt, FEAD – Idler (2) OAD Pulley, Engine Harness, Inlet Manifold
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 Lower Pressure Pump, Fuel Pressure Regulating Valve

<b>Covered Emission Components List:</b> <b>EPA: 60 Months or 100,000 Miles (160,934 km)</b> <b>CARB: 60 Months or 350,000 Miles (563,270 km)</b>	<b>Qualifications and Limitations</b>
Injectors	
Instrument Cluster	Limited to Repair of Microprocessor, MIL, Real Time Clock, DEF Gauge, DEF Lamp
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 (ECU)	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	
<b>GHG Covered Component</b>	<b>Qualifications and Limitations</b>
<b>24 Months or 24,000 Miles (38,624 km)</b>	
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.
<b>GHG Covered Components:</b>	<b>Qualifications and Limitations</b>
<b>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)</b>	
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

**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.  
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8003 Piedmont Triad Parkway  
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# Eaton Warranty Guide

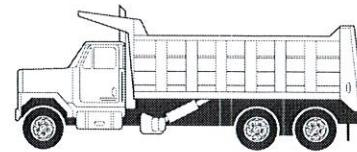
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October 2025



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SUPPORT

# Construction



## Construction

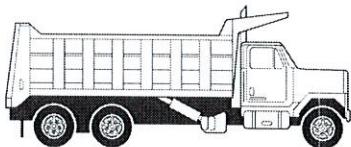
- Movement of material to and from a job site.
- Or vehicles used in transfer / relocation on a maximum grade of 8%, typically greater than 10 miles per trip.
- 90% of loaded operation on road surfaces of concrete, asphalt, gravel, crushed rock or hard packed dirt and up to 10% of loaded operation into sandy or muddy job sites. Vehicles operating less than 90%, refer to Specialized Applications "Off-Highway" coverages.

### Typical Vehicle Types

Asphalt Truck	Dump Truck	Roll-off	Tank Truck	Concrete Pumper	Mixer
Block Truck	Flatbed Truck	Snowplow	Utility Truck	Landscape Truck	

## Warranty Coverage for Vehicles Meeting Vocation Definitions and Application Guidelines (For U.S. and Canada Only)

<b>Clutches</b>	All Models except UltraShift <i>PLUS</i> and Advantage Series. <b>(Note 2)</b>	Per OEM Standard Chassis Warranty Coverage
	UltraShift <i>PLUS</i> VCS, VMS, VXP, LAS, MHP & MXP, Clutch & Low Capacity Inertia Brake (LCIB) <b>(Note 1)</b>	3 years / Unlimited Mileage
	Advantage Self-Adjust and Easy Pedal Advantage <b>(Notes 1, 5)</b>	2 years / 200,000 Mileage
	Advantage Automated Diaphragm Spring (Endurant) <b>(Note 1)</b>	3 years / 300,000 Mileage (480,000 Km)
<b>Hydraulic Clutch Actuator</b> (Adapter Assembly and Release Fork Assembly)	Assembly	
<b>Electronic Clutch Actuator</b>	Electronic Clutch Actuator	
<b>Transmissions</b>	Models: 7, 9, 10-Speed <b>(Note 1)</b> 1100-1800 lb-ft. 8600/8700 Series [Excludes Fuller UltraShift LST (DM)]	3 years / Unlimited Mileage
	Multispeed: 13, 15, 18, 8LL, MLL, 9ALL <b>(Notes 1, 2)</b> (Excludes Fuller UltraShift LHP)	3 years / Unlimited Mileage
	UltraShift <i>PLUS</i> VCS, VMS, VXP, LAS, MHP & MXP <b>(Note 1)</b>	3 years / Unlimited Mileage
	Fuller Advantage, SmartAdvantage 10C	3 years / Unlimited Mileage
	FS Series, RT-6609A <b>(Notes 3, 4)</b>	2 years / Unlimited Mileage
	Hybrid: <b>(Note 1)</b> EH-8E306A-UP EH-8E406A-UP EH-8FA0806A-UP EH-8E306A-UPG EH-8E406A-UPG EH-6E606B-UPG EH-6E706B-UPG EH-8FA0806A-UPG EH-6FL0806B-UPG	3 years / 150,000 miles (240,000 Km)



## Construction

<b>Oil-to-Water Heat Exchangers</b>	All Models ( <b>Note 1</b> )	3 years / Unlimited Mileage
<b>Auxiliary Transmission</b>	Models: AT-1202, 2A-92	1 year / Unlimited Mileage

**Note 1:** All transmission models require the use of a Roadranger approved lubricant. Automated transmissions and transmissions with Purchased Extended Protection Plans must use Roadranger Synthetic Lubricant meeting Eaton PS-386 specification (Refer to Lubrication Manual, TCMT0021.) All transmission and clutch models must meet and have Eaton Engineering Application Approval prior to sale to qualify for any warranty coverage, and then be operated in the approved applications. Those that do not will void their warranty. No blanket approvals are available at this time for UltraShift *PLUS* models and Hybrid Systems.

**Note 2:** Refer to "Extended Protection Plan Matrix" on [www.roadranger.com](http://www.roadranger.com)

**Note 3:** 1 year/Unlimited for Snow Plows in FS Series.

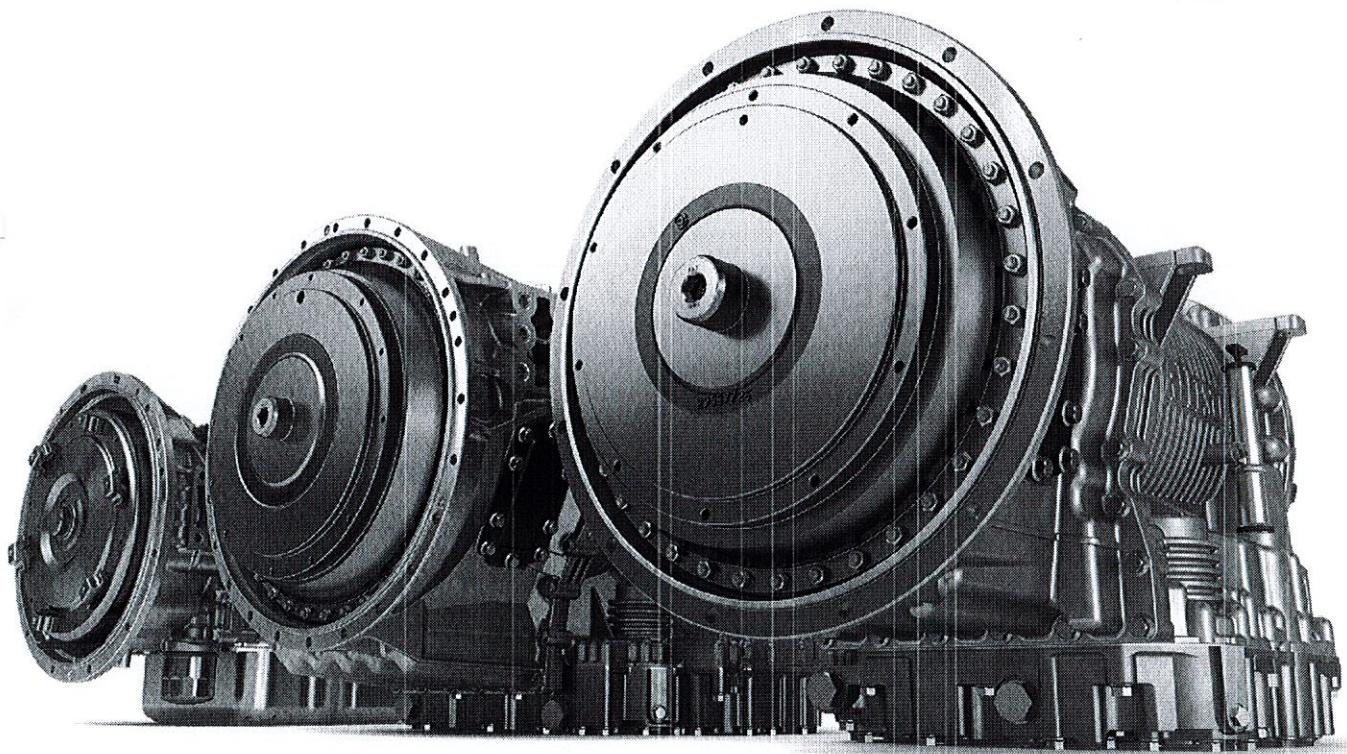
**Note 4:** FS Series synchronizer wear coverage (synchronizers with Eaton Friction Material) is only available for transmissions that use Eaton approved synthetic lubricant in conjunction with either a Solo Adjustment Free or a 365 MM Clutch (Transmission Robust Package). Without stated package requirements, synchronizer wear is not covered.

**Note 5:** Eaton highly recommends when a replacement is necessary that a like for like, should be used. Example: Solo Advantage for Solo Advantage.

**Note 6:** Eaton highly recommends installing a Solo clutch in vehicles with hydraulic release systems for optimal performance, reduced maintenance and increased clutch life.

Construction

# 2025 Allison Transmission Coverage Pricing Guide



Improving The Way

TheWorldWorks

## Terms and Conditions for

# Allison Transmission Coverage

## Transmission Coverage Definitions and Requirements

### Standard Limited Warranty

All Allison automatic transmissions carry a Standard Limited Warranty based upon Vocational Model Series and vocations\*. Standard Limited Warranty includes 100% parts and labor for the designated coverage period. Mileage limitations for specific Vocational Model Series and/or vocations may apply.

### Coverage Pricing

Extended Coverage must be purchased within one year of the delivery of the vehicle. Pricing shown in this brochure is applicable to Extended Coverage purchased in 2025.

Suggested retail prices are established for each transmission vocational model/vocation combination.

The terms and conditions under which Allison Transmission offers Extended Coverage are set forth on the back of the Extended Coverage Agreement Registration, available from any Allison Authorized Distributor or Dealer.

Pricing and/or coverage details shown in the following charts are subject to change without notice. All pricing is in US Dollars. For current prices and coverage information, go to [allisontransmission.com](http://allisontransmission.com).

### Extended Transmission Coverage

In addition to Standard Limited Warranty, Allison transmissions listed in this brochure are eligible for Extended Coverage. Extended Coverage begins at the end of the Standard Limited Warranty period and increases the coverage period. Extended Coverage is available for

purchase through Allison Authorized Distributors and Dealers. Details for Extended Coverage are shown on the following charts.

**REQUIREMENTS:** Use of Allison Approved TES 668\* or TES 295<sup>°</sup> transmission fluid\*\* and Genuine Allison Filters is required. Failure to use Allison Approved TES 668 or TES 295 transmission fluid and Genuine Allison Filters will result in no coverage for repair beyond Standard Limited Warranty coverage. Transmissions that are not OEM factory filled with Allison Approved TES 668 or TES 295 transmission fluid and Genuine Allison Filters must have Allison Approved TES 668 or TES 295 transmission fluid and Genuine Allison Filters installed at the time of Extended Coverage purchase. Transmissions that are not OEM factory filled with Allison Approved TES 668 or TES 295 transmission fluid, or transmissions operating with non-TES 668 or non-TES 295 fluids, must be drained and filled with Allison Approved TES 668 or TES 295 transmission fluid to achieve 100% concentration. One hundred percent concentration is not achieved until the second consecutive fluid change using Allison Approved TES 668 or TES 295 transmission fluid. The second consecutive fluid change must be achieved at the time of Extended Coverage purchase.

**NOTE:** Except as noted, all transmissions with Extended Coverage have 100% parts and labor coverage with no mileage limitations.

\* See Warranty Booklet for exact coverage details.

\*\* For a list of current Allison Approved TES 668 or TES 295 transmission fluids, go to: [allisontransmission.com](http://allisontransmission.com); click on Parts + Service, then Approved Fluids.

<b>EMERGENCY VEHICLE SERIES™</b>	All Emergency Vehicle Series Models carry a 5-year Standard Limited Warranty. See Warranty Booklet for exact coverage details.
----------------------------------	--

Model	Vocation	Standard Limited Warranty		Extended Coverage*	
		Years of Coverage	1 Year	3 Years	
1000 SP	Specialty/Military	2	N/A	\$528	
1350 SP	Specialty/Military	2	N/A	\$534	
2100 SP	Specialty/Military	2	N/A	\$585	

<b>MOTOR HOME SERIES™</b>  All Motor Home Series Models carry a 5-year Standard Limited Warranty. See Warranty Booklet for exact coverage details.	2200 SP	Specialty/Military	2	N/A	\$597
	2350 SP	Specialty/Military	2	N/A	\$648
	2500 SP	Specialty/Military	2	N/A	\$518
	2550 SP	Specialty/Military	2	N/A	\$518
	3000 SP	Specialty/Military	2	N/A	\$491
	3000 SP R**	Specialty/Military	2	N/A	\$995
	3200 SP	Specialty/Military	2	N/A	\$458
	3200 SP R**	Specialty/Military	2	N/A	\$483
	3500 SP	Specialty/Military	2	N/A	\$279
	3500 SP R**	Specialty/Military	2	N/A	\$407
<b>TRUCK RV SERIES™</b>  All Truck RV Series Models carry a 5-year Standard Limited Warranty. See Warranty Booklet for exact coverage details.	4000 SP	Specialty/Military	2	N/A	\$434
	4000 SP R**	Specialty/Military	2	N/A	\$1,024
	4500 SP	Specialty/Military	2	\$217	\$588
	4500 SP R**	Specialty/Military	2	\$180	\$972
	4700 SP	Specialty/Military	2	\$240	\$769
	4700 SP R**	Specialty/Military	2	\$283	\$1,497
	4800 SP	Specialty/Military	2	\$271	\$868
	4800 SP R**	Specialty/Military	2	\$370	\$1,526

\* Extended Coverage: Available for purchase through Allison Authorized Distributors and Dealers to increase coverage \*\* Retarder Option

## Vocational Model Warranty Booklets

<b>HIGHWAY SERIES™ (HS)</b>	SE0100
<b>RUGGED DUTY SERIES™ (RDS)</b>	SE0100
<b>PUPIL TRANSPORT/SHUTTLE SERIES™ – SCHOOL BUS (PTS)</b>	SE0100
<b>PUPIL TRANSPORT/SHUTTLE SERIES™ – SHUTTLE BUS/OTHER BUS (EXCLUDING TRANSIT, INTERCITY/COACH) (PTS)</b>	SE0100
<b>EMERGENCY VEHICLE SERIES™ – FIRE APPARATUS (EVS)</b>	SE0100
<b>MOTORHOME SERIES™ – MOTORHOME (MH)</b>	SE0100
<b>TRUCK RV SERIES™ (TRV)</b>	SE0100
<b>OIL FIELD SERIES™ (OFS)</b>	SE0102
<b>SPECIALTY SERIES™ (SP)</b>	SE0100
<b>REGIONAL HAUL SERIES™ (RHS)</b>	SE0100

RUGGED DUTY SERIES™		Limited Warranty	Coverage*		ion Coverage Pricing Guide
Model	Vocation	Years of Coverage	2 Years	4 Years	
1000 RDS	Agriculture	3	\$306	N/A	
	Dump Trucks/Mixers	3	\$306	N/A	
	P&D and Beverage	3	\$389	N/A	
	Utility and Other	3	\$389	N/A	
1000 RDS xFE	Agriculture	3	\$306	N/A	
	Dump Trucks/Mixers	3	\$306	N/A	
	P&D and Beverage	3	\$389	N/A	
	Utility and Other	3	\$389	N/A	
1005 RDS	Agriculture	5	\$515	N/A	
	Dump Trucks/Mixers	5	\$515	N/A	
	P&D Beverage	5	\$515	N/A	
	Utility and Other	5	\$515	N/A	
1350 RDS	Agriculture	3	\$522	N/A	
	Dump Trucks/Mixers	3	\$522	N/A	
	P&D and Beverage	3	\$346	N/A	
	Utility and Other	3	\$522	N/A	
1350 RDS xFE	Agriculture	3	\$528	N/A	
	Dump Trucks/Mixers	3	\$528	N/A	
	P&D and Beverage	3	\$351	N/A	
	Utility and Other	3	\$528	N/A	
2100 RDS	Agriculture	3	\$586	\$820	
	Dump Trucks/Mixers	3	\$586	\$820	
	P&D and Beverage	3	\$592	\$828	
	Utility and Other	3	\$592	\$828	
2100 RDS xFE	Agriculture	3	\$586	\$820	
	Dump Trucks/Mixers	3	\$586	\$820	
	P&D and Beverage	3	\$592	\$828	
	Utility and Other	3	\$592	\$828	
2200RDS	Agriculture	3	\$580	\$812	
	Dump Trucks/Mixers	3	\$580	\$812	
	P&D and Beverage	3	\$580	\$812	
	Utility and Other	3	\$580	\$812	
2200 RDS xFE	Agriculture	3	\$580	\$812	
	Dump Trucks/Mixers	3	\$580	\$812	
	P&D and Beverage	3	\$580	\$812	
	Utility and Other	3	\$580	\$812	
2300 RDS	Agriculture	3	\$600	\$843	
	Dump Trucks/Mixers	3	\$600	\$843	
	P&D and Beverage	3	\$600	\$843	
	Utility and Other	3	\$600	\$843	
2350 RDS	Agriculture	3	\$594	\$829	
	Dump Trucks/Mixers	3	\$594	\$829	
	P&D and Beverage	3	\$594	\$829	
	Utility and Other	3	\$594	\$829	
2350 RDS xFE	Agriculture	3	\$589	\$824	
	Dump Trucks/Mixers	3	\$589	\$824	
	P&D and Beverage	3	\$589	\$824	
	Utility and Other	3	\$589	\$824	
2500 RDS	Agriculture	3	\$512	\$717	
	Dump Trucks/Mixers	3	\$512	\$717	
	P&D and Beverage	3	\$512	\$717	
	Refuse Packer	3	\$995	\$1,393	
2500 RDS xFE	Utility and Other	3	\$512	\$717	
	Agriculture	3	\$512	\$722	
	Dump Trucks/Mixers	3	\$512	\$722	
	P&D and Beverage	3	\$512	\$722	
2550 RDS	Refuse Packer	3	\$995	\$1,398	
	Utility and Other	3	\$512	\$722	
	Agriculture	3	\$594	\$835	
	Dump Trucks/Mixers	3	\$594	\$835	
2550 RDS xFE	P&D and Beverage	3	\$594	\$835	
	Refuse Packer	3	\$1,147	\$1,609	
	Utility and Other	3	\$594	\$835	
	Agriculture	3	\$594	\$835	
2550 RDS xFE	Dump Trucks/Mixers	3	\$594	\$835	

2025 Allison Transmission Coverage Pricing Guide

Refuse Packer	3	\$1,147	\$1,609
Utility and Other	3	\$594	\$835

HIGHWAY SERIES™		Warranty	Coverage*		Coverage**			
Model	Vocation	Years of Coverage	1 Year	3 Years	2 Years	4 Years		
1000 HS	P&D and Beverage	4	\$217	\$444	On Coverage Pricing Guide			
	Utility and Other	4	\$146	N/A	\$527			
1000 HS xFE	P&D and Beverage	4	\$218	\$444	\$527			
	Utility and Other	4	\$149	N/A	\$527			
1350 HS	P&D and Beverage	4	\$176	\$449	\$527			
	Utility and Other	4	\$176	N/A	\$527			
1350 HS xFE	P&D and Beverage	4	\$177	\$450	\$764			
	Utility and Other	4	\$177	N/A	\$764			
2100 HS	P&D and Beverage	4	\$261	\$690	\$764			
	Utility and Other	4	\$203	N/A	\$764			
2100 HS xFE	P&D and Beverage	4	\$261	\$690	\$549			
	Utility and Other	4	\$203	N/A	\$549			
2200 HS	P&D and Beverage	4	\$205	\$533	\$549			
	Utility and Other	4	\$205	N/A	\$549			
2200 HS xFE	P&D and Beverage	4	\$205	\$533	\$1,235			
	Utility and Other	4	\$205	N/A	\$1,235			
2300 HS	P&D and Beverage	4	\$205	\$824	\$549			
	Utility and Other	4	\$205	N/A	\$549			
2350 HS	P&D and Beverage	4	\$203	\$493	\$1,041			
	Utility and Other	4	\$203	N/A	\$1,041			
2350 HS xFE	P&D and Beverage	4	\$203	\$498	\$549			
	Utility and Other	4	\$203	N/A	\$549			
2500 HS	P&D and Beverage	4	\$277	\$591	\$1,188			
	Utility and Other	4	\$203	N/A	\$1,188			
2500HS xFE	P&D and Beverage	4	\$277	\$591	\$2,417			
	Utility and Other	4	\$203	N/A	\$2,417			
2550 HS	P&D and Beverage	4	\$203	\$476	\$1,141			
	Utility and Other	4	\$203	N/A	\$1,141			
2550 HS xFE	P&D and Beverage	4	\$203	\$476	\$656			
	Utility and Other	4	\$203	N/A	\$656			
3000 HS	P&D and Beverage	4	\$313	\$665	\$2,318			
	Utility and Other	4	\$297	N/A	\$2,318			
3000 HS R**	P&D and Beverage	4	\$320	\$902	\$656			
	Utility and Other	4	\$320	N/A	\$656			
4000 HS	P&D and Beverage	4	\$329	\$941	\$1,242			
	Utility and Other	4	\$395	N/A	\$1,242			
4000 HS R**	P&D and Beverage	4	\$460	\$1,429	\$945			
	Utility and Other	4	\$460	N/A	\$945			
4500 HS	P&D and Beverage	4	\$357	\$941	\$1,594			
	Utility and Other	4	\$393	N/A	\$1,594			
4500 HS R**	P&D and Beverage	4	\$491	\$1,792	\$1,312			
	Utility and Other	4	\$491	N/A	\$1,312			
Rugged Duty applications with a 2200/2500/3000 RDS Series™ may have additional coverage. Contact your distributor for additional information.								
* Extended Coverage: Available for purchase through Allison Authorized Distributors and Dealers to increase coverage								
** Retarder Option								
3000 RDS	Agriculture	3	\$1,070	\$2,148	\$1,070			
	Dump Trucks/Mixers	3	\$1,070	\$2,148	\$1,070			
3000 RDS R**	P&D and Beverage	3	\$1,070	\$2,148	\$1,329			
	Refuse Packer	3	\$1,329	N/A	\$1,329			
3300 RDS	Utility and Other	3	\$1,070	\$2,148	\$1,070			
	Agriculture	3	\$1,432	\$3,224	\$1,432			
3300 RDS R**	Dump Trucks/Mixers	3	\$1,380	\$3,224	\$1,380			
	P&D and Beverage	3	N/A	N/A	N/A			
3500 RDS	Refuse Packer	3	\$1,710	N/A	\$1,710			
	Utility and Other	3	\$1,778	\$3,224	\$1,778			
3500 RDS R**	Agriculture	3	\$2,215	\$5,282	\$2,215			
	Dump Trucks/Mixers	3	\$2,215	\$5,282	\$2,215			
4000 RDS	P&D and Beverage	3	N/A	N/A	N/A			
	Refuse Packer	3	\$1,041	N/A	\$1,041			
4000 RDS R**	Utility and Other	3	\$1,242	N/A	\$1,242			
	Agriculture	3	\$1,312	\$2,613	\$1,312			
4500 RDS	Dump Trucks/Mixers	3	\$1,312	\$2,613	\$1,312			
	P&D and Beverage	3	\$1,594	N/A	\$1,594			
4500 RDS R**	Refuse Packer	3	\$1,149	N/A	\$1,149			
	Utility and Other	3	\$906	\$1,614	\$906			
4700 RDS	Agriculture	3	\$1,070	\$2,148	\$1,070			
	Dump Trucks/Mixers	3	\$1,070	\$2,148	\$1,070			
4700 RDS R**	P&D and Beverage	3	N/A	N/A	N/A			
	Refuse Packer	3	\$2,563	N/A	\$2,563			
4700 RDS R**	Utility and Other	3	\$2,215	\$5,282	\$2,215			

### 2025 Allison Transmission Coverage

Any Pupil Transport/Shuttle Series Coverage beyond Standard Limited Warranty does not have a mileage limitation. School Bus applications with a 2300/2350/2500/2550 PTS Series™ may have additional coverage. Contact your distributor for additional information.

\* Extended Coverage:  
Available for purchase through

Allison Authorized Distributors and Dealers to increase coverage

\*\* Retarder Option

Highway applications with a 2200/2500/3000 HS Series™ may have additional coverage. Contact your distributor for additional information.

\* Extended Coverage: Available for purchase through Allison Authorized Distributors and Dealers to increase coverage

\*\* Retarder Option

REGIONAL HAUL SERIES™		Standard Limited Warranty	Extended Transmission Coverage*	
Model	Vocation	Coverage	1 Year/750K Miles**	2 Years/750K Miles**
3414 RHS	Regional Haul	5 Years/750k Miles	N/A	\$697
3414 RHS R	P&D and Beverage	5 Years/ 750k Miles	N/A	\$968
	Regional Haul	5 Years/ 750k Miles	N/A	\$968
	Utility and Other	5 Years/ 750k Miles	N/A	\$968
114 RHS PR	P&D and Beverage	5 Years/ 750k Miles	N/A	\$968
	Regional Haul	5 Years/ 750K Miles	N/A	\$968
	Utility and Other	5 Years/ 750k Miles	N/A	\$968
3414 RHS P	Regional Haul	5 Years/ 750K Miles	\$348	\$697

\* Extended Coverage: Available for purchase through Allison Authorized Distributors and Dealers to increase coverage

\*\* 750k mile limitation applies to the entire coverage period (Standard Limited Warranty + Extended Coverage)

### 2024 Allison Transmission Coverage Pricing Guide

Q. During my Extended Coverage period, will Allison Transmission cover repairs if I do not use an Allison Approved TES 668® or TES 295® transmission fluid AND Genuine Allison Filters? A. No.

Q. Where can I purchase Extended Coverage?

A. You can purchase the coverage from any Allison Authorized Distributor or Dealer.

Q. When do I purchase Extended Coverage?

A. You can purchase the coverage at the time the vehicle is delivered or within 12 months of vehicle delivery.

Q. How do I pay for this Extended Coverage?

A. You may include the cost with the purchase of your vehicle (with dealer approval) or simply write a check to the Allison Authorized Distributor or Dealer.

Q. Will regars be accepted in this program?

A. Yes, as long as they are new Allison transmissions in approved applications and the Extended Coverage is purchased within 12 months of purchase of the new Allison transmission.

Q. Do I have to return to the selling outlet to obtain service?

A. No. You may select any Allison Authorized Distributor or Dealer offering vehicle transmission service.

Q. If I decide to sell or trade in my vehicle before my coverage expires, can the remaining coverage be transferred to my new transmission?

A. No. The remaining coverage is not transferable to your new transmission. The Extended Coverage purchased stays with the transmission. There is no need for transfer papers to be filed.

Q. If I take delivery of a new vehicle from an outlet that does not make Extended Coverage available, am I still eligible to purchase the coverage?

A. Yes. Contact your nearest Allison Authorized Distributor or Dealer to purchase the coverage.

Q. Are towing charges to the nearest Allison Transmission authorized service outlet covered by Extended Coverage?

A. Yes, if your vehicle is disabled or if towing is necessary to prevent further damage to your transmission.

Q. Is the support equipment purchased from Allison Transmission for original installations covered by Extended Coverage?

A. Yes, support equipment supplied by Allison Transmission to the OEM is covered.

Q. Are the electronic components purchased from Allison Transmission covered by Extended Coverage?

A. Yes.

### Extended Coverage Vocation Codes

2025 Allison Transmission Coverage Pricing Guide

<u>P&amp;D AND BEVERAGE</u>	<u>SHUTTLE BUS</u>			<u>EMERGENCY</u>
ST09 P&D, Beverage	BU08 Bus, Shuttle BU09 Bus, Other			ST02 Ambulance, Emergency Support Vehicles
ST10 P&D, Tanker Fuel/Propane/Pool				ST03 Fire, Articulated
ST11 P&D, Household Moving				ST04 Fire, Pumper
ST12 P&D, Postal	<u>REFUSE PACKER</u>			ST05 Fire, Other
ST13 P&D, Other	ST15 Refuse, Packer - Landfill ST16 Refuse, Packer - No Landfill			<u>UTILITY</u>
<u>MOTORCOACH</u>	<u>AGRICULTURE</u>			<u>IND OTHER</u>
BU03 Coach, Intercity	AG01 Tractor, Farm			ST18 Snow Plow
BU05 Coach, Tour	AG02 Hay Squeeze, Other AG03 Spreader/Sprayer			ST19 Tree Service/Lawn Care/Landscaping
<u>MOTORHOME</u>				ST20 Utility, with Bucket, Auger, etc.
BU04 Motorhome				ST21 Wrecker
<u>TRUCK RV</u>	<u>DUMP TRUCKS/MIXERS</u>			ST22 Straight Truck - Other
ST14 Truck RV	ST01 Dump Truck, Construction ST06 Dump Truck Highway Maintenance ST07 Concrete Mixer			TT01 Tractor - Single Axle
<u>SCHOOL BUS</u>	<u>SPECIALTY / MILITARY</u>			TT02 Tractor - Tandem Axle
BU06 Bus, School - Front Engine	SP02 Military			TT05 Tractor - Other
BU07 Bus, School - Rear Engine	OF02 Crane, Propulsion			ST08 One Way Rental
				AG04 Feedlot Truck
				SP01 Aircraft Support
				SP03 Dock Spotter
				SP04 Street Sweeper
				SP05 Special - Other
				ST17 Refuse, Roll-on/Roll-off

One Allison Way  
Indianapolis, Indiana, USA 46222-3271

Information or specifications subject to change without notice or obligation.

[allisontransmission.com](http://allisontransmission.com)  
SE9054EN (12/2024)

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# **DEALER BUSINESS LICENSE**

Master Dealer License

# 2026 Regulatory License 2026

**TITLE 40, CHAPTER 12, ARTICLE 8, CODE OF ALABAMA 1975**

## Alabama Department of Revenue

### Motor Vehicle

P.O. BOX 327643, MONTGOMERY, AL 36132-7643

**Issued To:**

NEXTRAN CORPORATION

**DBA:**

NEXTRAN TRUCK CENTER BIRMINGHAM

**License Number:**

010207600

**Effective Date:**

October 01, 2025

**Expiration Date:**

September 30, 2026

**Mailing Business Location:**

PO BOX 820 FULTONDALE AL 35068-0820  
35068

**Primary Business Location:**

1801 FULTON ROAD FULTONDALE AL  
35068

**Secondary Business Location:**

This is a regulatory license and is not transferable or refundable. This license should be presented to the privilege license issuing officer at the County Courthouse in the county where your business is located in order to secure the State and County Privilege under Code Section 40-12-51 Automobile Dealer.

**E-VERIFY**



Company ID Number: 1250269

Client Company ID Number: 1864056



## **THE E-VERIFY MEMORANDUM OF UNDERSTANDING FOR EMPLOYERS USING A WEB SERVICES E-VERIFY EMPLOYER AGENT**

### **ARTICLE I PURPOSE AND AUTHORITY**

The parties to this agreement are the Department of Homeland Security (DHS), the **Nextran Corp** (Employer), and the Web Services E-Verify Employer Agent. The purpose of this agreement is to set forth terms and conditions which the Employer and the Web Services E-Verify Employer Agent will follow while participating in E-Verify.

E-Verify is a program that electronically confirms an employee's eligibility to work in the United States after completion of Form I-9, Employment Eligibility Verification (Form I-9). This Memorandum of Understanding (MOU) explains certain features of the E-Verify program and describes specific responsibilities of the Employer, the E-Verify Employer Agent, the Social Security Administration (SSA), and DHS.

References in this MOU to the Employer include the Web Services E-Verify Employer Agent when acting on behalf of the Employer.

For purposes of this MOU, the E-Verify browser refers to the website that provides direct access to the E-Verify system: <https://E-Verify.uscis.gov/emp/>. You may access E-Verify directly free of charge via the E-Verify browser.

Authority for the E-Verify program is found in Title IV, Subtitle A, of the Illegal Immigration Reform and Immigrant Responsibility Act of 1996 (IIRIRA), Pub. L. 104-208, 110 Stat. 3009, as amended (8 U.S.C. § 1324a note). The Federal Acquisition Regulation (FAR) Subpart 22.18, "Employment Eligibility Verification" and Executive Order 12989, as amended, provide authority for Federal contractors and subcontractors (Federal contractor) to use E-Verify to verify the employment eligibility of certain employees working on Federal contracts.

### **ARTICLE II RESPONSIBILITIES**

#### **A. RESPONSIBILITIES OF THE EMPLOYER**

For purposes of this MOU, references to the Employer include the Web Services E-Verify Employer Agent when acting on behalf of the Employer.

1. By enrolling in E-Verify and signing the applicable MOU, the Employer asserts that it is a legitimate company which intends to use E-Verify for legitimate purposes only and in accordance with the laws, regulations and DHS policies and procedures relating to the use of E-Verify.



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2. The Employer agrees to display the following notices supplied by DHS (through the Web Services E-Verify Employer Agent) in a prominent place that is clearly visible to prospective employees and all employees who are to be verified through the system:

- a. Notice of E-Verify Participation
- b. Notice of Right to Work

3. The Employer agrees to provide to the SSA and DHS the names, titles, addresses, and telephone numbers of the Employer representatives to be contacted about E-Verify. The Employer also agrees to keep such information current by providing updated information to SSA and DHS whenever the representatives' contact information changes.

4. The Employer agrees to become familiar with and comply with the most recent version of the

**E-Verify User Manual.** The Employer will obtain the E-Verify User Manual from the Web Services E-Verify Employer Agent, and will be notified by the Web Services E-Verify Employer Agent when a new version of the E-Verify User Manual becomes available.

5. The Employer agrees to comply with current Form I-9 procedures, with two exceptions:

- a. If an employee presents a "List B" identity document, the Employer agrees to only accept "List B" documents that contain a photo. (List B documents identified in 8 C.F.R. 274a.2(b)(1)(B)) can be presented during the Form I-9 process to establish identity.) If an employee objects to the photo requirement for religious reasons, the Employer should contact E-Verify at 888-464-4218.
- b. If an employee presents a DHS Form I-551 (Permanent Resident Card), Form I-766 (Employment Authorization Document), or U.S. Passport or Passport Card to complete Form I-9, the Employer agrees to make a photocopy of the document and to retain the photocopy with the employee's Form I-9. The Employer will use the photocopy to verify the photo and to assist DHS with its review of photo mismatches that employees contest. DHS may in the future designate other documents that activate the photo screening tool.

Note: Subject only to the exceptions noted previously in this paragraph, employees still retain the right to present any List A, or List B and List C, document(s) to complete the Form I-9.

6. The Employer agrees to record the case verification number on the employee's Form I-9 or to print the screen containing the case verification number and attach it to the employee's Form I-9.

7. The Employer agrees that, although it participates in E-Verify, the Employer has a responsibility to complete, retain, and make available for inspection Forms I-9 that relate to its employees, or from other requirements of applicable regulations or laws, including the obligation to comply with the antidiscrimination requirements of section 274B of the INA with respect to Form I-9 procedures.

- a. The following modified requirements are the only exceptions to an Employer's obligation to not employ unauthorized workers and comply with the anti-discrimination provision of the INA: (1) List B identity documents must have photos, as described in paragraph 6 above; (2) When an Employer confirms the identity and employment eligibility of newly hired employee using E-Verify procedures, the Employer establishes a rebuttable presumption that it has not violated section 274A(a)(1)(A) of



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the Immigration and Nationality Act (INA) with respect to the hiring of that employee; (3) If the Employer receives a final nonconfirmation for an employee, but continues to employ that person, the Employer must notify DHS and the Employer is subject to a civil money penalty between \$550 and \$1,100 for each failure to notify DHS of continued employment following a final nonconfirmation; (4) If the Employer continues to employ an employee after receiving a final nonconfirmation, then the Employer is subject to a rebuttable presumption that it has knowingly employed an unauthorized alien in violation of section 274A(a)(1)(A); and (5) no E-Verify participant is civilly or criminally liable under any law for any action taken in good faith based on information provided through the E-Verify.

b. DHS reserves the right to conduct Form I-9 compliance inspections, as well as any other enforcement or compliance activity authorized by law, including site visits, to ensure proper use of E-Verify.

8. The Employer is strictly prohibited from creating an E-Verify case before the employee has been hired, meaning that a firm offer of employment was extended and accepted and Form I-9 was completed. The Employer agrees to create an E-Verify case for new employees within three Employer business days after each employee has been hired (after both Sections 1 and 2 of Form I-9 have been completed), and to complete as many steps of the E-Verify process as are necessary according to the E-Verify User Manual. If E-Verify is temporarily unavailable, the three-day time period will be extended until it is again operational in order to accommodate the Employer's attempting, in good faith, to make inquiries during the period of unavailability.

9. The Employer agrees not to use E-Verify for pre-employment screening of job applicants, in support of any unlawful employment practice, or for any other use that this MOU or the E-Verify User Manual does not authorize.

10. The Employer must use E-Verify (through its Web Services E-Verify Employer Agent) for all new employees. The Employer will not verify selectively and will not verify employees hired before the effective date of this MOU. Employers who are Federal contractors may qualify for exceptions to this requirement as described in Article II.B of this MOU.

11. The Employer agrees to follow appropriate procedures (see Article III below) regarding tentative nonconfirmations. The Employer must promptly notify employees in private of the finding and provide them with the notice and letter containing information specific to the employee's E-Verify case. The Employer agrees to provide both the English and the translated notice and letter for employees with limited English proficiency to employees. The Employer agrees to provide written referral instructions to employees and instruct affected employees to bring the English copy of the letter to the SSA. The Employer must allow employees to contest the finding, and not take adverse action against employees if they choose to contest the finding, while their case is still pending. Further, when employees contest a tentative nonconfirmation based upon a photo mismatch, the Employer must take additional steps (see Article III.B below) to contact DHS with information necessary to resolve the challenge.

12. The Employer agrees not to take any adverse action against an employee based upon the employee's perceived employment eligibility status while SSA or DHS is processing the verification request unless the Employer obtains knowledge (as defined in 8 C.F.R. § 274a.1(l)) that the employee is not work authorized. The Employer understands that an initial inability of the SSA or DHS automated



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verification system to verify work authorization, a tentative nonconfirmation, a case in continuance (indicating the need for additional time for the government to resolve a case), or the finding of a photo mismatch, does not establish, and should not be interpreted as, evidence that the employee is not work authorized. In any of such cases, the employee must be provided a full and fair opportunity to contest the finding, and if he or she does so, the employee may not be terminated or suffer any adverse employment consequences based upon the employee's perceived employment eligibility status (including denying, reducing, or extending work hours, delaying or preventing training, requiring an employee to work in poorer conditions, withholding pay, refusing to assign the employee to a Federal contract or other assignment, or otherwise assuming that he or she is unauthorized to work) until and unless secondary verification by SSA or DHS has been completed and a final nonconfirmation has been issued. If the employee does not choose to contest a tentative nonconfirmation or a photo mismatch or if a secondary verification is completed and a final nonconfirmation is issued, then the Employer can find the employee is not work authorized and terminate the employee's employment. Employers or employees with questions about a final nonconfirmation may call E-Verify at 1-888-464-4218 (customer service) or 1-888-897-7781 (worker hotline).

13. The Employer agrees to comply with Title VII of the Civil Rights Act of 1964 and section 274B of the INA as applicable by not discriminating unlawfully against any individual in hiring, firing, employment eligibility verification, or recruitment or referral practices because of his or her national origin or citizenship status, or by committing discriminatory documentary practices. The Employer understands that such illegal practices can include selective verification or use of E-Verify except as provided in part D below, or discharging or refusing to hire employees because they appear or sound "foreign" or have received tentative nonconfirmations. The Employer further understands that any violation of the immigration-related unfair employment practices provisions in section 274B of the INA could subject the Employer to civil penalties, back pay awards, and other sanctions, and violations of Title VII could subject the Employer to back pay awards, compensatory and punitive damages. Violations of either section 274B of the INA or Title VII may also lead to the termination of its participation in E-Verify. If the Employer has any questions relating to the anti-discrimination provision, it should contact OSC at 1-800-255-8155 or 1-800-237-2515 (TDD).

14. The Employer agrees that it will use the information it receives from E-Verify (through its Web Services E-Verify Employer Agent) only to confirm the employment eligibility of employees as authorized by this MOU. The Employer agrees that it will safeguard this information, and means of access to it (such as Personal Identification Numbers and passwords), to ensure that it is not used for any other purpose and as necessary to protect its confidentiality, including ensuring that it is not disseminated to any person other than employees of the Employer who are authorized to perform the Employer's responsibilities under this MOU, except for such dissemination as may be authorized in advance by SSA or DHS for legitimate purposes.

15. The Employer agrees to notify DHS immediately in the event of a breach of personal information. Breaches are defined as loss of control or unauthorized access to E-Verify personal data. All suspected or confirmed breaches should be reported by calling 1-888-464-4218 or via email at [E-Verify@uscis.dhs.gov](mailto:E-Verify@uscis.dhs.gov). Please use "Privacy Incident - Password" in the subject line of your email when sending a breach report to E-Verify.

16. The Employer acknowledges that the information it receives from SSA through its Web Services



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E-Verify Employer Agent is governed by the Privacy Act (5 U.S.C. § 552a(l)(1) and (3)) and the Social Security Act (42 U.S.C. 1306(a)). Any person who obtains this information under false pretenses or uses it for any purpose other than as provided for in this MOU may be subject to criminal penalties.

17. The Employer agrees to cooperate with DHS and SSA in their compliance monitoring and evaluation of E-Verify, which includes permitting DHS, SSA, their contractors and other agents, upon reasonable notice, to review Forms I-9 and other employment records and to interview it and its employees regarding the Employer's use of E-Verify, and to respond in a prompt and accurate manner to DHS requests for information relating to their participation in E-Verify.

18. The Employer shall not make any false or unauthorized claims or references about its participation in E-Verify on its website, in advertising materials, or other media. The Employer shall not describe its services as federally-approved, federally-certified, or federally-recognized, or use language with a similar intent on its website or other materials provided to the public. Entering into this MOU does not mean that E-Verify endorses or authorizes your E-Verify services and any claim to that effect is false.

19. The Employer shall not state in its website or other public documents that any language used therein has been provided or approved by DHS, USCIS or the Verification Division, without first obtaining the prior written consent of DHS.

20. The Employer agrees that E-Verify trademarks and logos may be used only under license by DHS/USCIS (see [M-795 \(Web\)](#)) and, other than pursuant to the specific terms of such license, may not be used in any manner that might imply that the Employer's services, products, websites, or publications are sponsored by, endorsed by, licensed by, or affiliated with DHS, USCIS, or E-Verify.

21. The Employer understands that if it uses E-Verify procedures for any purpose other than as authorized by this MOU, the Employer may be subject to appropriate legal action and termination of its participation in E-Verify according to this MOU.

#### **B. RESPONSIBILITIES OF THE WEB SERVICES E-VERIFY EMPLOYER AGENT**

1. The Web Services E-Verify Employer Agent agrees to complete its Web Services interface no later than six months after the date the Web Services User signs this MOU. E-Verify considers your interface to be complete once it has been built pursuant to the Interface Control Agreement (ICA), submitted to E-Verify for testing, and approved for system access.

2. The Web Services E-Verify Employer Agent agrees to perform sufficient maintenance on the Web Services interface in accordance with the requirements listed in the ICA. These requirements include, but are not limited to, updating the Web Services interface to ensure that any updates or enhancements are incorporated no later than six months after the issuance of an ICA. Web Services E-Verify Employer Agents should be aware that this will require the investment of time and resources. Compliance with the requirements of the ICA must be carried out to the satisfaction of DHS and or its assignees.

3. The Web Services E-Verify Employer Agent agrees to provide to SSA and/or DHS the names, titles, addresses, e-mail addresses, and telephone numbers of the Web Services E-Verify Employer Agent representative who will access information, as well as ensure cooperation, communication, and coordination with E-Verify.



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Client Company ID Number: 1864056



In addition, Web Services E-Verify Employer Agents must provide to SSA and/or DHS the names, titles, addresses, and telephone numbers of its clients and their staff who will access information through E-Verify. Web Services E-Verify Employer Agents must ensure the contact information is updated with SSA and DHS whenever the points of contact change.

4. The Web Services E-Verify Employer Agent agrees to become familiar with and comply with the E-Verify User Manual and provide a copy of the most current version of the manual to the Employer so that the Employer can become familiar with and comply with E-Verify policy and procedures. The Web Services E-Verify Employer Agent agrees to obtain a revised E-Verify User Manual as it becomes available and to provide a copy of the revised version to the Employer no later than 30 days after the manual becomes available.
5. The Web Services E-Verify Employer Agent agrees that any person accessing E-Verify on its behalf is trained on the most recent E-Verify policy and procedures.
6. The Web Services E-Verify Employer Agent agrees that any of its representatives who will perform employment verification cases will complete the E-Verify Tutorial before that individual initiates any cases.
  - a. The Web Services E-Verify Employer Agent agrees that all of its representatives will take the refresher tutorials initiated by E-Verify as a condition of continued use of E-Verify, including any tutorials for Federal contractors, if any of the Employers represented by the Web Services E-Verify Employer Agent is a Federal contractor.
  - b. Failure to complete a refresher tutorial will prevent the Web Services E-Verify Employer Agent and Employer from continued use of E-Verify.
7. The Web Services E-Verify Employer Agent agrees to grant E-Verify access only to current employees who need E-Verify access. The Web Services E-Verify Employer Agent must promptly terminate an employee's E-Verify access if the employee is separated from the company or no longer needs access to E-Verify.
8. The Web Services E-Verify Employer Agent agrees to obtain the necessary equipment to use E-Verify as required by the E-Verify rules and regulations as modified from time to time.
9. The Web Services E-Verify Employer Agent agrees to, consistent with applicable laws, regulations, and policies, commit sufficient personnel and resources to meet the requirements of this MOU.
10. The Web Services E-Verify Employer Agent agrees to provide its clients with training on E-Verify processes, policies, and procedures. The E-Verify Employer Agent also agrees to provide its clients with ongoing E-Verify training as needed. E-Verify is not responsible for providing training to clients of E-Verify Employer Agents.
11. The Web Services E-Verify Employer Agent agrees to provide the Employer with the notices described in Article II.B.2 below.
12. The Web Services E-Verify Employer Agent agrees to create E-Verify cases for the Employer it represents in accordance with the E-Verify Manual, the E-Verify Web-Based Tutorial and all other published E-Verify



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rules and procedures. The Web Services E-Verify Employer Agent will create E-Verify cases using information provided by the Employer and will immediately communicate the response back to the Employer. If E-Verify is temporarily unavailable, the three-day time period will be extended until it is again operational in order to accommodate the Web Services E-Verify Employer Agent's attempting, in good faith, to make inquiries on behalf of the Employer during the period of unavailability. If, however, the Web Services interface is unavailable due to no fault of E-Verify, then the three-day time period is not extended. In such a case, the Web Services E-Verify Employer Agent must use the E-Verify browser during the outage.

13. The Web Services E-Verify Employer Agent agrees to ensure that all notices, referral letters and any other materials otherwise including instructions regarding tentative nonconfirmations, will be consistent with the most current E-Verify tentative nonconfirmation notices and referral letters, which are available on E-Verify's website.
14. The Web Services E-Verify Employer Agent agrees that any system or interface it develops will follow the steps for creating E-Verify cases and processing tentative nonconfirmations, as laid out in the ICA, this MOU and the User Manual, including but not limited to allowing an employer to close an invalid case where appropriate, allowing an employer to refer a tentative nonconfirmation only when an employee chooses to contest a tentative nonconfirmation (no automatic referrals), and referring a tentative nonconfirmation to the appropriate agency at the time the employer prints the referral letter and provides the letter to the employee. The Web Services E-Verify Employer Agent understands that any failure to make its system or interface consistent with proper E-Verify procedures can result in DHS terminating the Web Services E-Verify Employer Agent's agreement and access with or without notice.
15. When the Web Services E-Verify Employer Agent receives notice from a client company that it has received a contract with the FAR clause, then the Web Services E-Verify Employer Agent must update the company's E-Verify profile within 30 days of the contract award date.
16. If data is transmitted between the Web Services E-Verify Employer Agent and its client, then the Web Services E-Verify Employer Agent agrees to protect personally identifiable information during transmission to and from the Web Services E-Verify Employer Agent.
17. The Web Services E-Verify Employer Agent agrees to notify DHS immediately in the event of a breach of personal information. Breaches are defined as loss of control or unauthorized access to E-Verify personal data. All suspected or confirmed breaches should be reported by calling 1-888-464-4218 or via email at [E-Verify@uscis.dhs.gov](mailto:E-Verify@uscis.dhs.gov). Please use "Privacy Incident - Password" in the subject line of your email when sending a breach report to E-Verify.
18. The Web Services E-Verify Employer Agent agrees to fully cooperate with DHS and SSA in their compliance monitoring and evaluation of E-Verify, including permitting DHS, SSA, their contractors and other agents, upon reasonable notice, to review Forms I-9, employment records, and all records pertaining to the Web Services E-Verify Employer Agent's use of E-Verify, and to interview it and its employees regarding the use of E-Verify, and to respond in a timely and accurate manner to DHS requests for information relating to their participation in E-Verify.
  - a. The Web Services E-Verify Employer Agent agrees to cooperate with DHS if DHS requests



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information about the Web Services E-Verify Employer Agent's interface, including requests by DHS to view the actual interface operated by the Web Services E-Verify Employer Agent as well as related business documents. The Web Services E-Verify Employer Agent agrees to demonstrate for DHS the functionality of its interface to E-Verify upon request.

b. The Web Services E-Verify Employer Agent agrees to demonstrate, if requested by DHS, that it has provided training to its clients that meets E-Verify standards. Training programs must provide a focused study of the topics covered in the E-Verify User Manual and pertinent Supplemental Guides. Furthermore, training programs and materials must be updated as E-Verify changes occur. The Web Services E-Verify Employer Agent is encouraged to incorporate information from existing E-Verify materials, including the Enrollment Quick Reference Guide, the E-Verify Employer Agent Client Handbook (formerly known as the Designated Agent Client Handbook), and existing tutorials and manuals into their training program. E-Verify also encourages the Web Services E-Verify Employer Agent to supervise first-time use of the E-Verify browser or Web Services Interface by its staff and Employer clients as part of any training program. The Web Services E-Verify Employer Agent agrees to submit its training program materials to DHS for review upon request.

Failure to provide adequate training could, in some instances, lead to penalties as described in Article V.F.1. of this MOU.

19. The Web Services E-Verify Employer Agent shall not make any false or unauthorized claims or references about its participation in E-Verify on its website, in advertising materials, or other media. The Web Services E-Verify Employer Agent shall not describe its services as federally-approved, federally-certified, or federally-recognized, or use language with a similar intent on its website or other materials provided to the public. Entering into this MOU does not mean that E-Verify endorses or authorizes your Web Services E-Verify Employer Agent services and any claim to that effect is false.

20. The Web Services E-Verify Employer Agent shall not state in its website or other public documents that any language used therein has been provided or approved by DHS, USCIS or the Verification Division, without first obtaining the prior written consent of DHS.

21. The Web Services E-Verify Employer Agent agrees that E-Verify trademarks and logos may be used only under license by DHS/USCIS (see [M-795 \(Web\)](#)) and, other than pursuant to the specific terms of such license, may not be used in any manner that might imply that the Web Services E-Verify Employer Agent's services, products, websites, or publications are sponsored by, endorsed by, licensed by, or affiliated with DHS, USCIS, or E-Verify.

22. The Web Services E-Verify Employer Agent understands that if it uses E-Verify procedures for any purpose other than as authorized by this MOU, the Web Services E-Verify Employer Agent may be subject to appropriate legal action and termination of its participation in E-Verify according to this MOU.

#### C. RESPONSIBILITIES OF FEDERAL CONTRACTORS

The Web Services E-Verify Employer Agent shall ensure that the Web Services E-Verify Employer Agent and the Employers it represents carry out the following responsibilities if the Employer is a Federal contractor or becomes a federal contractor. The Web Services E-Verify Employer Agent should instruct the client to keep the Web Services E-Verify Employer Agent informed about any changes or updates related to federal contracts. It is the Web Services E-Verify Employer Agent's responsibility to ensure that its clients are in compliance



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with all E-Verify policies and procedures.

1. If the Employer is a Federal contractor with the FAR E-Verify clause subject to the employment verification terms in Subpart 22.18 of the FAR, it will become familiar with and comply with the most current version of the E-Verify User Manual for Federal Contractors as well as the E-Verify Supplemental Guide for Federal Contractors.

2. In addition to the responsibilities of every employer outlined in this MOU, the Employer understands that if it is a Federal contractor subject to the employment verification terms in Subpart 22.18 of the FAR it must verify the employment eligibility of any "employee assigned to the contract" (as defined in FAR 22.1801). Once an employee has been verified through E-Verify by the Employer, the Employer may not reverify the employee through E-Verify.

a. An Employer that is not enrolled in E-Verify as a Federal contractor at the time of a contract award must enroll as a Federal contractor in the E-Verify program within 30 calendar days of contract award and, within 90 days of enrollment, begin to verify employment eligibility of new hires using E-Verify. The Employer must verify those employees who are working in the United States, whether or not they are assigned to the contract. Once the Employer begins verifying new hires, such verification of new hires must be initiated within three business days after the hire date. Once enrolled in E-Verify as a Federal contractor, the Employer must begin verification of employees assigned to the contract within 90 calendar days after the date of enrollment or within 30 days of an employee's assignment to the contract, whichever date is later.

b. Employers enrolled in E-Verify as a Federal contractor for 90 days or more at the time of a contract award must use E-Verify to begin verification of employment eligibility for new hires of the Employer who are working in the United States, whether or not assigned to the contract, within three business days after the date of hire. If the Employer is enrolled in E-Verify as a Federal contractor for 90 calendar days or less at the time of contract award, the Employer must, within 90 days of enrollment, begin to use E-Verify to initiate verification of new hires of the contractor who are working in the United States, whether or not assigned to the contract. Such verification of new hires must be initiated within three business days after the date of hire. An Employer enrolled as a Federal contractor in E-Verify must begin verification of each employee assigned to the contract within 90 calendar days after date of contract award or within 30 days after assignment to the contract, whichever is later.

c. Federal contractors that are institutions of higher education (as defined at 20 U.S.C. 1001(a)), state or local governments, governments of Federally recognized Indian tribes, or sureties performing under a takeover agreement entered into with a Federal agency under a performance bond may choose to only verify new and existing employees assigned to the Federal contract. Such Federal contractors may, however, elect to verify all new hires, and/or all existing employees hired after November 6, 1986. Employers in this category must begin verification of employees assigned to the contract within 90 calendar days after the date of enrollment or within 30 days of an employee's assignment to the contract, whichever date is later.

d. Upon enrollment, Employers who are Federal contractors may elect to verify employment eligibility of all existing employees working in the United States who were hired after November 6, 1986, instead of verifying only those employees assigned to a covered Federal contract. After enrollment, Employers must elect to verify existing staff following DHS procedures and begin E-Verify verification of all



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existing employees within 180 days after the election.

e. The Employer may use a previously completed Form I-9 as the basis for creating an E-Verify case for an employee assigned to a contract as long as:

- i. That Form I-9 is complete (including the SSN) and complies with Article II.A.6,
- ii. The employee's work authorization has not expired, and
- iii. The Employer has reviewed the information reflected in the Form I-9 either in person or in communications with the employee to ensure that the employee's Section 1, Form I-9 attestation has not changed (including, but not limited to, a lawful permanent resident alien having become a naturalized U.S. citizen).

f. The Employer shall complete a new Form I-9 consistent with Article II.A.6 or update the previous Form I-9 to provide the necessary information if:

- i. The Employer cannot determine that Form I-9 complies with Article II.A.6,
- ii. The employee's basis for work authorization as attested in Section 1 has expired or changed, or
- iii. The Form I-9 contains no SSN or is otherwise incomplete.

Note: If Section 1 of Form I-9 is otherwise valid and up-to-date and the form otherwise complies with Article II.C.5, but reflects documentation (such as a U.S. passport or Form I-551) that expired after completing Form I-9, the Employer shall not require the production of additional documentation, or use the photo screening tool described in Article II.A.5, subject to any additional or superseding instructions that may be provided on this subject in the E-Verify User Manual.

g. The Employer agrees not to require a second verification using E-Verify of any assigned employee who has previously been verified as a newly hired employee under this MOU or to authorize verification of any existing employee by any Employer that is not a Federal contractor based on this Article.

3. The Employer understands that if it is a Federal contractor, its compliance with this MOU is a performance requirement under the terms of the Federal contract or subcontract, and the Employer consents to the release of information relating to compliance with its verification responsibilities under this MOU to contracting officers or other officials authorized to review the Employer's compliance with Federal contracting requirements.

#### D. RESPONSIBILITIES OF SSA

1. SSA agrees to allow DHS to compare data provided by the Employer (through the E-Verify Employer Agent) against SSA's database. SSA sends DHS confirmation that the data sent either matches or does not match the information in SSA's database.
2. SSA agrees to safeguard the information the Employer provides (through the E-Verify Employer Agent) through E-Verify procedures. SSA also agrees to limit access to such information, as is appropriate by law, to individuals responsible for the verification of Social Security numbers or responsible for evaluation of E-Verify or such other persons or entities who may be authorized by SSA as governed by the Privacy Act (5 U.S.C. § 552a), the Social Security Act (42 U.S.C. 1306(a)), and SSA regulations (20 CFR Part 401).



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3. SSA agrees to provide case results from its database within three Federal Government work days of the initial inquiry. E-Verify provides the information to the E-Verify Employer Agent.
4. SSA agrees to update SSA records as necessary if the employee who contests the SSA tentative nonconfirmation visits an SSA field office and provides the required evidence. If the employee visits an SSA field office within the eight Federal Government work days from the date of referral to SSA, SSA agrees to update SSA records, if appropriate, within the eight-day period unless SSA determines that more than eight days may be necessary. In such cases, SSA will provide additional instructions to the employee. If the employee does not visit SSA in the time allowed, E-Verify may provide a final nonconfirmation to the E-Verify Employer Agent.

Note: If an Employer experiences technical problems, or has a policy question, the employer should contact E-Verify at 1-888-464-4218.

#### E. RESPONSIBILITIES OF DHS

1. DHS agrees to provide the Employer with selected data from DHS databases to enable the Employer (through the E-Verify Employer Agent) to conduct, to the extent authorized by this MOU:
  - a. Automated verification checks on alien employees by electronic means, and
  - b. Photo verification checks (when available) on employees.
2. DHS agrees to assist the E-Verify Employer Agent with operational problems associated with its participation in E-Verify. DHS agrees to provide the E-Verify Employer Agent names, titles, addresses, and telephone numbers of DHS representatives to be contacted during the E-Verify process.
3. DHS agrees to provide to the E-Verify Employer Agent with access to E-Verify training materials as well as an E-Verify User Manual that contain instructions on E-Verify policies, procedures, and requirements for both SSA and DHS, including restrictions on the use of E-Verify.
4. DHS agrees to train E-Verify Employer Agents on all important changes made to E-Verify through the use of mandatory refresher tutorials and updates to the E-Verify User Manual. Even without changes to E-Verify, DHS reserves the right to require E-Verify Employer Agents to take mandatory refresher tutorials.
5. DHS agrees to provide to the Employer (through the E-Verify Employer Agent) a notice, which indicates the Employer's participation in E-Verify. DHS also agrees to provide to the Employer anti-discrimination notices issued by the Office of Special Counsel for Immigration-Related Unfair Employment Practices (OSC), Civil Rights Division, U.S. Department of Justice.
6. DHS agrees to issue each of the E-Verify Employer Agent's E-Verify users a unique user identification number and password that permits them to log in to E-Verify.
7. DHS agrees to safeguard the information the Employer provides (through the E-Verify Employer Agent), and to limit access to such information to individuals responsible for the verification process, for evaluation of E-Verify, or to such other persons or entities as may be authorized by applicable law. Information will be used only to verify the accuracy of Social Security numbers and employment eligibility, to enforce the INA and Federal criminal laws, and to administer Federal contracting requirements.



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8. DHS agrees to provide a means of automated verification that provides (in conjunction with SSA verification procedures) confirmation or tentative nonconfirmation of employees' employment eligibility within three Federal Government work days of the initial inquiry.
9. DHS agrees to provide a means of secondary verification (including updating DHS records) for employees who contest DHS tentative nonconfirmations and photo mismatch tentative nonconfirmations. This provides final confirmation or nonconfirmation of the employees' employment eligibility within 10 Federal Government work days of the date of referral to DHS, unless DHS determines that more than 10 days may be necessary. In such cases, DHS will provide additional verification instructions.

### ARTICLE III REFERRAL OF INDIVIDUALS TO SSA AND DHS

#### A. REFERRAL TO SSA

1. If the Employer receives a tentative nonconfirmation issued by SSA, the Employer must print the notice as directed by E-Verify. The Employer must promptly notify employees in private of the finding and provide them with the notice and letter containing information specific to the employee's E-Verify case. The Employer also agrees to provide both the English and the translated notice and letter for employees with limited English proficiency to employees. The Employer agrees to provide written referral instructions to employees and instruct affected employees to bring the English copy of the letter to the SSA. The Employer must allow employees to contest the finding, and not take adverse action against employees if they choose to contest the finding, while their case is still pending.
2. The Employer agrees to obtain the employee's response about whether he or she will contest the tentative nonconfirmation as soon as possible after the Employer receives the tentative nonconfirmation. Only the employee may determine whether he or she will contest the tentative nonconfirmation.
3. After a tentative nonconfirmation, the Employer will refer employees to SSA field offices only as directed by E-Verify. The Employer must record the case verification number, review the employee information submitted to E-Verify to identify any errors, and find out whether the employee contests the tentative nonconfirmation. The Employer will transmit the Social Security number, or any other corrected employee information that SSA requests, to SSA for verification again if this review indicates a need to do so.
4. The Employer will instruct the employee to visit an SSA office within eight Federal Government work days. SSA will electronically transmit the result of the referral to the Employer within 10 Federal Government work days of the referral unless it determines that more than 10 days is necessary.
5. While waiting for case results, the Employer agrees to check the E-Verify system regularly for case updates.
6. The Employer agrees not to ask the employee to obtain a printout from the Social Security Administration number database (the Numident) or other written verification of the SSN from the SSA.



## B. REFERRAL TO DHS

1. If the Employer receives a tentative nonconfirmation issued by DHS, the Employer must promptly notify employees in private of the finding and provide them with the notice and letter containing information specific to the employee's E-Verify case. The Employer also agrees to provide both the English and the translated notice and letter for employees with limited English proficiency to employees. The Employer must allow employees to contest the finding, and not take adverse action against employees if they choose to contest the finding, while their case is still pending.
2. The Employer agrees to obtain the employee's response about whether he or she will contest the tentative nonconfirmation as soon as possible after the Employer receives the tentative nonconfirmation. Only the employee may determine whether he or she will contest the tentative nonconfirmation.
3. The Employer agrees to refer individuals to DHS only when the employee chooses to contest a tentative nonconfirmation.
4. If the employee contests a tentative nonconfirmation issued by DHS, the Employer will instruct the employee to contact DHS through its toll-free hotline (as found on the referral letter) within eight Federal Government work days.
5. If the Employer finds a photo mismatch, the Employer must provide the photo mismatch tentative nonconfirmation notice and follow the instructions outlined in paragraph 1 of this section for tentative nonconfirmations, generally.
6. The Employer agrees that if an employee contests a tentative nonconfirmation based upon a photo mismatch, the Employer will send a copy of the employee's Form I-551, Form I-766, U.S. Passport, or passport card to DHS for review by:
  - a. Scanning and uploading the document, or
  - b. Sending a photocopy of the document by express mail (furnished and paid for by the employer).
7. The Employer understands that if it cannot determine whether there is a photo match/mismatch, the Employer must forward the employee's documentation to DHS as described in the preceding paragraph. The Employer agrees to resolve the case as specified by the DHS representative who will determine the photo match or mismatch.
8. DHS will electronically transmit the result of the referral to the Employer within 10 Federal Government work days of the referral unless it determines that more than 10 days is necessary.
9. While waiting for case results, the Employer agrees to check the E-Verify system regularly for case updates.



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## ARTICLE IV SERVICE PROVISIONS

### A. NO SERVICE FEES

1. SSA and DHS will not charge the Employer or the Web Services E-Verify Employer Agent for verification services performed under this MOU. The Employer is responsible for providing equipment needed to make inquiries. To access E-Verify, an Employer will need a personal computer with Internet access.

## ARTICLE V SYSTEM SECURITY AND MAINTENANCE

### A. DEVELOPMENT REQUIREMENTS

1. Software developed by Web Services E-Verify Employer Agents must comply with federally-mandated information security policies and industry security standards to include but not limited to:
  - a. Public Law 107-347, "E-Government Act of 2002, Title III, Federal Information Security Management Act (FISMA)," December 2002.
  - b. Office of Management and Budget (OMB) Memorandum (M-10-15), "FY 2010 Reporting Instructions for the Federal Information Security Management Act and Agency Privacy Management," April 2010.
  - c. National Institute of Standards and Technology (NIST) Special Publication (SP) and Federal Information Processing Standards Publication (FIPS).
  - d. International Organization for Standardization/International Electrotechnical Commission (ISO/IEC) 27002, Information Technology — Security Techniques — Code of Practice for Information Security Management.
2. The Web Services E-Verify Employer Agent agrees to update its Web Services interface to reflect system enhancements within six months from the date DHS notifies the Web Services User of the system update. The Web Services User will receive notice from DHS in the form of an Interface Control Agreement (ICA). The Web Services E-Verify Employer Agent agrees to institute changes to its interface as identified in the ICA, including all functionality identified and all data elements detailed therein.
3. The Web Services E-Verify Employer Agent agrees to demonstrate progress of its efforts to update its Web Services interface if and when DHS requests such progress reports.
4. The Web Services E-Verify Employer Agent acknowledges that if its system enhancements are not completed to the satisfaction of DHS or its assignees within six months from the date DHS notifies the Web Services User of the system update, then the Web Services User's E-Verify account may be suspended, and support for previous releases of E-Verify may no longer be available to the Web Services User. The Web Services E-Verify Employer Agent also acknowledges that DHS may suspend the Web Services User's account after the six-month period has elapsed.
5. The Web Services E-Verify Employer Agent agrees to incorporate error handling logic into its development or software to accommodate and act in a timely fashion should an error code be returned.



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**6. The Web Services E-Verify Employer Agent agrees to complete the technical requirements testing which is confirmed upon receiving approval of test data and connectivity between the Web Services E-Verify Employer Agent and DHS.**

**7. DHS will not reimburse any Web Services E-Verify Employer Agent or software developer who has expended resources in the development or maintenance of a Web Services Interface if that party is unable, or becomes unable, to meet any of the requirements set forth in this MOU.**

**8. Housing, development, infrastructure, maintenance, and testing of the Web Services applications may take place outside the United States and its territories, but testing must be conducted to ensure that the code is correct and secure.**

**9. If the Web Services E-Verify Employer Agent includes an electronic Form I-9 as part of its interface, then it must comply with the standards for electronic retention of Form I-9 found in 8 CFR 274a.2(e).**

## **B. INFORMATION SECURITY REQUIREMENTS**

Web Services E-Verify Employer Agents performing verification services under this MOU must ensure that information that is shared between the Web Services E-Verify Employer Agent and DHS is appropriately protected comparable to the protection provided when the information is within the DHS environment [OMB Circular A-130 Appendix III].

To achieve this level of information security, the Web Services E-Verify Employer Agent agrees to institute the following procedures:

1. Conduct periodic assessments of risk, including the magnitude of harm that could result from the unauthorized access, use, disclosure, disruption, modification, or destruction of information and information systems that support the operations and assets of the DHS, SSA, and the Web Services E-Verify Employer Agent and its clients;
2. Develop policies and procedures that are based on risk assessments, cost-effectively reduce information security risks to an acceptable level, and ensure that information security is addressed throughout the life cycle of each organizational information system;
3. Implement subordinate plans for providing adequate information security for networks, facilities, information systems, or groups of information systems, as appropriate;
4. Conduct security awareness training to inform the Web Services E-Verify Employer Agent's personnel (including contractors and other users of information systems that support the operations and assets of the organization) of the information security risks associated with their activities and their responsibilities in complying with organizational policies and procedures designed to reduce these risks;
5. Develop periodic testing and evaluation of the effectiveness of information security policies, procedures, practices, and security controls to be performed with a frequency depending on risk, but no less than once per year;



6. Develop a process for planning, implementing, evaluating, and documenting remedial actions to address any deficiencies in the information security policies, procedures, and practices of the organization;
7. Implement procedures for detecting, reporting, and responding to security incidents;
8. Create plans and procedures to ensure continuity of operations for information systems that support the operations and assets of the organization;
9. In Information-sharing environments, the information owner is responsible for establishing the rules for appropriate use and protection of the subject information and retains that responsibility even when the information is shared with or provided to other organizations [NIST SP 800-37].
10. DHS reserves the right to restrict Web Services calls from certain IP addresses.
11. DHS reserves the right to audit the Web Services E-Verify Employer Agent's application.
12. Web Services E-Verify Employer Agents and Software Developers agree to cooperate willingly with the DHS assessment of information security and privacy practices used by the company to develop and maintain the software.

## C. DATA PROTECTION AND PRIVACY REQUIREMENTS

1. Web Services E-Verify Employer Agents must practice proper Internet security; this means using HTTP over SSL/TLS (also known as HTTPS) when accessing DHS Information resources such as E-Verify [NIST SP 800-95]. Internet security practices like this are necessary because Simple Object Access Protocol (SOAP), which provides a basic messaging framework on which Web Services can be built, allows messages to be viewed or modified by attackers as messages traverse the Internet and is not independently designed with all the necessary security protocols for E-Verify use.
2. In accordance with DHS standards, the Web Services E-Verify Employer Agent agrees to maintain physical, electronic, and procedural safeguards to appropriately protect the information shared under this MOU against loss, theft, misuse, unauthorized access, and improper disclosure, copying use, modification or deletion.
3. Any data transmission requiring encryption shall comply with the following standards:
  - Products using FIPS 197 Advanced Encryption Standard (AES) algorithms with at least 256-bit encryption that has been validated under FIPS 140-2.
  - NSA Type 2 or Type 1 encryption.
4. User ID Management (Set Standard): All information exchanged between the parties under this MOU will be done only through authorized Web Services E-Verify Employer Agent representatives identified above.
5. The Web Services E-Verify Employer Agent agrees to use the E-Verify browser instead of its own interface if it has not yet upgraded its interface to comply with the Federal Acquisition Regulation (FAR) system changes. In addition, Web Services E-Verify Employer Agents whose interfaces do not support the Form I-9 from 2/2/2009 or 8/7/2009 should also use the E-Verify browser until the system upgrade is completed.



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**6. The Web Services E-Verify Employer Agent agrees to use the E-Verify browser instead of its own interface if it has not completed updates to its system within six months from the date DHS notifies the Web Services E-Verify Employer Agent of the system update. The Web Services E-Verify Employer Agent can resume use of its interface once it is up-to-date, unless the Web Services E-Verify Employer Agent has been suspended or terminated from continued use of the system.**

#### **D. COMMUNICATIONS**

- 1. Web Services E-Verify Employer Agents and Software Developers agree to develop an electronic system that is not subject to any agreement that would restrict access to and use of by an agency of the United States.**
- 2. The Web Services E-Verify Employer Agent agrees to develop effective controls to ensure the integrity, accuracy and reliability of its electronic system.**
- 3. The Web Services E-Verify Employer Agent agrees to develop an inspection and quality assurance program that regularly, at least once per year, evaluates the electronic system, and includes periodic checks of electronically stored information. The Web Services E-Verify Employer Agent agrees to share the results of its regular inspection and quality assurance program with DHS upon request.**
- 4. The Web Services E-Verify Employer Agent agrees to develop an electronic system with the ability to produce legible copies of applicable notices, letters, etc.**
- 5. All information exchanged between the parties under this MOU will be in accordance with applicable laws, regulations, and policies, including but not limited to, information security guidelines of the sending party with respect to any information that is deemed Personally Identifiable Information (PII), including but not limited to the employee or applicant's Social Security number, alien number, date of birth, or other information that may be used to identify the individual.**
- 6. Suspected and confirmed information security breaches must be reported to DHS according to Article II.A.17. Reporting such breaches does not relieve the Web Services E-Verify Employer Agent from further requirements as directed by state and local law. The Web Services E-Verify Employer Agent is subject to applicable state laws regarding data protection and incident reporting in addition to the requirements herein.**

#### **E. SOFTWARE DEVELOPER RESTRICTIONS**

- 1. The Web Services E-Verify Employer Agent agrees that if it develops a Web Services interface and sells such interface, then it can be held liable for any misuse by the company that purchases the interface. It is the responsibility of the Web Services E-Verify Employer Agent to ensure that its interface is used in accordance with E-Verify policies and procedures.**
- 2. The Web Services E-Verify Employer Agent agrees to provide software updates to each client who purchases its software. Because of the frequency Web Services updates, an ongoing relationship between the software developer and the client is necessary.**



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3. DHS reserves the right to terminate the access of any software developer with or without notice who creates or uses an interface that does not comply with E-Verify procedures.
4. Web Services Software Developers pursuing software development independent of serving clients as a Web Services E-Verify Employer Agent are not eligible to receive an ICA. At this time, E-Verify does not permit Web Services software development without also being a Web Services E-Verify Employer Agent or Web Services Employer.

#### **F. PENALTIES**

1. The Web Services E-Verify Employer Agent agrees that any failure on its part to comply with the terms of the MOU may result in account suspension, termination, or other adverse action.
2. DHS is not liable for any financial losses to Web Services E-Verify Employer Agent, its clients, or any other party as a result of your account suspension or termination.

### **ARTICLE VI MODIFICATION AND TERMINATION**

#### **A. MODIFICATION**

1. This MOU is effective upon the signature of all parties and shall continue in effect for as long as the SSA and DHS operates the E-Verify program unless modified in writing by the mutual consent of all parties.
2. Any and all E-Verify system enhancements by DHS or SSA, including but not limited to E-Verify checking against additional data sources and instituting new verification policies or procedures, will be covered under this MOU and will not cause the need for a supplemental MOU that outlines these changes.

#### **B. TERMINATION**

1. The Web Services E-Verify Employer Agent may terminate this MOU and its participation in E-Verify at any time upon 30 days prior written notice to the other parties. In addition, any Employer represented by the Web Services E-Verify Employer Agent may voluntarily terminate its MOU upon giving DHS 30 days' written notice. The Web Services E-Verify Employer Agent may not refuse to terminate the Employer based upon an outstanding bill for verification services.
2. Notwithstanding Article V, part A of this MOU, DHS may terminate this MOU, and thereby the Web Services E-Verify Employer Agent's participation in E-Verify, with or without notice at any time if deemed necessary because of the requirements of law or policy, or upon a determination by SSA or DHS that there has been a breach of system integrity or security by the Web Services E-Verify Employer Agent or Employer, or a failure on the part of either party to comply with established E-Verify procedures and/or legal requirements. The Employer understands that if it is a Federal contractor, termination of this MOU by any party for any reason may negatively affect the performance of its contractual responsibilities. Similarly, the Employer understands that if it is in a state where E-Verify is mandatory, termination of this by any party MOU may negatively affect the Employer's business.



3. A Web Services E-Verify Employer Agent for an Employer that is a Federal contractor may terminate this MOU when the Federal contract that requires its participation in E-Verify is terminated or completed. In such cases, the Web Services E-Verify Employer Agent must provide written notice to DHS. If the Web Services E-Verify Employer Agent fails to provide such notice, then that Employer will remain an E-Verify participant, will remain bound by the terms of this MOU that apply to non-Federal contractor participants, and will be required to use the E-Verify procedures to verify the employment eligibility of all newly hired employees.
4. The Web Services E-Verify Employer Agent agrees that E-Verify is not liable for any losses, financial or otherwise, if the Web Services E-Verify Employer Agent or the Employer is terminated from E-Verify.

## ARTICLE VII PARTIES

- A. Some or all SSA and DHS responsibilities under this MOU may be performed by contractor(s), and SSA and DHS may adjust verification responsibilities between each other as necessary. By separate agreement with DHS, SSA has agreed to perform its responsibilities as described in this MOU.
- B. Nothing in this MOU is intended, or should be construed, to create any right or benefit, substantive or procedural, enforceable at law by any third party against the United States, its agencies, officers, or employees, or against the Web Services E-Verify Employer Agent, its agents, officers, or employees.
- C. The Web Services E-Verify Employer Agent may not assign, directly or indirectly, whether by operation of law, change of control or merger, all or any part of its rights or obligations under this MOU without the prior written consent of DHS, which consent shall not be unreasonably withheld or delayed. Any attempt to sublicense, assign, or transfer any of the rights, duties, or obligations herein is void.
- D. Each party shall be solely responsible for defending any claim or action against it arising out of or related to E-Verify or this MOU, whether civil or criminal, and for any liability wherefrom, including (but not limited to) any dispute between the Web Services E-Verify Employer Agent or the Employer and any other person or entity regarding the applicability of Section 403(d) of IIRIRA to any action taken or allegedly taken by the Web Services E-Verify Employer Agent or the Employer.
- E. The Web Services E-Verify Employer Agent understands that its participation in E-Verify is not confidential information and may be disclosed as authorized or required by law and DHS or SSA policy, including but not limited to, Congressional oversight, E-Verify publicity and media inquiries, determinations of compliance with Federal contractual requirements, and responses to inquiries under the Freedom of Information Act (FOIA).
- F. The individuals whose signatures appear below represent that they are authorized to enter into this MOU on behalf of the Employer, the Web Services E-Verify Employer Agent and DHS respectively. The Web Services E-Verify Employer Agent understands that any inaccurate statement, representation, data or other information provided to DHS may subject the Web Services E-Verify Employer Agent, as the case may be, its subcontractors, its employees, or its representatives to: (1) prosecution for false statements pursuant to 18 U.S.C. 1001 and/or; (2) immediate termination of its MOU and/or; (3) possible debarment or suspension.



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E-VERIFY IS A SERVICE OF DHS AND DSS

G. The foregoing constitutes the full agreement on this subject between DHS, the Employer, and the E-Verify Employer Agent. **Nextran Corp** (Employer) hereby designates and appoint **Equifax Workforce Solutions LLC** (E-Verify Employer Agent) including its officers and employees, as the E-Verify Employer Agent for the purpose of carrying out (Employer) responsibilities under the MOU between the Employer, the E-Verify Employer Agent, and DHS. If you have any questions, contact E-Verify at 1-888-464-4218.



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Approved by:

**Employer**

Nextran Corp

Name (Please Type or Print) Taylor C Dube at HIREtech	Title
Signature Electronically Signed	Date 08/03/2022

**E-Verify Employer Agent**

Equifax Workforce Solutions LLC

Name (Please Type or Print) Taylor C Dube	Title
Signature Electronically Signed	Date 08/03/2022

**Department of Homeland Security – Verification Division**

Name (Please Type or Print) USCIS Verification Division	Title
Signature Electronically Signed	Date 08/29/2022



Company ID Number: 1250269

Client Company ID Number: 1864056



#### Information Required for the E-Verify Program

##### Information relating to your Company:

Company Name	Nextran Corp
Company Facility Address	1986 W Beaver St. Jacksonville, FL 32209
Company Alternate Address	1986 W Beaver St. Jacksonville, FL 32209
County or Parish	DUVAL
Employer Identification Number	593139839
North American Industry Classification Systems Code	484
Parent Company	
Number of Employees	100 to 499
Number of Sites Verified for	1 site(s)



Company ID Number: 1250269

Client Company ID Number: 1864056



**Are you verifying for more than 1 site? If yes, please provide the number of sites verified for in each State:**



Company ID Number: 1250289

Client Company ID Number: 1864056



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**Information relating to the Program Administrator(s) for your Company on policy questions or operational problems:**



Company ID Number: 1250269

Client Company ID Number: 1864056



This list represents the first 20 Program Administrators listed for this company.