# 2025 Chevrolet Low Cab Forward



**Attention Body Builders! Chevrolet LCF Medium Duty Body Builder manuals are now available for FREE! - go to: [www.gmupfitter.com](http://www.gmupfitter.com)**

Download the Body Builder Manual or sections for important information about up fitting your Chevrolet LCF Medium Duty Commercial truck. Please check Section 0 to review information that has changed since your last visit as the manual is updated from time to time to include the latest information available. All printed material, specifications, and drawings contained in the Chevrolet LCF Medium Duty Body Builder Manual are based on the latest information available at the time of publication / posting. The manufacturer reserves the right to discontinue or change, at any time, without notice specifications, options, materials, equipment, design, and models.

Information contained in the manual includes:

- FMVSS safety standard
- EPA requirements
- OE recommendations
- Cautions for successful application up fitting and Frame modification procedures

| 2025 Body Builder Manual Revisions | | | | |
|---|---|---|---|---|
| **Revision Number** | **Date** | **Section** | **Page(s)** | **Description** |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |

# Introduction

This manual has been provided as an aid to final stage manufacturers in determining conformity to the applicable Emission Control and Federal Motor Vehicle Safety Standards. Final stage manufacturers should maintain current knowledge of all Emission Regulations and Federal Motor Vehicle Safety Standards and be aware of their specific responsibility regarding each standard.

Any manufacturer making material alterations to this incomplete vehicle during the process of manufacturing the complete vehicle should be constantly alert to all effects, direct or indirect, on other components, assemblies or systems caused by such alterations. No alterations should be made to the incomplete vehicle that directly or indirectly results in any either component, assembly or system being in nonconformance with applicable Emission Regulations or Federal Motor Vehicle Safety Standards.

General Motors will honor its warranty commitment (for the cab-chassis only), to the ultimate consumer, provided:

1. The final stage manufacturer has not made any alterations or modifications which do not conform to any applicable laws, regulations, or standards, or adversely affect the operation of the cab-chassis; and
2. The final stage manufacturer complied with the instructions contained in this manual with respect to the completion of the vehicle. Otherwise, the warranty becomes the responsibility of the final stage manufacturer.

The final stage manufacturer is solely responsible for the final certification of the vehicle and for compliance with Emission Control and Federal Motor Vehicle Safety Standards. The information contained in this manual has been provided for the final stage manufacturer's information and guidance.

This manual contains information pertaining to the:

- 3500 HG & 4500 HG Gas Regular Cab
- 3500 HG & 4500 HG Gas Crew Cab
- 5500 HG & 5500 XG Gas Regular Cab
- 5500 HG & 5500 XG Gas Crew Cab
- 4500 HD, 4500 XD, 5500 XD Diesel Regular Cab
- 4500 HD, 4500 XD, 5500 XD Diesel Crew Cab
- 6500 & 7500 XD Diesel Regular Cab

# 2025 Chevrolet Low Cab Forward



## CAUTIONARY NOTES:

### Electrical Sensitivity and Battery Relocation Warning

Starting with the 2011 Model year Diesel and 2012 Model year Low Cab Forward Trucks, these products are more sensitive to poor electrical integrity of the starting circuit when compared to previous year models. This is due to the ever increasing electrical demands from the base vehicle that includes the new emissions componentry as well as more sophisticated engines and transmissions. The control modules for these devices require healthy electrical circuits without significant voltage drops through the supply and return circuits. Relocation or modification of batteries coupled with insufficient wire gauge, poor terminal crimps, weak conductivity to frame rails, terminal corrosion, or loose bolts, could contribute to a possible no start condition.

### All Fluids and Lubricants Caution

Any fluids or lubricants added to the chassis during the final manufacturing process must meet GM's fluids and lubricants specifications. These fluids and lubricant specifications vary based on model year and chassis model code. A recommended fluids list based on model and model year can be found in the Vehicle Owner's Manual.

### Low Speed Applications for LCF Chassis

Any low-speed vehicle applications using the Aisin Transmission such as sweeper, highway striping and roadside mowing airport service must adhere to the following guidelines to prevent the overheating of the automatic transmission fluid.

Factory Recommendation: Select Range 1 for low-speed operations under 11 mph, (18km/h).
Select Range 2 for low-speed operation under 22 mph, (36km/h).

### Auxiliary Transmission Cooler Warning

Installation of Auxiliary automatic transmission fluid cooler will void warranty on transmission/engine.

### Transmission Temperature Warning Lamp

Automatic transmission fluid temperature warning lamp illuminates over 140°Centigrade/284°Fahrenheit.

### Tapping into Engine Cooling System

Do not connect any auxiliary heating or cooling devices to the chassis cooling system. Engine calibrations are based on the original cooling system and any changes may adversely affect performance or diagnostics. The chassis cooling system is part of the vehicle emission system and is also used to thaw DEF fluid in diesel trucks and meet mandatory emission thaw times.

### Air Conditioning Modification

No modifications or alterations should be made to the factory provided air conditioning system.

### Engine Front End Accessory Drive (FEAD) Modification

Modifying or installing additional equipment onto the engine accessory drive can impact engine performance and emissions regulations compliance.
If modifications are made to the FEAD, impact to certification compliance and subsequent actions are solely the responsibility of those making the modifications.

## CAUTIONARY NOTES CONTINUED:

### Brake Override Logic

This ECM logic has been adopted to enhance the safe operation of the vehicle. The brake override logic disables the accelerator pedal input and protects against vehicle malfunction in cases where the accelerator pedal and brake pedal are operated simultaneously, or if unintended driver acceleration pedal operations are detected.

### No–Start Condition: Clicking or Banging from Starter
### 2012-2015MY Chevrolet LCF Equipped with 5.2L (4HK1) Diesel Engines

It is possible to experience a no-start condition accompanied by a clicking or banging-type noise from the starter. This condition presents itself when vehicle battery voltage is low. The insufficient voltage/current will cause an improper ground for the X-17 starter relay. As a result, the starter will not remain engaged to start the engine. This is not an indication of a defective starter, alternator, or ECM.
The following is a list of common causes for low battery voltage. Inspect these items as possible causes for the described condition before further diagnosis.

1. Extreme low ambient temperatures (below 10°C / 50°F). The chemical reactions inside of batteries take place more slowly when the battery is cold. The vehicle systems therefore have less energy to work with when it tries to start the engine.
2. Vehicles stored for long periods without proper battery charging and maintenance.
3. Batteries that have been relocated further away from the starter than the original designed location.
4. Batteries or battery cables that have been replaced with improper gauge.
5. Corroded battery terminals and cables.
6. Vehicles that are started and stopped multiple times without allowing the charging system to replenish the batteries' charge.
7. Excessive use of electrical equipment such as electric lift gates.
8. Interior and exterior lighting left "On" without the engine running.

**NOTE: Do not diagnose starters, alternators, ECM's or other no-start conditions prior to ensuring the battery is fully charged and none of the above common causes exist**

### Fuel Tank Caution

Fuel fill kit must be installed on cab chassis if it will be driven for an extended distance. Note: fuel tank kit provides venting for the fuel tank.
**CAUTION: DO NOT RESTRICT OR KINK THE FUEL TANK VENT HOSE.** Operating this vehicle with a restricted or kinked fuel tank vent hose may cause serious damage to the fuel tank and/or fuel injection pump. Continued operation may cause engine failure.

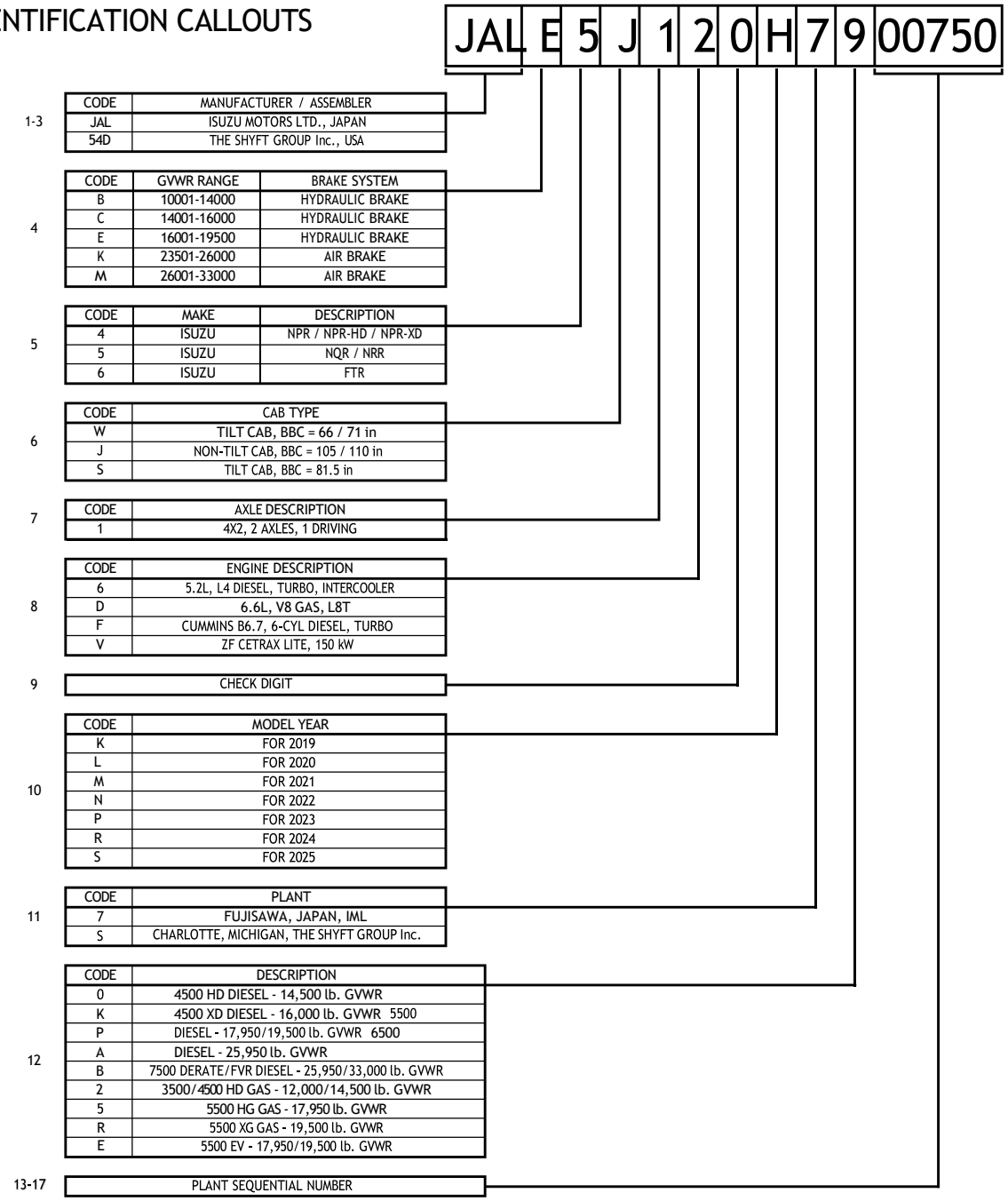
### Anti-lock Brake System (ABS) & Electronic Stability Control (ESC)

ABS helps prevent the wheels from locking or from slipping when the brakes are applied under certain driving conditions.
ESC monitors the truck's steering wheel angle, individual wheel rotation speed, lateral G forces and more. When the system senses that the driver is at risk of losing stability, it alerts the driver via an on-dash warning light and automatically reduces engine output and applies braking pressure to help the driver maintain stability.
ABS and ESC systems are sensitive to chassis modifications. Please reference Section 2 – "Installation of Body and Special Equipment" prior to making modifications to the chassis.

# 2025 Chevrolet Low Cab Forward



## LCF MEDIUM DUTY V.I.N. IDENTIFICATION CALLOUTS



# 2025 Chevrolet Low Cab Forward

## Installation of Body and Special Equipment

### Anti-lock Brake System (ABS) & Electronic Stability Control (ESC)

**IMPORTANT NOTES**:

1. Do not relocate or modify the electro-hydraulic control unit.
2. Do not modify the electrical harness and connector(s) of ABS/ESC systems.
3. Do not modify the vacuum line(s) inside cab.
4. Do not use ABS/ESC component wiring to extract power or ground circuits for accessories or added equipment.
5. Do not relocate or change the installation direction of the yaw rate sensor. The yaw rate sensor's operation is dependent on its position relative to the vehicle's center of gravity as well as the direction of its mounting. Altering the installed location or direction may cause the system to operate incorrectly.
6. Do not set final gear ratio to anything other than GENERAL MOTORS factory specification.
   The set value of the final gear ratio is programmed into the ABS/ESC control unit. If the final gear ratio is changed, the ABS/ESC systems may not operate correctly.
7. Do not operate the vehicle with any combination of tires other than GENERAL MOTORS factory-specified tires. When brakes are applied, the ABS/ESC systems monitor the rotational speed differences of the front and rear tires and rely on a preset value for the tire diameter programmed into the control unit. Using tires that are different from the preset values or using tires that vary greatly in diameter from front to rear, may negatively impact braking performance and cause abnormal operation of the ABS/ESC systems. Contact GM before equipping any tires other than GM factory- specified tires.
8. Contact GENERAL MOTORS before changing the wheelbase. Changing the wheelbase will impact the ABS/ESC system and will need to be reprogrammed. Only change to other factory offered wheelbases.
9. Do not upfit chassis into a tractor or 5th wheel (Hot Shot) configuration.

**ADVICE:** When installing the following components in the vicinity of ABS/ESC equipment (e.g., electro-hydraulic control unit, speed sensor, yaw rate sensor, steering sensor, etc.), maintain more than 100mm (3.94in) of clearance:

- Communication radio devices and their antennas.
- Motors, relays, and other devices that generate noise.

Wires for the ABS/ESC components are located within the main vehicle harness. In order to help prevent interference with the ABS/ESC wires and signals, do not route antenna wiring near the main vehicle harness.
ESC calibration is necessary when replacing and/or removing any of the following components (contact a Chevrolet dealership for more details):

- Electro-hydraulic control unit and/or yaw rate sensor.
- Steering sensor and/or steering-related components and steering wheel.

### ADAS (Advanced Driver Assistance System)

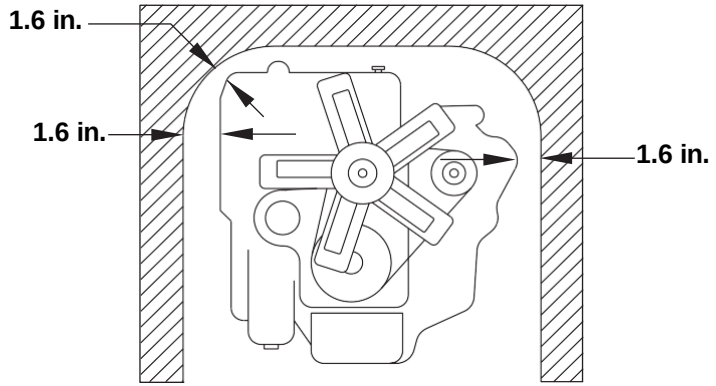
**IMPORTANT NOTES FOR TRUCKS EQUIPPED WITH ADAS**:

1. When changing the wheelbase on a truck equipped with ADAS, only change to other factory offered wheelbases. Changing the wheelbase will impact the ADAS system and will need to be reprogrammed.
2. Please contact applications engineering for guidelines on LCF Chassis frame modifications when the vehicle is equipped with ADAS.

## Installation of Body and Special Equipment

***Engine***

At least 1.6 inches of clearance should be maintained around the engine. At least 1 inch of clearance should be maintained to the front and rear of the engine. No obstacles should be added in front of the radiator or intercooler.




**Front and Back Clearance: 1 inch**

Figure 1

***Transmission***

The transmission is removed from the rear. Enough clearance must be provided to allow for rearward movement of the transmission assembly. At least 2 inches of clearance should be maintained above the automatic transmission to allow for transmission removal. At least 1 inch of clearance should be maintained to the front and rear of the transmission. Clearance should be sufficient to allow 5 to 6 inches of unrestricted movement of the transmission assembly. In addition, provide at least 2 inches of clearance around the control lever on the side of the transmission to allow free movement without any binding.

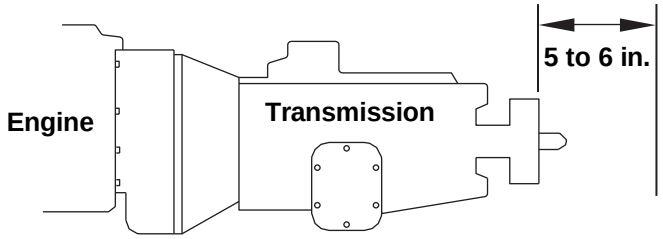
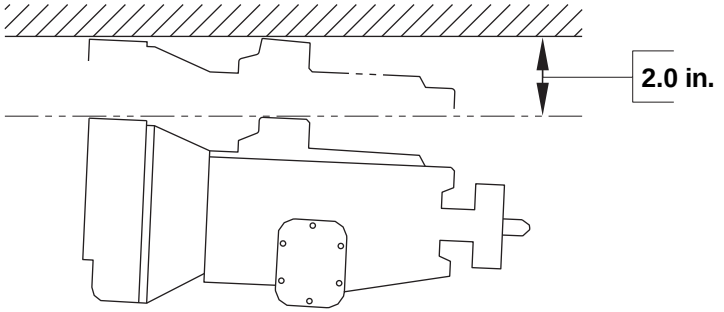



Figure 2




**Front and Back Clearance: 1 inch**

Figure 3

***Front and Center Propeller Shafts***

At least 1.25 inches of clearance should be maintained around front and center propeller shafts.

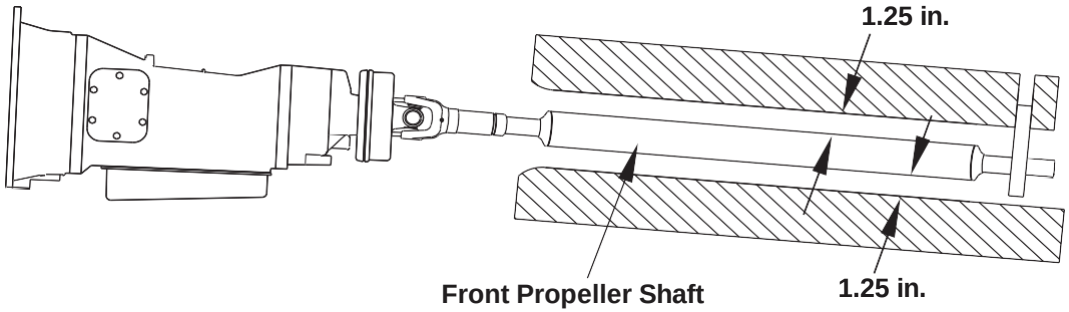



Figure 4

***Rear Propeller Shaft***

With the rear springs at maximum deflection, at least 1.25 inches of clearance should be provided over the rear propeller shaft.

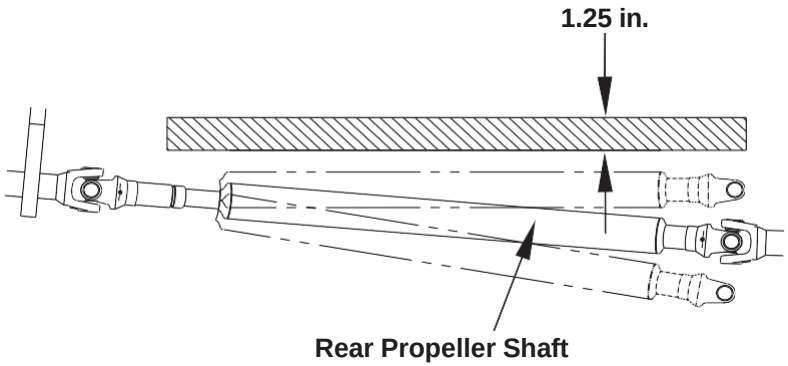



Figure 5

***Rear Wheel and Axle***

The design and installation of the body should allow sufficient clearance for full vertical movement of the rear wheels and axle when the vehicle travels over rough or unleveled surfaces.

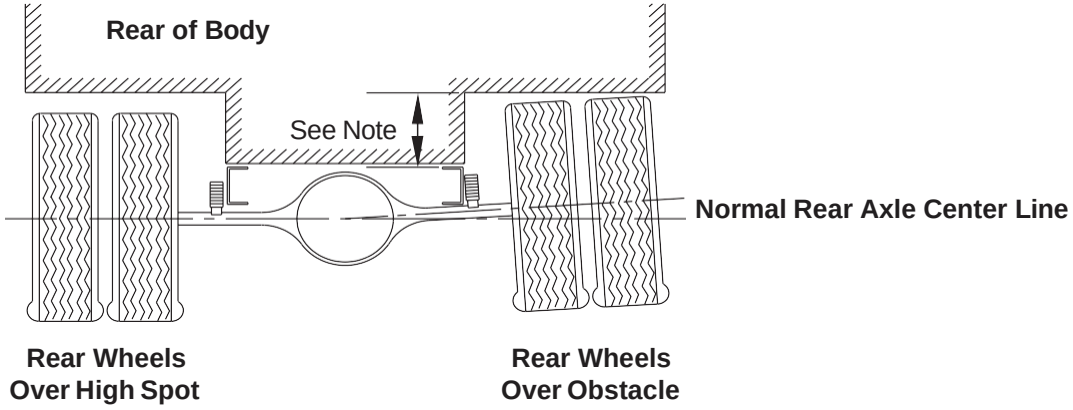



Figure 6

**Note:** For recommended clearances, please refer to the Rear Axle Chart in each model's respective section.

***Other Clearances***

The transmission control cable may be broken if it is bent by or interferes with the body and its fixtures. To prevent this, 1 inch of minimum clearance should be provided. When cable is detached from body mounting, be sure not to bend the cable.

Accessibility to the grease nipple on the rear spring bracket/shackle should be provided so that serviceability with a grease gun is not hampered.

| Parts | Location | Minimum Clearance (in) |
|---|---|---|
| Brake Hose | Axle Side | 6.7 |
| | Frame Side | 1.6 |
| Shock Absorber | Axle Side | 2.4 |
| | Frame Side | 1.2 |
| Parking Brake Cable | - | 1.2 |
| Fuel Hose | - | 1.6 |

Figure 7

***Exhaust Pipe Clearances***

If flammable materials such as wood are used in the body, provide at least 3.9 inches of clearance between the body and any parts of the exhaust pipe, DPF/ SCR Package. If it is impossible to maintain the minimum clearance, use a heat shield. Also use a heat shield if an oil pump or line is located above the exhaust pipe, muffler or catalytic converter.

1. Clearances around SCR system components must be greater than 1.0 inch at all times to avoid potential contact between the body and the exhaust components. The 1.0 inch allows for thermal expansion and assembly tolerance of the exhaust system. It does not account for dynamic movement in the body due to road conditions and other loads. Body companies are instructed to adjust this 1.0 inch clearance as required to account for body displacement while driving. This guidance does not supersede guidance or exhaust clearances for temperature sensitive or flammable components.
2. Exhaust temperatures have not changed since the introduction of DPF in 2007.

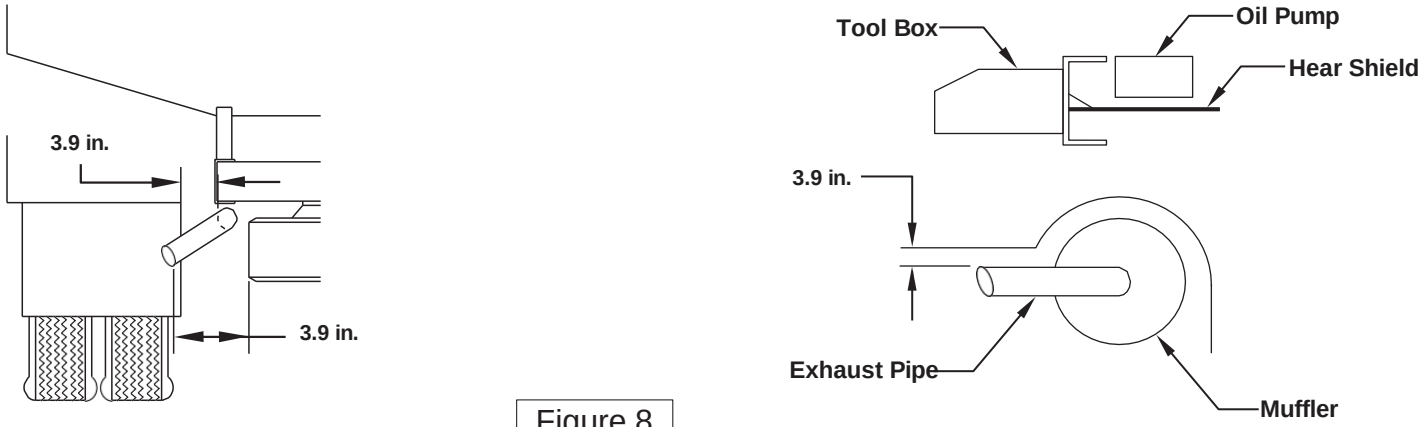



Figure 8

***Exhaust Heat Clearances***

During the DPF regeneration cycle, exhaust gas temperatures are hot. Therefore, care should be exercised in placement of the pipe's end location and angle. Do not locate any body components or equipment around the exhaust pipe's end area.

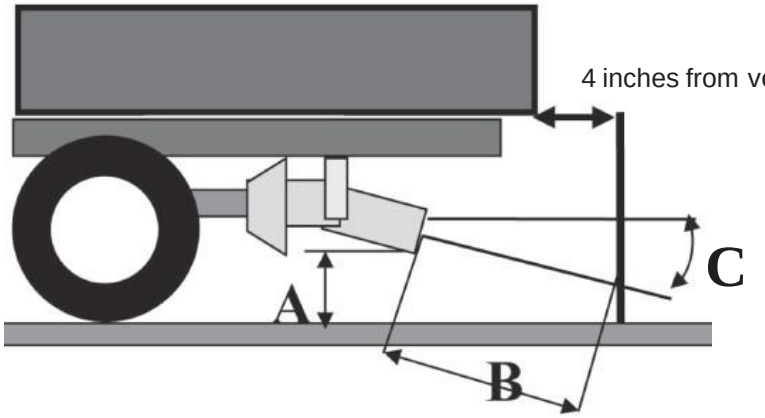



Figure 9

| Dimension | Clearance |
|---|---|
| A | 8 in. (minimum) |
| B | 18 in. (minimum) |
| C | 45 deg. (maximum) |

## Exhaust System

The exhaust system has a crucial role in meeting 2010 EPA regulations. In order to maintain compliance with the 2010 EPA emissions levels the Diesel Particulate Filter (DPF) and SCR package must not be moved. The distance between the engine exhaust manifold down pipe and Diesel Particulate Filter (DPF) / Selective Catalytic Reduction Package (SCR) must be maintained and the pressure in the system must be sustained at a constant level. Due to increased temperatures in the exhaust system during the regeneration cycle and the heat stress caused by these temperatures, body builders should closely evaluate the placement of equipment and provide protection to these added components as needed.

### *Diesel Particulate Filter (DPF) and Selective Catalytic Reduction (SCR) Restrictions*

1. The DPF/SCR has exhaust pressure pipes and temperature sensors. Care must be taken when a body is installed so as to not damage pipe sensors.
2. The DPF/SCR should be free from impact or vibration during body installation.
3. The DPF/SCR must have enough room for disassembly of the unit for service and cleaning.
4. The DPF/SCR switch in the cab should not be removed or disabled. No modification or relocation of the DPF/SCR unit, pressure pipes, and sensor is permitted.

### *Exhaust System Modification*

Modification of the exhaust system should be avoided. If modifications are absolutely necessary, the following points should be maintained.

1. Maintain the clearance specified in the table below between all parts of the exhaust system and any fuel lines, brake lines, brake hoses, electrical cables, etc. The exhaust outlet should not point toward any of these parts.

| Component | Clearance Dimension |
|---|---|
| Brake Lines | 2.4 in. or more. If the combined section of a group of parallel brake lines is more than 7.8 in., a clearance of 7 in. or more should be provided. |
| Flexible Brake Hoses | 7.8 in. or more. The temperature of flexible brake hoses should not exceed 158°F. If the highest temperature is not measurable, a clearance of more than 15.7 in. should be maintained between the hoses and the exhaust system. |
| Wiring Harnesses and Cables | 7.8 in. or more. The temperature of flexible brake hoses should not exceed 158°F. If the highest temperature is not measurable, a clearance of more than 15.7 in. should be maintained between the hoses and the exhaust system. |
| Steel Fuel Lines | 3.1 in. or more. |
| Rubber or Vinyl Fuel Hoses | 5.9 in. or more. |

2. If a toolbox is installed, it should preferably be made from steel. If a wooden toolbox is installed, at least 7.8 inches of clearance should be maintained between the toolbox and any parts of the exhaust system.
3. If the exhaust system is modified, it is the responsibility of those making the modification to ensure that the noise level meets appropriate standards.
4. If the exhaust system is modified, it is the responsibility of those making the modification to ensure that the emission levels meet appropriate standards.
5. Exhaust system component temperatures are sufficient to ignite flammable materials; efforts should be made to prevent flammable materials from interacting with the exhaust system.

***DPF/SCR Heat Shield Removal***

The exhaust external heat shield does not impact vehicle emissions or emissions system durability. This shield can be removed or modified in order to facilitate body or equipment mounting, but the completed vehicle manufacturer should ensure that, when completed, the exhaust will be adequately shielded to prevent unintentional contact with hot exhaust components, and that heat transfer to body components is not so high as to present safety or durability risks. Detailed information on removal of the heat shield can be found in the service manual.

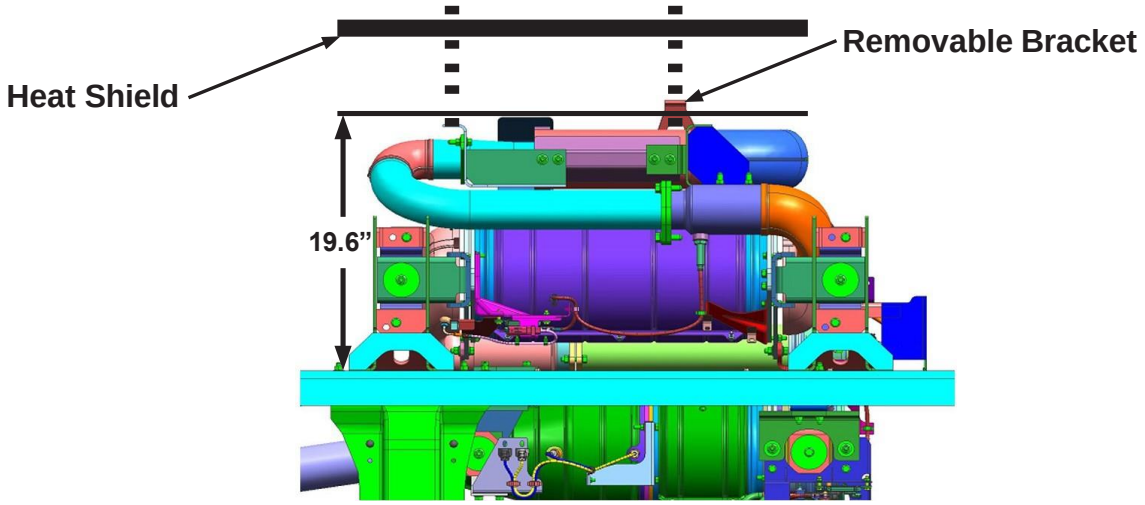



Figure 10

***3500, 4500 & 5500 No Modification Zones***

The DPF/SCR unit **CANNOT** be modified or moved. The DEF tank and pump **CANNOT** be modified or removed. DEF lines and coolant lines **CANNOT** be modified or rerouted.

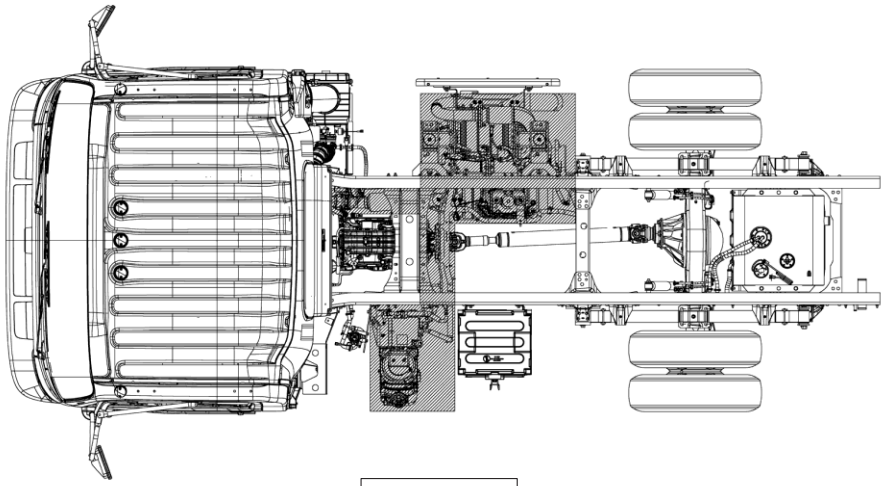


Figure 11

***Gas (6.6L Engine) No Modification Zones***

The vehicle exhaust, evaporative system, and fuel tank are integral parts of the evaporative/engine and emission/diagnostic control system and **CANNOT** be modified or rerouted.

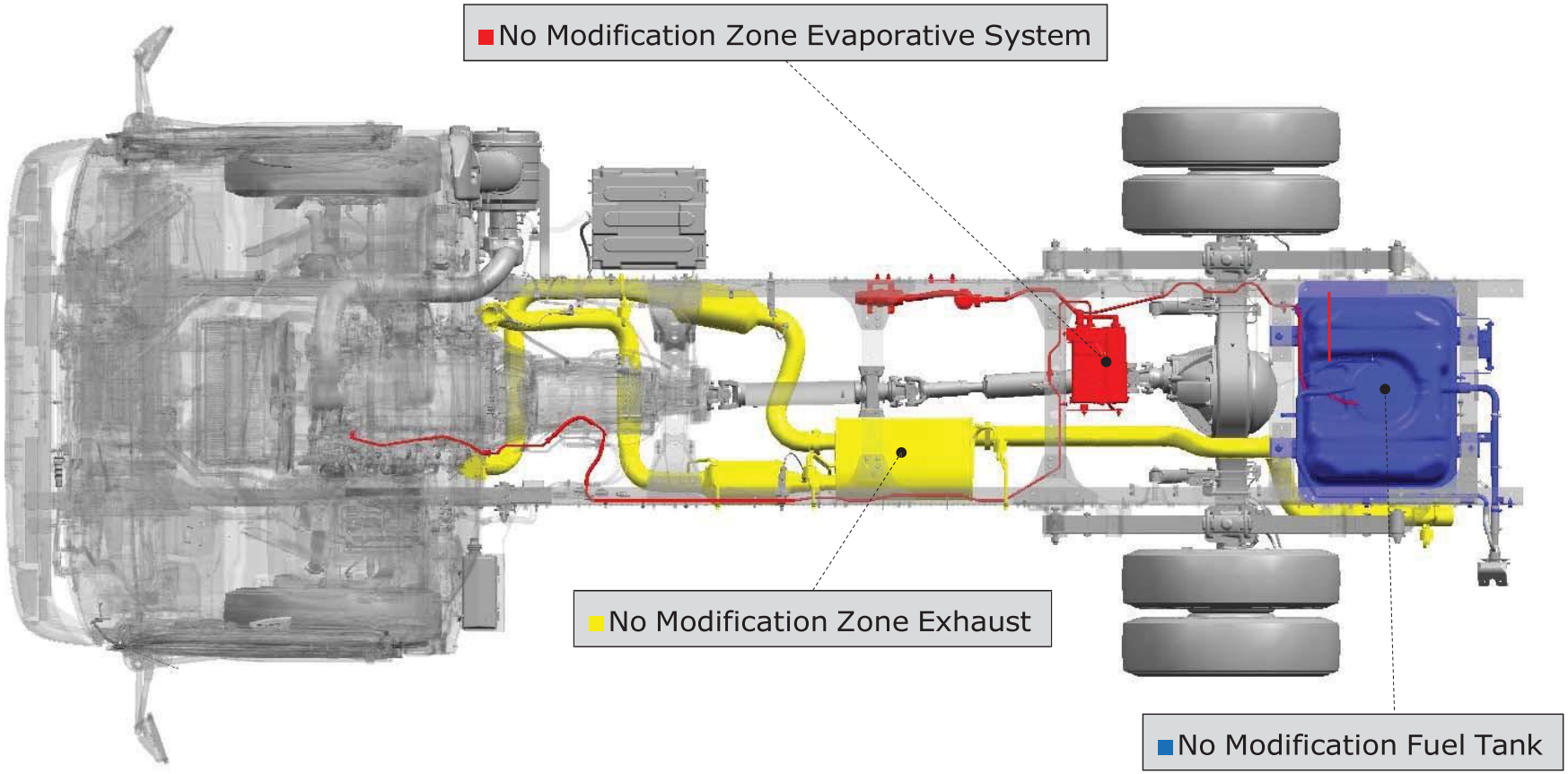



Figure 12

## Body Installation

### Mirrors

The Chevrolet LCF chassis will accommodate up to 96-inch-wide bodies without modification to the mirror brackets. Bodies wider than 96 inches and up to 102 inches wide will require modified mirror brackets. This Modification can be made at the port and the vehicle order/label will indicate a Regular Product Option (RPO) of IU2 indicating “Mirror Bracket for 102 wide body”. The brackets can also be modified by the Chevrolet Dealer or the Body Company by installing mirror brackets ordered from GM Parts.

### Sidestep Door Installation Recommendations

1. Floor of body should be at least 10” above frame rail (2.5” wood + 4” long sill + 3” cross sill + 1.125” floor).
2. Forward end plate of step well area can interfere with SCR system.
3. All body components should maintain a minimum 1.0” of clearance to exhaust components UNDER ALL (DYNAMIC) CONDITIONS. (Body company will need to add to this 1.0” clearance to account for flex or movement in the body).
4. Outer heat shield on SCR system can be removed prior to mounting body if required for clearance. Care should be taken to adequately shield exhaust.
5. A driver’s side steps can also be accommodated depending on the door location. If the door is located behind the DEF tank, the battery may have to be relocated.
6. Access hatch for DEF tank fill may have to be added, depending on door location.

### Special Equipment on the Chassis

When installing special equipment on the chassis, extra consideration must be given to the weight and construction of the equipment to assure proper distribution of the load. Localization of the load should be prevented. All special equipment should be properly secured into position. We recommend the use of subframe members when installing special equipment.

### Subframe Design and Mounting

The sub frame assembly should be mounted as close to the cab as possible. It should be contoured to match the shape and dimensions of the chassis frame as closely as possible.

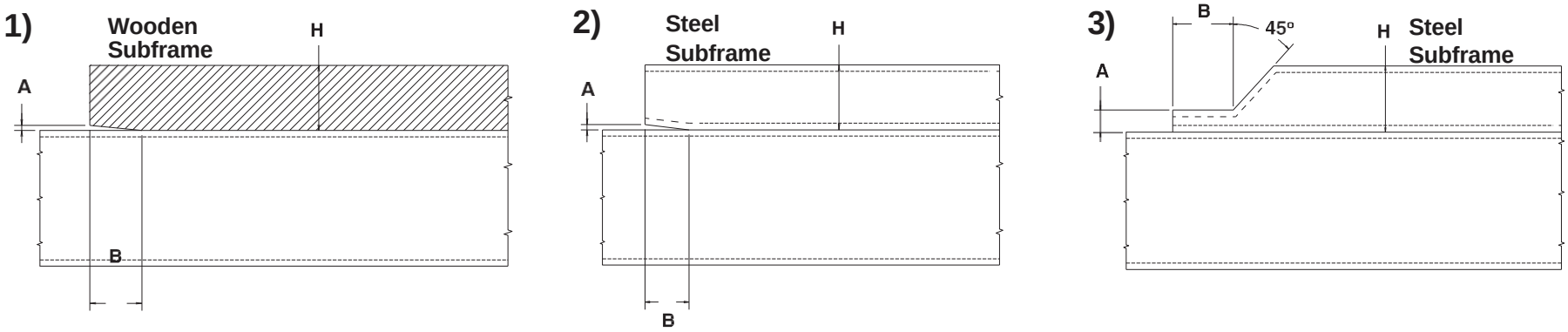
### Crew Cab Body / Frame Requirements

The Chevrolet LCF will be available in two wheelbases, 150 and 176 inches with CA's of 88.5 and 114.5 inches respectively.
On this model chassis, GM will require that the body installed on the chassis have an understructure manufactured with any of the following structural steel “C” channels:

1. 4” x 1-5/8”, 7.5 lb./ft.
2. 5” x 1-3/4”, 6, 7 or 9.0 lb./ft.
3. 6” x 2”, 8.2, 10.5 or 13 lb./ft.

***Subframe Contour***

Contouring of the front end of the subframe members as shown in the three illustrations below will prevent stresses from being concentrated on certain areas of the chassis frame.




| Drawing | A | B |
|---|---|---|
| 1) | 0.2 in. | $\frac{H}{2} \cong H$ |
| 2) | 0.2 in. | H or greater |
| 3) | $\frac{H}{3}$ | H or greater |

Figure 13

When using a steel subframe, do not close off the end of the subframe.

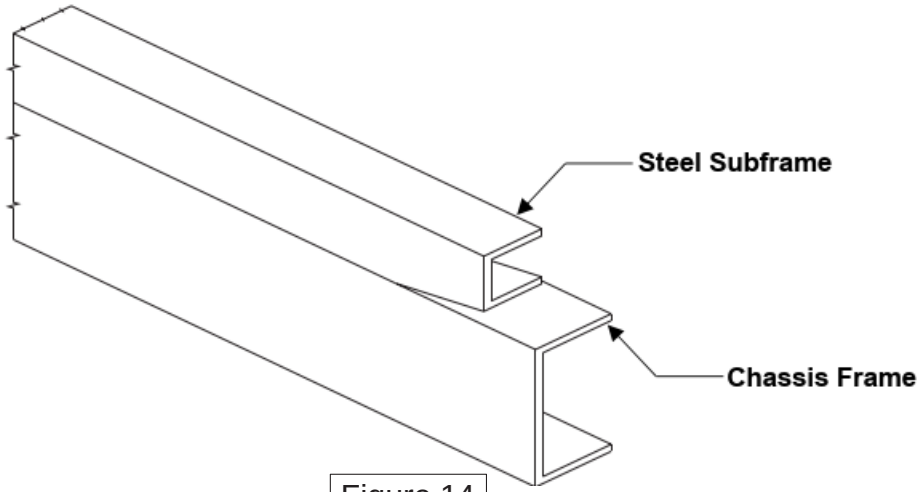



Figure 14

***Prohibited Attachment Areas***

Do not attach the subframe to the chassis frame with a bolt or bracket at the points indicated in the following illustrations.

1. At the front end of the subframe. The attaching bolt or bracket must be at least 2 inches behind the kick up point of the subframe (Figure 15).
2. Within 8 inches of bends in the chassis frame or the attachment points of any crossmembers (Figure 16).

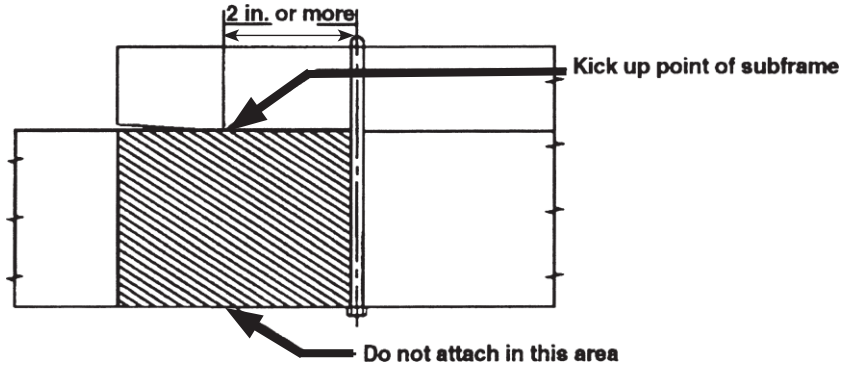



Figure 15

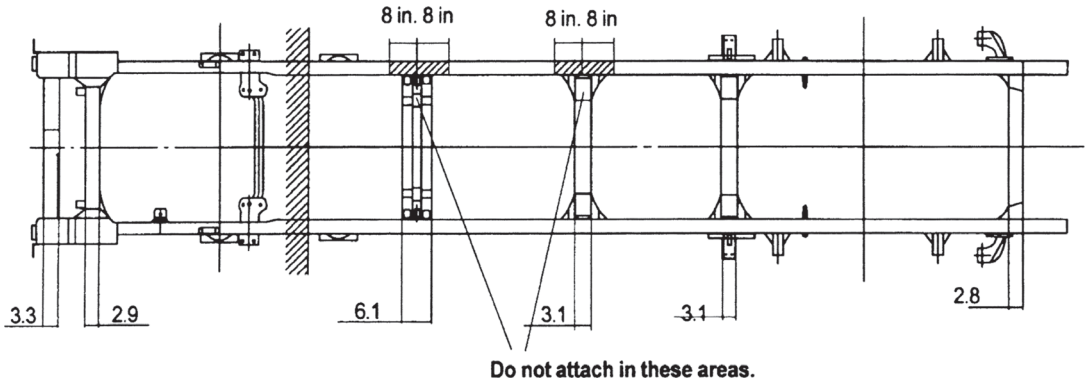
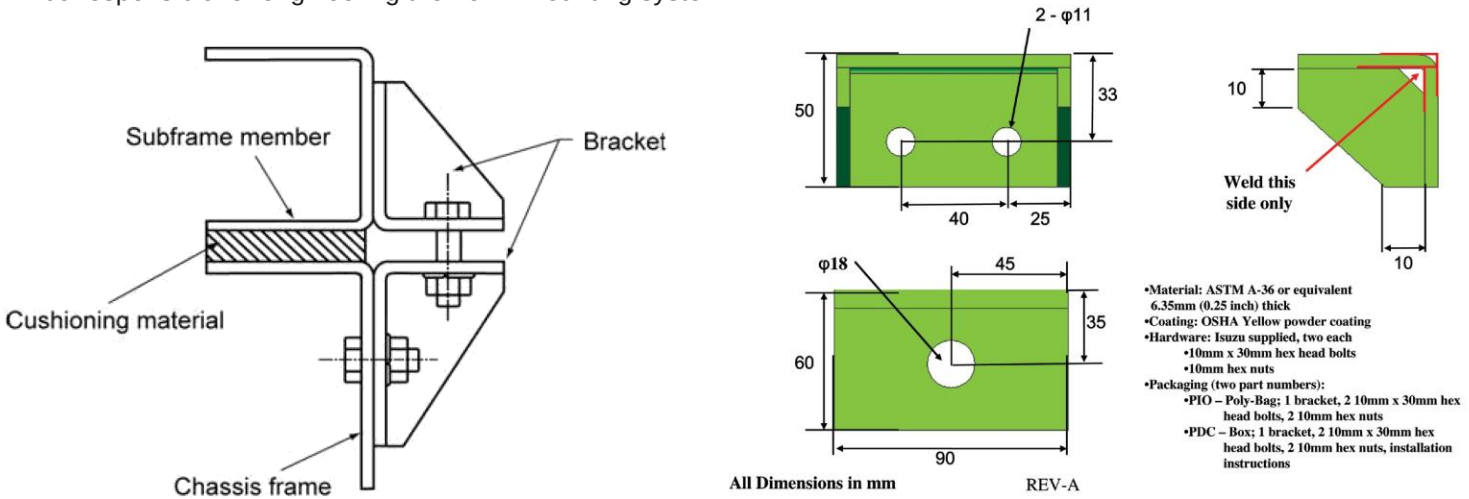



Figure 16

***Subframe Mounting - Bracket Installation***

Mounting brackets should be clamped to the chassis frame using bolts. For proper positions in which to install the bolts, refer to the section of this document "Modifications to the Chassis Frame." In addition to the illustrated bracket and U-bolts a shear plate may be required for adequately body mounting. The body company will be responsible for engineering their own mounting system.

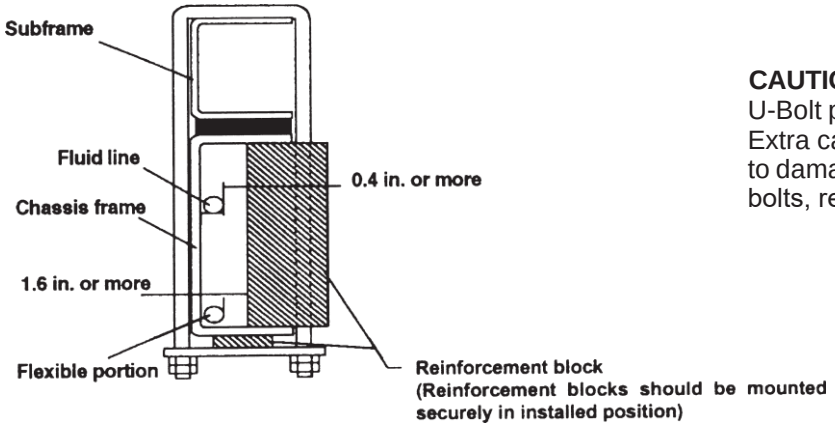



Note: Body mounting bracket will be painted "YELLOW" of easy identification

Figure 17

***U-bolt Installation***

When U-bolts are used to retain the subframe, reinforcement blocks must be installed in the frame members. This will prevent distortion of the frame flange as they are tightened. The drawing indicates the correct placement of reinforcement blocks. If you use wood blocks, be sure that there is sufficient clearance between them and any parts of the exhaust system. The use of J-bolts to retain the subframe is strictly prohibited. If any fluid lines or electric cables are located near the reinforcement blocks, you must provide at least 0.4 inches of clearance between rigid or stationary portions, and at least 1.6 inches between moveable or flexible portions of the lines.




**CAUTION:**
U-Bolt placement is critical with new emission systems and controls. Extra care must be taken when placing bodies on chassis so as not to damage these components. For the installation positions of the U-bolts, refer to "Prohibited Attachment Areas."

Figure 18

# 2025 Chevrolet Low Cab Forward

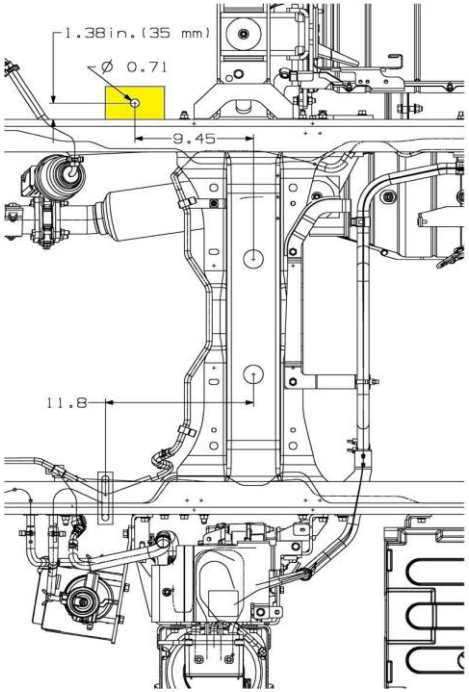


***Front U-bolt and Mounting Bracket, Mounting Locations Ahead of Transmission***

Mandatory location due to after treatment device location and interior frame components. The chassis will be supplied with one steel crush block in cab for left hand forward body attaching location as illustrated in the drawings below and one body mounting bracket (painted yellow) attached to the right-hand frame rail in the location shown in the drawings below. Body Builder will be required to design a mating bracket for attaching the body to the yellow painted chassis body mounting bracket (Ref Figure 17 for illustration of bolt clamping 2 brackets). No U-bolt type attaching allowed.

Front, RHS U-bolt on 150” Wheelbase Crew Cab interferes with after treatment system. GM will supply body mounting bracket on chassis to facilitate body mounting on the passenger side of the vehicle as illustrated in Figure 19 below.

**Standard Cab - Body Mounting Bracket Location**




Note: 4H Body Mount Kit - PN 2901400270

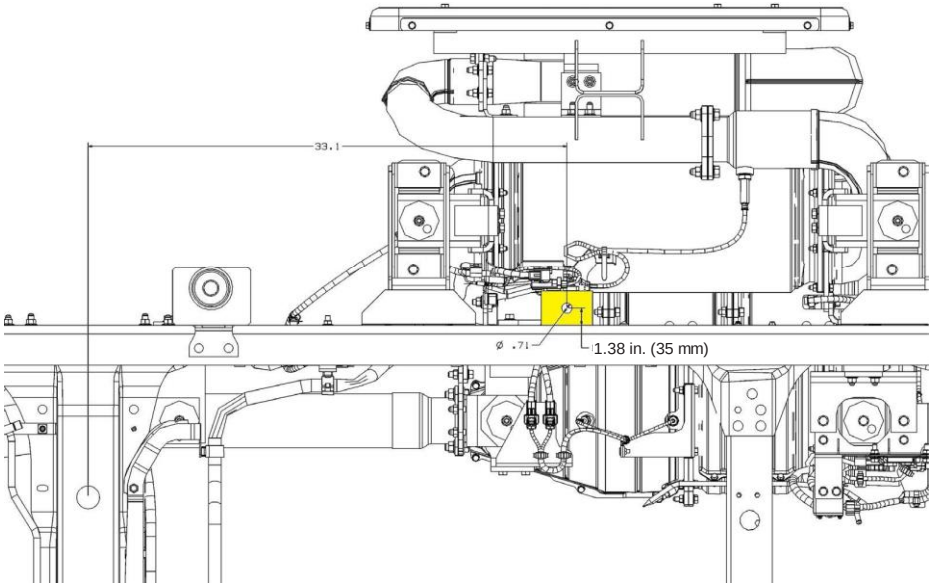
Crush Block and U-Bolt (Left Hand-Rail)

Body Mounting Bracket (Right Hand-Rail)

Figure 19

Forward

**Crew Cab 150’’ WB - Body Mounting Bracket Location**




Note: 4H Body Mount Kit 150” WB Crew Cab - PN 2901400250

Figure 20

***Modular Frame Hole Pattern***

The frame material is a heat-treated carbon manganese, and low alloy steel with good welding characteristics. The frame has an 40mm modular hole spacing standard. This standard pattern will assist with body mounting.

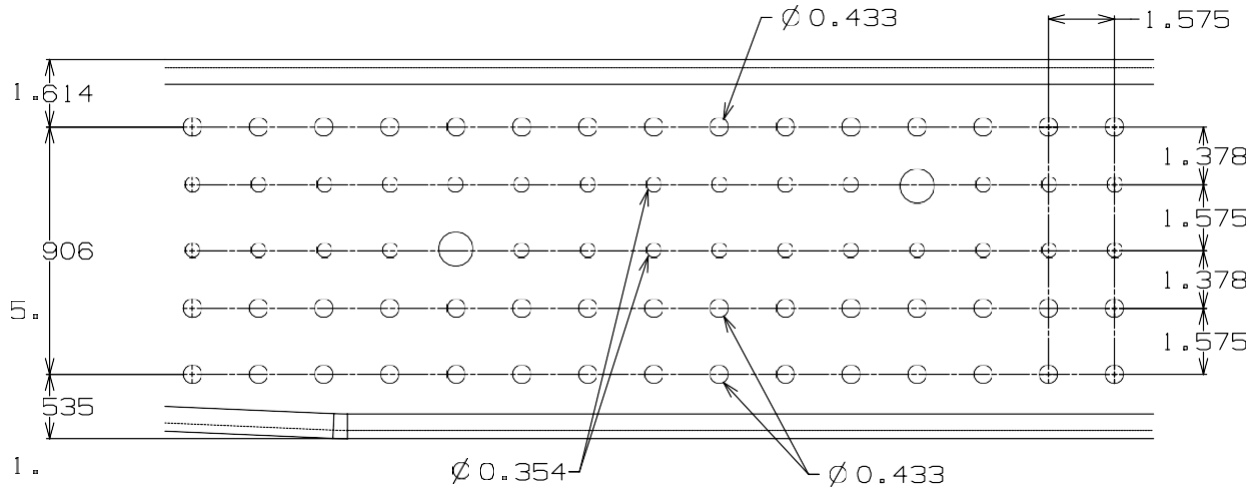
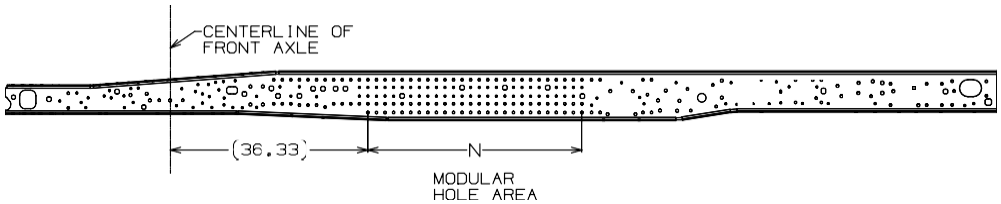



Figure 21

Depending on model, wheelbase, and chassis specification some holes are in use and some holes are intentionally missing. (Subject to change without notice).




| WB (inches) 4500 HG, 4500 XD, 5500 XG, 5500 XD | N (inches) |
|---|---|
| 109 | 39.37 |
| 132.5 | 63 |
| 150 | 80.3 |
| 176 | 105.5 |

Note: Re-tighten all attaching parts that are loosened during body installation.

Figure 22

Note: Dimensions in inches

## ***Modification of the Frame***

Modifications of the chassis frame should be held to an absolute minimum. Modification work should be performed according to the instructions in the following paragraphs.

When modification is complete, chassis frame members should be carefully inspected to eliminate the possibility of any safety-related defects.

**NOTE: PLEASE REFER TO NOTES ON CHASSIS FRAME MODIFICATION WITH ANTILOCK BRAKES.**

***Working on Chassis frame***

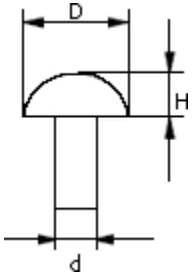
The chassis frame is designed and built with consideration for proper load distribution. Sufficient physical strength is provided when the load is evenly distributed. Installation of special equipment on the chassis frame can cause variations in load distribution. If even distribution of load is not kept in mind when the equipment is installed, localization of stresses on specific areas of the frame could cause cracking of the chassis frame members or other problems, even if the total weight of the equipment is within the design limit.

The chassis frame is designed as an integral unit. Therefore, we do not recommend cutting the chassis frame under any circumstances.

***Drilling and Welding***

**IMPORTANT NOTE: For vehicles equipped with electronic engines and or electronic or hydra-matic transmissions, electric arc welding must be done with the negative battery cable disconnected.**

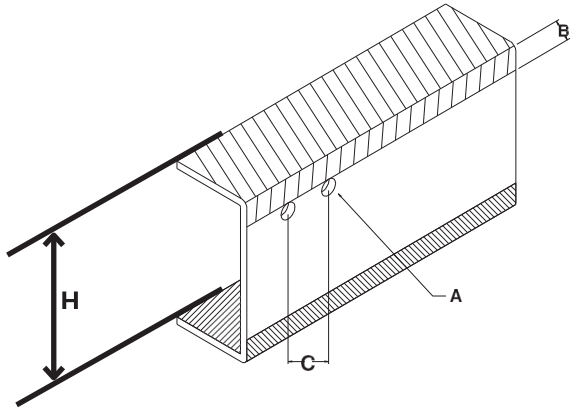
1. Do not drill or weld in the shaded portions of the chassis frame members (see below). Do not weld within 0.8 inches from the edges of any existing holes.
2. Hold the length of any welding beads within 1.2-2.0 inches. Allow at least 1.57.
3. All holes must be drilled. Do not use a torch to make any holes.
4. All riveting must be done with cold rivets. Do not use hot rivets.
5. The flange of the chassis frame must not be cut under any circumstances.
6. The subframe must be attached to the chassis frame with bolts. Do not weld.
7. Repaint exposed metal after drilling.




**Rivet size detail:**

D - 18mm (medium duty truck) / 21mm (heavy duty truck)
d - 11mm (medium duty truck) / 13mm (heavy duty truck)
H - 7.7mm (medium duty truck) / 11mm (heavy duty truck)

Figure 23




**Dimensions:**

A - no more than 0.59 inches in diameter
B - must be more than H/5 for welding and H/7 for holes
C - must be more than 1.57 inches
H = Frame Height

Figure 24

***Reinforcement of Chassis Frame***

Reinforcements must be installed to prevent the considerable variation in the section modulus. They must be welded so as to avoid localized stresses. The frame of the 3500, 4500 & 5500 is made of SAPH440 mild steel. The drawing below illustrates the correct and incorrect methods of frame reinforcement.

***Welding***

Keep reinforcement plates and chassis frame free from moisture and water. Avoid cooling with water after welding. Use a suitable means to protect pipes, wires, rubber parts, leaf springs, etc. against heat and effect of sputtering. Remove fuel tank assembly when welding portions near the fuel tank. Remove coat of paint completely when welding painted areas. Repaint exposed metal after welding.

When installing reinforcement by riveting or plug welding, place plugs or rivets in a zigzag pattern. When performing plug welding, be sure that electrical components, such as electric harnesses on the inner side of a chassis frame side member, are a minimum of 50mm apart from welding site. When inserting a rivet in a hole from which another rivet has previously been removed, the rivet should be 1 or 2mm larger in diameter than the removed one. Cold rivet only.

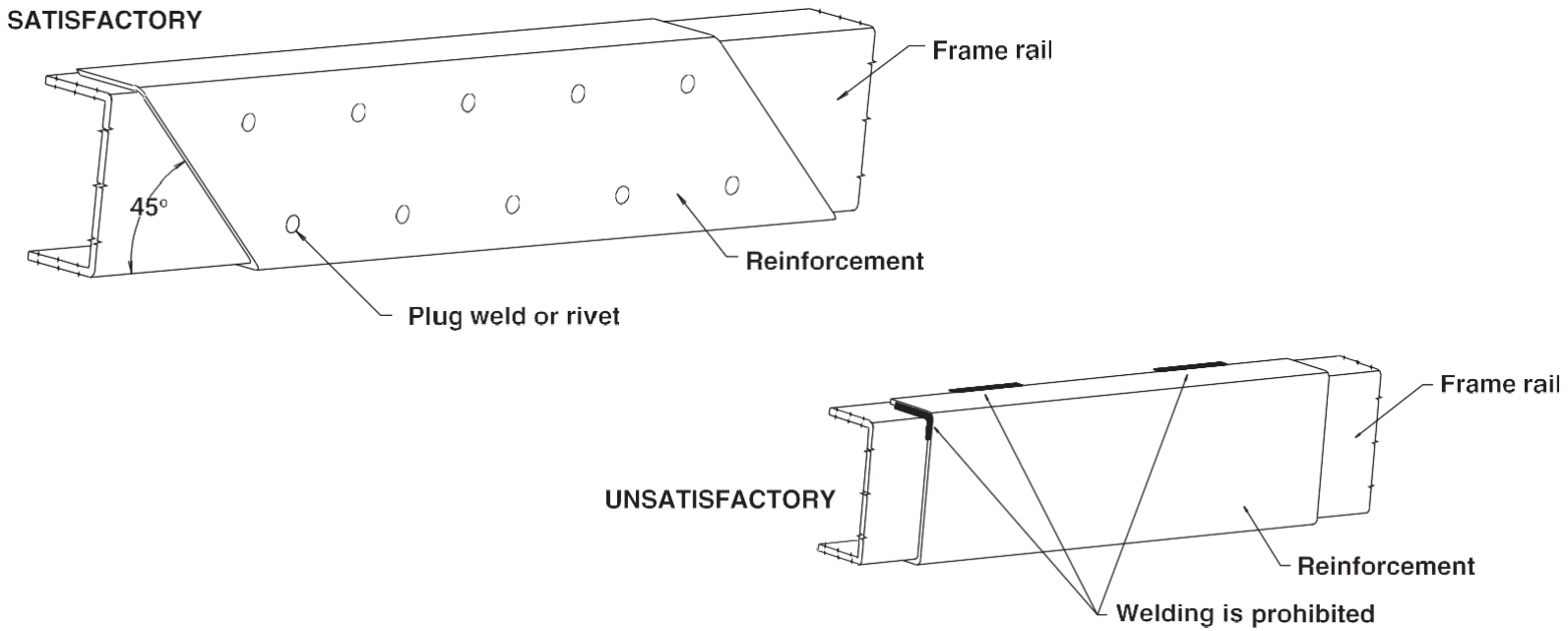



Figure 25

## ***Crossmember Modification***

Alligator type cross member - For alligator type, hole drilling, notch making, and welding are prohibited.

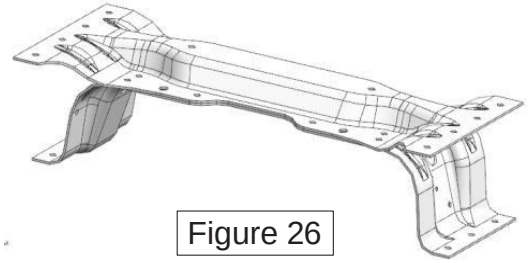


Figure 26

Channel type cross member: a – Allowable maximum hole diameter is 9mm, and this hole should be used only for piping or harness routing.
b – Prohibited area, no drilling should be done in this area.
c – See Figure 24 for minimum required distance.

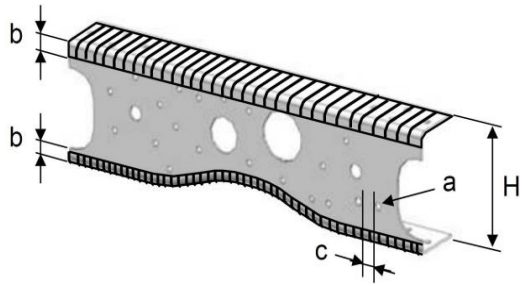



Figure 27

Gusset: Hole drilling and notch making are prohibited.

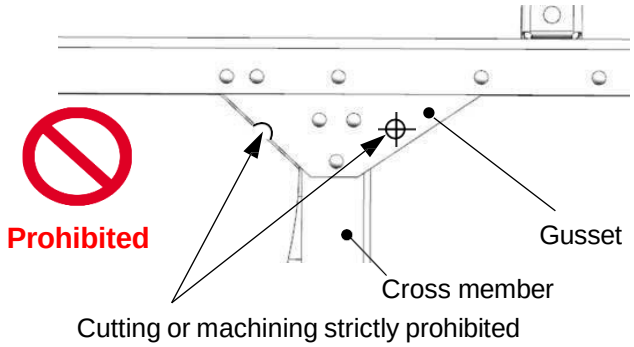



Figure 28

## ***Rear Overhang Modification***

If a body protrudes outward from the rear end of the chassis frame by 300 mm (11.8 in.) or more, lengthen the rear overhang of the chassis frame as indicated below. If it is necessary to cut the chassis frame, ensure that the cut location does not split existing holes.

1. Extension material
    - The extension material should be equivalent to that of side members. Refer to specification information for the vehicle model in consideration.
    - Thickness and bending radius of the extension material should be the same as that of side members. Refer to specification information for the vehicle model in consideration.

2. Installing extension material
    - **Extension material is 300mm or shorter:** Join extension material and chassis frame with a continuous butt weld around the entire circumference. After welding, grind finish weld surface.

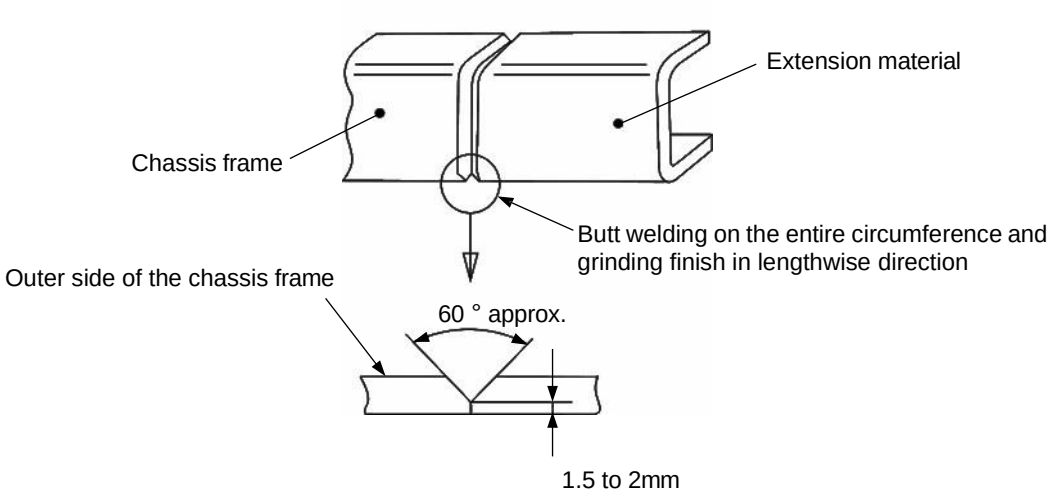
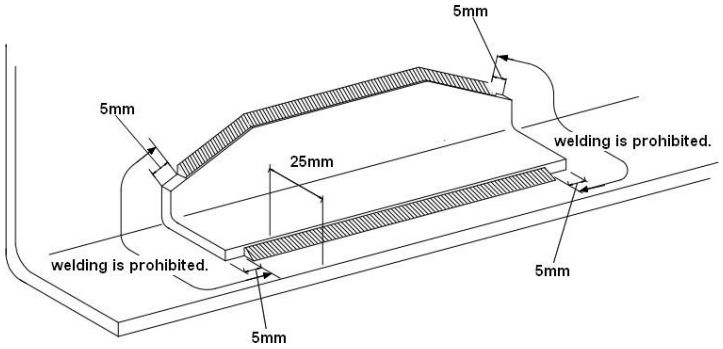



Figure 29

- **Extension material is longer than 300mm:** Join extension material and chassis frame with a continuous butt weld around the entire circumference, and then fit a reinforcement on the inner side of the chassis frame and extension material.




| Side member thickness [mm] | Reinforcement material thickness (recommendation value) [mm] |
|---|---|
| 8.0 at minimum | 7.0 |
| 7.5 | 5.5 to 7.0 |
| 7.0 | 4.5 to 6.0 |
| 4.0 to 6.0 | 4.5 |

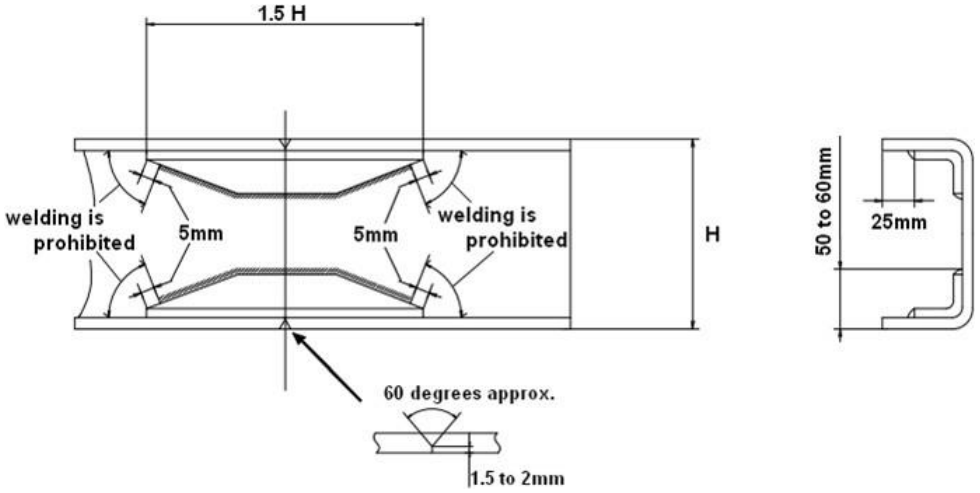



Figure 30

## Fluid Lines

Do not disturb the layout of any brake lines or fuel lines unless absolutely necessary. When modification is needed, follow the instructions below carefully to ensure safety. Brake fluid lines must not be cut and spliced under any circumstances. We do not recommend the cutting or splicing of any fuel lines, but if it is absolutely necessary, be sure that the correct fitting and tools are used to form the joint, and then pressure test the joint. Steel lines are metric sizes.

### *Preparation of Additional Lines*

1. Where possible, use only genuine GM lines as supplied by authorized Chevrolet dealers.
2. Use the correct metric flaring and bending tools to form the lines.
3. Avoid repeated bending. Do not use heat for flaring and bending the lines. Before and after forming the new lines, examine them carefully for scratches, distortion, dents, and the presence of any foreign matter.

### *Installation of Additional Lines*

Install new lines away from adjacent parts and away from any sources of heat.

1. A minimum clearance of 0.4 inches must be maintained between lines. Where necessary, clip the lines into position in order to maintain this minimum clearance.
2. Minimize any crossing between lines. If a crossing is unavoidable, use the following procedure:
    a. At least 0.4 inches of clearance should be maintained between lines at the crossing point.
    b. If the 0.4 inches of clearance cannot be maintained, or if the lines are subject to vibration, clip them securely.
3. Plan the bends and clipping points of the lines to minimize vibration and the resulting fatigue.
4. Use rust-proofed clips and apply vinyl coating to the portions of the lines to be clipped.
5. Install new lines in positions where they are protected against water, dirt, grit, sand, rocks, and other foreign matter that can come from above or below or can be flung up by the wheels.

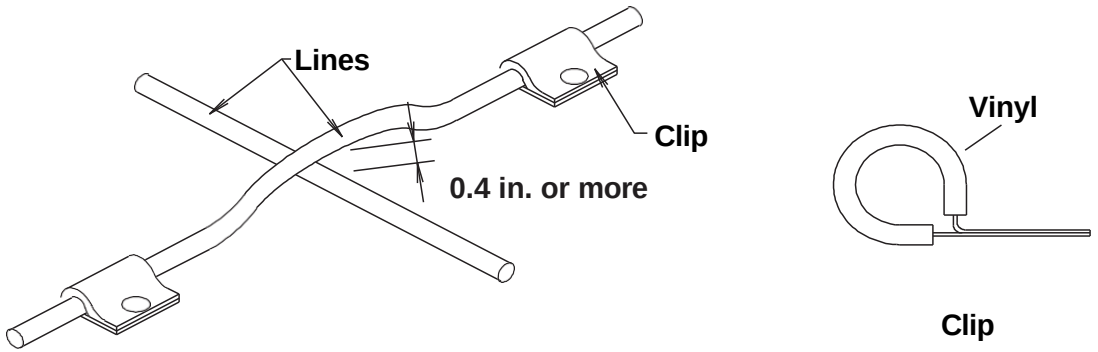



Figure 31

## ***Electrical Wiring and Harnessing***

To increase the reliability of the wiring, all frame harnesses are covered with corrugated vinyl tubing. The following instructions apply to extending or modifying these harnesses. See the Electrical Section for information on commonly used circuits.

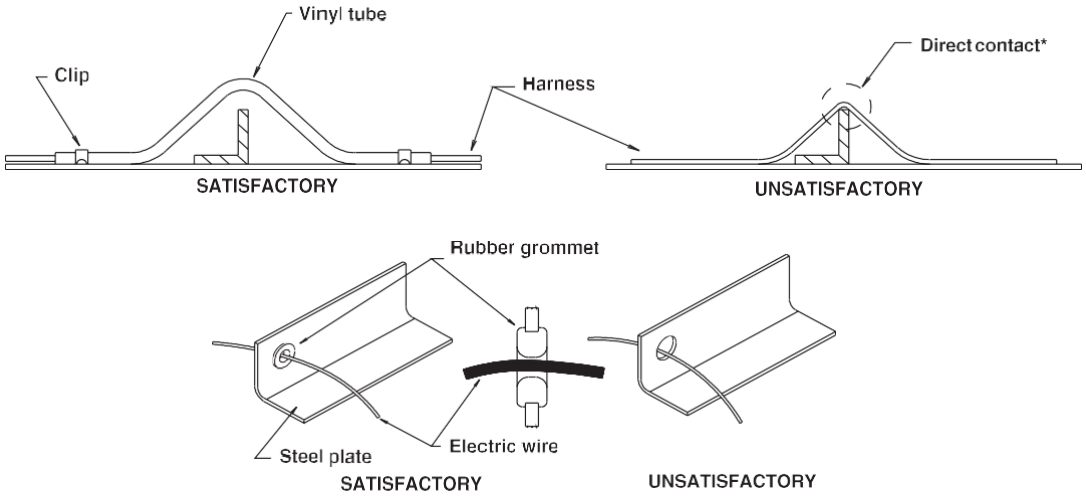
***Wiring***

1. Most wiring connections on GM vehicles are made with terminals. We recommend the use of terminals when splicing cables and wires.
2. When splicing, use new wire of the same gauge, and do not make splices inside the corrugated tubing.
3. When making connections to the end of the harness, make sure the connections are electrically perfect. Use insulating tape as needed to prevent the entry of water, which results in short circuits and/or corrosion.
4. When making new circuits, or modifying circuits already installed, make the cables only just taut enough to remove any slack. Use clips or grommets where required to protect cables from heat or sharp edges. When cables must run near the exhaust system, see the instructions in the “Exhaust System” section.
5. Always use rustproof clips and apply vinyl coating to that portion of the clips in direct contact with the harnesses. No scotch clips or connectors.
6. To minimize the vibration of the harness, clipping points should be set up according to the table below.
7. When changing the length of the battery cable, do not cut or splice the existing cable. Make up a new cable of the correct length and wire gauge for the load and distance, without splices.
8. When using connectors, use a socket (female) connector on the electrical source side and a plug (male) connector on the electrical load side to lower the possibility of a short circuit when disconnected.
9. When connecting cables to moving or vibrating parts such as the engine or transmission, be sure to maintain sufficient slack in the wiring to absorb the vibration. Follow the example of existing cables connected by GM. Keep flexible cables clear of other parts.
10. Do not use vinyl tape in the engine compartment. The heat will tend to make it peel off. Use plated steel clips coated with rubber or vinyl.
11. When locating auxiliary equipment or lines near the ECM caution should be used in order to protect the ECM from excessive vibration, heat or chemical reactions.

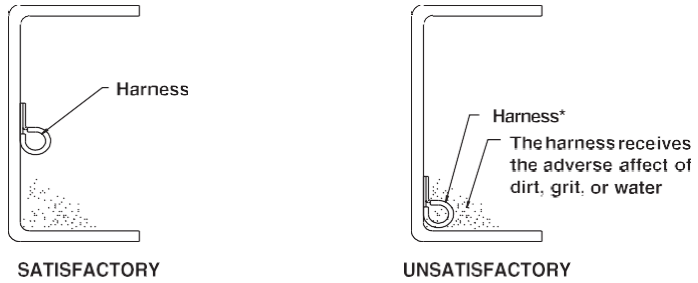
*Wiring Harness Clip Distances*

| Harness Diameter | Clip Distance |
|---|---|
| less than 0.2 in. | less than 11.8 in. |
| 0.2 in. ~ 0.4 in. | approx. 15.7 in. |
| 0.4 in. ~ 0.8 in. | approx. 19.7 in. |

Figure 32




* Cables should not be in contact with sharp edges or piercec holes.




* Harnesses should not be installed on inside lower face of the chassis frame.

* Harnesses should not be taped to fuel lines or other lines. A sufficient clearance should be maintained between harness and pipe lines.

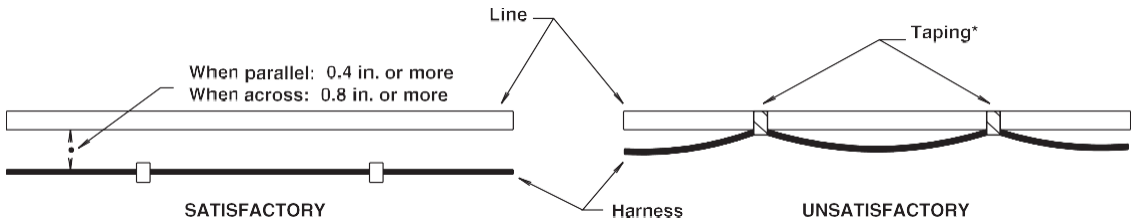



Figure 33

***Wire Color Code***

The electrical circuits of the Chevrolet LCF Chassis Cab are connected with low-voltage stranded wire for automotive applications. The color-coding standards are as follows for the Chevrolet LCF Chassis Cab:

(1) Black
(2) White
(3) Red
(4) Green

B Starter circuits and grounds
W Generator (alternator) circuit
R Lighting circuit
G Signal circuit

(5) Yellow
(6) Brown
(7) Light Green
(8) Blue

Y Instrument circuit
Br Accessory circuit
Lg Other circuit
L Windshield wiper motor circuit

*Maximum Allowable Current by Wire Size*

| Harness Design Diameter (mm) | AWG Equivalent | No. of Wires/Wire Diameter (mm) | Cross Sectional Area (mm2) | Maximum Allowable Current (Amps) |
|---|---|---|---|---|
| 100 | 00 | 217/0.80 | 109.1 | 363 |
| 85 | 0 | 169/0.80 | 84.96 | 305 |
| 60 | 1 | 127/0.80 | 63.84 | 248 |
| 50 | 1 | 108/0.80 | 54.29 | 223 |
| 40 | 1 | 85/0.80 | 42.73 | 191 |
| 30 | 2 | 70/0.80 | 35.19 | 171 |
| 20 | 4 | 41/0.80 | 20.61 | 123 |
| 15 | 6 | 84/0.45 | 13.36 | 93 |
| 8 | 8 | 50/0.45 | 7.952 | 68 |
| 5 | 8 | 65/0.32 | 5.228 | 51 |
| 3 | 12 | 41/0.32 | 3.297 | 39 |
| 2 | 14 | 26/0.32 | 2.091 | 29 |
| 1.25 | 16 | 16/0.32 | 1.287 | 21 |
| 0.85 | 18 | 11/0.32 | 0.8846 | 17 |
| 0.5 | 20 | 7/0.32 | 0.5629 | 13 |

**Reference:** The values given in the “maximum allowable current” column are based on the ambient temperature condition of 104°F with temperature increase of 104°F.

Figure 34

***Electrical System Modifications***

Modifications/add-on wiring must be carefully reviewed to ensure compatibility with the base vehicle wiring by reviewing system schematics, wire routing paths, harness connections, etc. Due to the wide range of modifications that may be required for vocational needs, it is not feasible for the O.E.M. to take into account all potential revisions. For this reason, any person modifying existing vehicle wiring must assume responsibility that the revisions have not degraded the electrical system performance. Any add-on wiring needs to be properly fused and routed to prevent cut, pinch, and chafe problems, as well as avoid exposure to excessive heat. Care must be exercised that existing vehicle interfaces do not have their current load capabilities exceeded, and that the respective control devices are not overloaded. Added wire size should be at least as large as the wire to which it is attaching in order for fuse protection to be maintained.

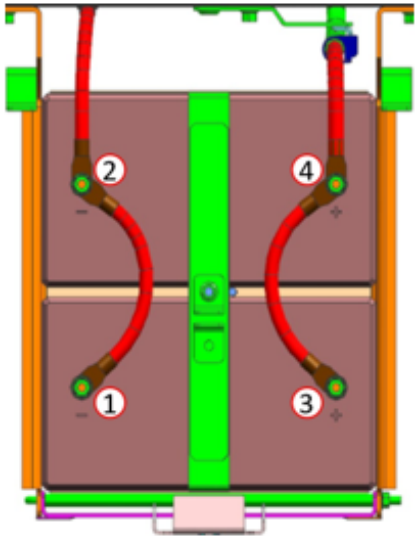
A Packard electric wiring repair kit is available through Kent-Moore (P/N J38125-B) (Phone # 1-800-345-2233). This kit contains instructions, tools and components for making repairs to wiring harness components. This kit would also greatly assist in accomplishing necessary add-on wiring such as body marker lamps, so that system reliability/durability is maintained.

Electrical wiring components can be obtained through your authorized Chevrolet dealers. Packard Electric components are also available through Power and Signal (www.powerandsignal.com). Power and Signal may also be able to assist in making necessary wiring additions by providing custom wiring stubs or jumpers to your specifications.

**CAUTION:** Before servicing any electrical component, the ignition key must be in the LOCK position and all electrical loads must be OFF, unless instructed otherwise in GM service procedures. If a tool or equipment could easily come in contact with a live exposed electrical terminal, also disconnect the negative battery cable. Do not disconnect cable within 3 minutes after turning the ignition key to the Lock position. Failure to follow these precautions may cause personal injury and/or damage to the vehicle or its components.

**ELECTRICAL CAUTION:** Please see bulletin on the subject of “NO-START CONDITION – CLICKING OR BANGING FROM STARTER 2012-2015MY Chevrolet LCF Equipped with 5.2L (4HK1) Diesel Engines”.

*Battery Terminal Tightening Torque*




| No. | NUT SIZE | TORQUE |
|---|---|---|
| ① ~ ④ | 3/8-16 (inch) | 15±2 (N·m) |

Figure 35

***Fuel System***

Relocation of the fuel tank, or installation of additional fuel tanks, is not recommended. If modifications to the fuel system are unavoidable, follow these recommendations:

1. Maintain adequate clearance between the fuel tank and any other device or structure.
2. Do not connect any additional fuel hose.

***Rear Lighting***

Brackets installed are temporary. Please do not use these brackets for body installation.

***Serviceability***

No matter what other modifications or changes are made, access to components requiring daily preventive maintenance or other routine service must not be obstructed. This includes the following items:

1. Inspection, filling and draining of engine oil and cooling water.
2. Inspection, filling and draining of transmission fluid.
3. Adjustment, removal, and installation of the fan belts.
4. Inspection, filling and removal of the battery and battery cover.
5. Inspection and filling of brake fluid.
6. Inspection and bleeding of the brake system and servo unit.
7. Maintenance of clearance for tightening of check bolt on brake safety cylinder.
8. Operation of the spare tire carrier, including mounting and dismounting of the spare tire.
9. Adjustment, removal, and installation of distributor and/or cover.

## Wheelbase Alteration

With certain applications, it may become necessary to alter the wheelbase of the chassis. The following pages provide the suggested guidelines for accomplishing either shortening or lengthening of the wheelbase.

### *Shortening/Lengthening the Wheelbase Without Altering the Frame*

Since the frame is an integral part of the chassis, it is recommended for the frame not be cut if it is avoidable. When shortening or lengthening the wheelbase on some models, it is possible to do so without cutting the frame. This is possible on models which have a straight frame rail. If the chassis does not have a straight frame rail, it may still be necessary to cut the frame. For instructions on shortening or lengthening these chassis, refer to the "Altering the Wheelbase by Altering the Frame" section of this book. Otherwise, the wheelbase may be shortened or lengthened by removing the rear suspension, drilling new suspension mounting holes at the appropriate spot in the frame, and sliding the rear suspension, suspension liner, and suspension crossmembers forward or aft.

The suspension and suspension crossmembers' rivet holes left in the frame rail flange must be filled with GRADE 8 bolts and hardened steel washers at both the bolt head and nut, HUC bolts or GRADE 8 flanged bolts and hardened steel washers at the nut. When shortening/lengthening the wheelbase in this manner, the following guidelines must be adhered to:

1. All frame drilling must comply with the DRILLING AND WELDING section of this book.
2. All rivet holes left in the frame rail flange from the suspension and suspension crossmembers must be either filled with GRADE 8 bolts and hardened steel washers at both the bolt head and nut, HUC bolts or GRADE 8 flanged bolts and hardened steel washers at the nut.
3. The components required to be slid forward or aft are the suspension and suspension hangers, suspension crossmembers and suspension frame liner.

### *Altering the Wheelbase by Altering the Frame*

Even on a straight frame rail, it may be desirable to cut the frame and lengthen or shorten the wheelbase rather than simply sliding the rear suspension back or forward. The following section offers some guidelines and suggestions for cutting and lengthening or shortening the frame.

### *Glossary of Terms – Chassis Wheelbase Alteration*

CA – Length from back-of-cab to rear axle centerline in inches.
AL – Added length (in case of a lengthened wheelbase). Difference between WB (new) and WB (old).
SL – Shortened length (in case of shortened wheelbase). Difference between WB (old) and WB (new).

1. Determine the added length (AL) or shortened length (SL) required to lengthen or shorten chassis. (For added wheelbase: New CA = CA + AL; For shortened wheelbase: New CA = CA – SL.)

2. Obtain the material to be used as the insert for the lengthened wheelbase in the correct length (AL). The insert must have the same cross-sectional dimensions and yield strength as the original frame rail.

3. Divide the new CA by two (2). Measure new CA/2 from the center of the rear axle forward and mark this point on the chassis frame (see figure below).

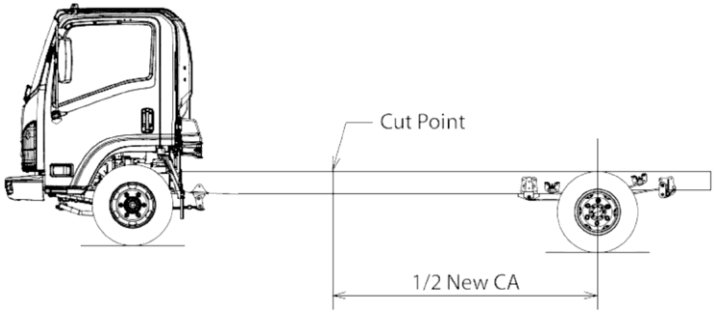



Figure 36

4. Cut the chassis frame at this point. If the wheelbase is to be lengthened, addition of the previously obtained insert (of length AL determined in step 1) will be made at this time. If the wheelbase is to be shortened, measure the distance (SL) forward of this cut and remove a length (SL) section from the chassis frame (see figure below). Ensure that an adequate area on the frame remains for the required addition of the necessary reinforcements. These are the only suggested places for cutting the frame and reinforcements but may be changed upon the advice of GM Upfitter engineering.

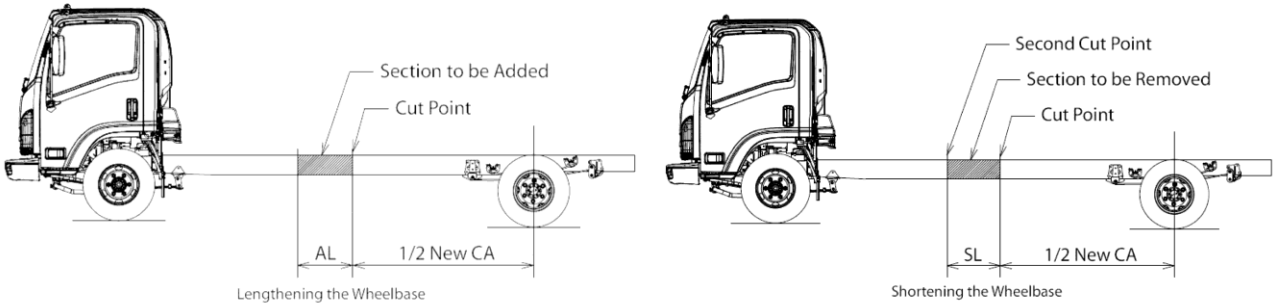



Figure 37

5. When welding the insert (length AL for wheelbase lengthening) to the original frame rail, a continuous butt weld must be used at the splices. When shortening the wheelbase, weld the ends of the chassis frame together with a continuous butt weld over the junction of the frame ends. Weld can be both the inside and outside of the frame rails using welding techniques prescribed by established welding standards (ref. SAE J1147) and in accordance with this manual. An example of this weld is shown below.

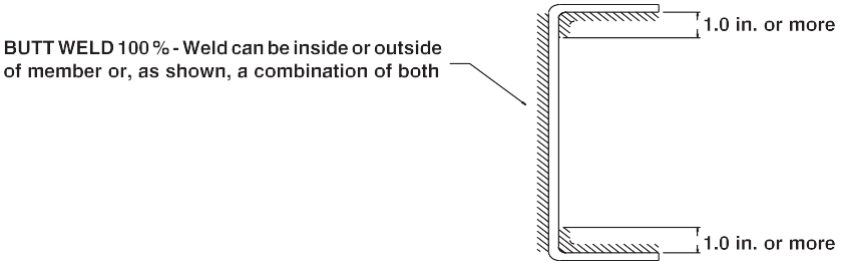



Figure 38

***Installation position of reinforcement material***

・Ends of outer reinforcement and inner reinforcement should not overlap.
・An end of outer reinforcement and cross member should not overlap.
・An end of outer reinforcement and spring bracket should not overlap.

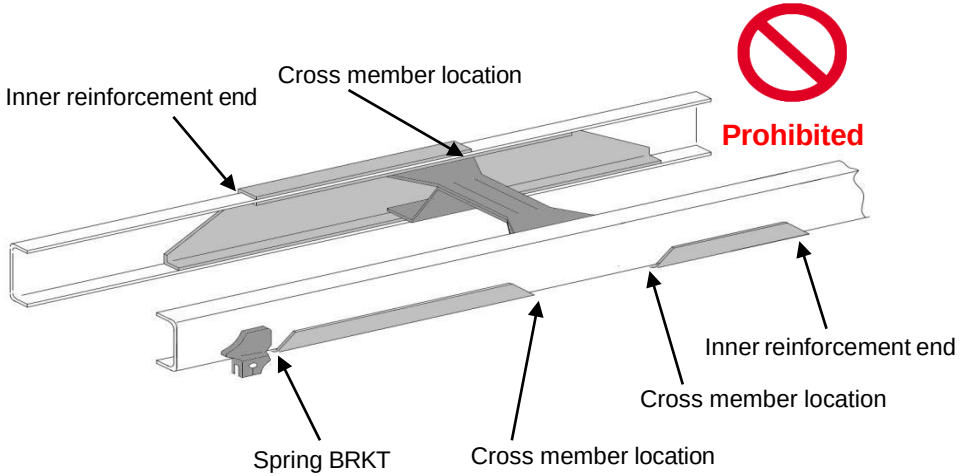
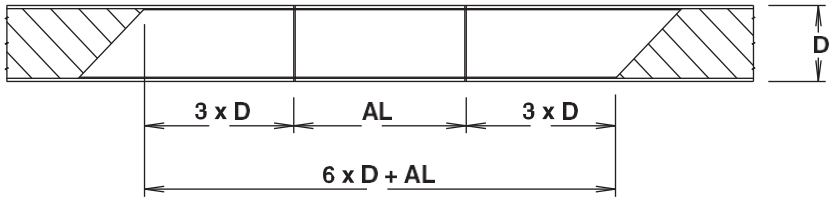



Figure 39

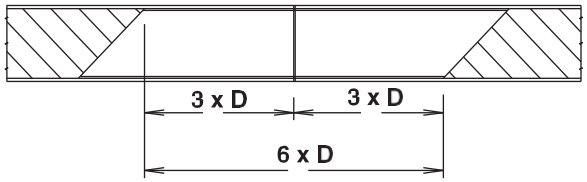
6. Determine the appropriate additional internal reinforcements which are required using this equation:

Reinforcement Length = AL + 6 x (original frame rail web depth).

The figure below shows how this reinforcement is to be placed over the extended or shortened section of the frame rail.




Lengthened Wheelbase

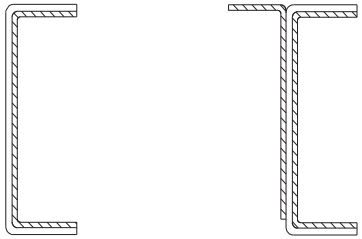



Shortened Wheelbase

D = Original frame rail web depth

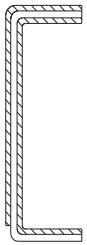
Figure 40

The suggested cross section of this reinforcement is a snug fit inner channel. If the new wheelbase exceeds the upper limit of the optional wheelbases of this model, i.e.; a “long bridge”, it may be necessary to use an “inverted L” reinforcement in addition to the snug fit channel reinforcement. Application Engineering should be consulted for approval of such cases. It should be noted that these methods of reinforcements, and any other methods which may be used, require a 45° angled cut at both ends to avoid stress concentrations in the frame (note the figures under item 7).



Snug fit inner channel

OR



Snug fit inner channel with "Inverted L" for "Long Bridge" wheelbases

Figure 41

7. The reinforcements must be fastened securely to only the web of the original chassis frame rail. The reinforcement must be held rigidly in place using either HUC bolts, GRADE 8 bolts and hardened steel washers at both the bolt head and nut, or GRADE 8 flanged bolts and hardened steel washers at the nut. Below are some suggested bolt patterns. It should be noted that these bolt patterns must not align the bolts vertically, i.e.: the bolt pattern must be staggered.

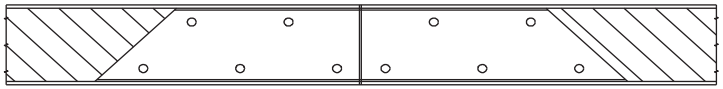
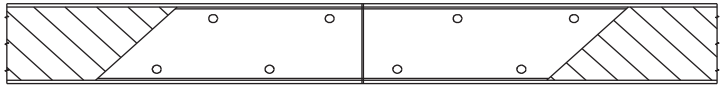


Figure 42



8. Lengthening the frame will also require extending the brake lines, basic chassis electrical harness. It is recommended that the original brake lines be removed and replaced with brake lines of the same diameter as the original lines and of the appropriate length. The extended ABS brake lines must be supported back to the frame to prevent vibration. The electrical harness must be extended in accordance with the ELECTRICAL WIRING AND HARNESSING section of this book. ICTA offers an electrical extension harnesses for the chassis when a wheelbase is lengthened. One wheelbase longer is the recommended maximum wheelbase extension (please refer to the drive line section and particular models for number of drivelines and their maximum lengths). The extension of a wheelbase will require electrical extension harnesses.

Diesel: 2022i-2025 3500 HG 4500 HG 4500 HD 5500 PN 8977995790 CHAS WRG HARNESS ASM; QTY 1
2022i-2025 3500 HG 4500 HG 4500 HD 5500 PN 5097003210 CHAS RR WRG HARNCLIP; QTY10

9. The propeller shafts' overall length will also need to be lengthened or shortened. If the extension is within the limits of the optional wheelbases of the respective model, the exact propeller shaft lengths and angles are given on or about Page 12 of the respective sections of this book. If the modified wheelbase exceeds the optional wheelbases of the respective model, the following guidelines must be adhered to:
   a) Propeller Shaft Length - the maximum propeller shaft lengths (pin to pin) for the respective models are shown in the table below.
   b) Propeller Shaft Angles - the maximum propeller shaft angles, with respect to the previous shaft, are shown in the table below.
   c) The propeller shaft angles must be designed such that the angles will cancel to avoid propeller shaft whip.
   d) The propeller shaft yokes must be assembled such that the propeller shaft yokes are "in phase."

| | GAS ENGINE | | | | DIESEL ENGINE | | | |
|---|---|---|---|---|---|---|---|---|
| **Chassis Model** | **3500 HG** | **4500 HG** | **5500 HG** | **5500 XG** | **4500 HD** | **4500 XD** | **5500 XD DR** | **5500 XD** |
| Propeller Shaft Diameter (in.) | 3.25 | 3.25 | 3.54 | 3.54 | 3.25 | 3.25 | 3.54 | 3.54 |
| Maximum Propeller Shaft Length (in.) | 50.7 | 50.7 | 54.3 | 54.3 | 50.7 | 50.7 | 52.9 | 52.9 |
| Maximum Propeller Shaft Angle (in.) | 6.1° | 6.1° | 6.1° | 6.1° | 6.1° | 6.1° | 6.1° | 6.1° |

Figure 43

10. Extending the frame will also require relocation and/or addition of crossmembers. If the extension is within the limits of the optional wheelbases of the respective model, the exact crossmember locations and dimensions are given in the respective model sections of this book. If the modified wheelbase exceeds the optional wheelbases of the respective model, the following guidelines must be adhered to:
   a) The crossmember location will largely be determined by the propeller shaft lengths and where the center carrier bearing locations are for the propeller shaft assembly.
   b) A crossmember must be located at the front and rear spring hangers of the rear suspension (refer to the appropriate section of this book to see where these suspension crossmembers are to be located).

c) The crossmember must be constructed such that it supports both the upper and lower flange on each frame rail (see drawing on next page). A crossmember such as the one shown below may be constructed, or GM crossmembers may be obtained from your GM parts dealer.

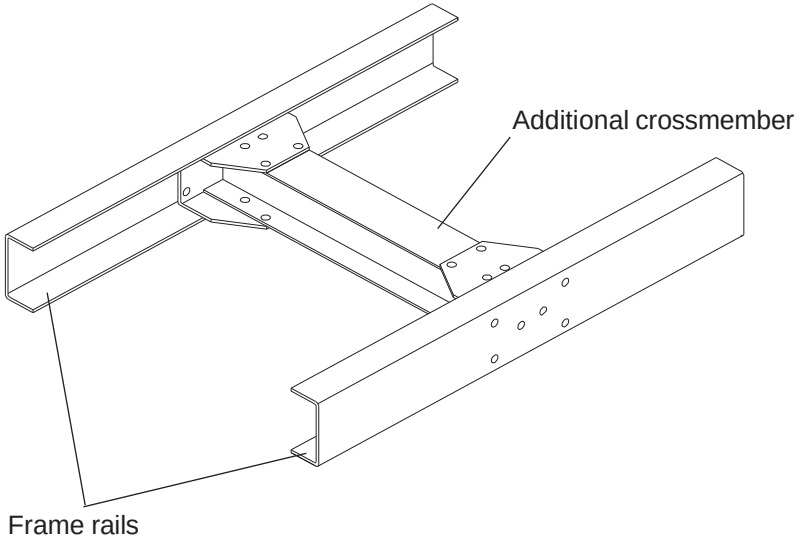



Figure 44

d) The maximum distance between crossmembers for the respective models is given in the table below.

| MODEL | 3500 HG | 4500 HG | 4500 XD | 5500 XD |
|---|---|---|---|---|
| Maximum Distance Between Crossmembers (in.) | 35.7 | 35.7 | 35.7 | 35.7 |

Figure 45

e) The drilling for any additional holes in the frame rails must comply with the DRILLING AND WELDING section of this book.

11. All other aspects of lengthening or shortening the wheelbase must comply with the applicable section of this Body Builder's Manual. For special applications and longer than recommended body lengths, GM Upfitter Engineering must be consulted for approval.

12. Please contact GM Upfitter Engineering for guidelines on LCF Chassis frame modifications when the vehicle is equipped with an anti-lock brake system.

## Installation of Body and Special Equipment

### Anti-lock Brake System (ABS) & Electronic Stability Control (ESC)

**IMPORTANT NOTES**:

1. Do not relocate or modify the electro-hydraulic control unit.
2. Do not modify the electrical harness and connector(s) of ABS/ESC systems.
3. Do not modify the vacuum line(s) inside cab.
4. Do not use ABS/ESC component wiring to extract power or ground circuits for accessories or added equipment.
5. Do not relocate or change the installation direction of the yaw rate sensor. The yaw rate sensor's operation is dependent on its position relative to the vehicle's center of gravity as well as the direction of its mounting. Altering the installed location or direction may cause the system to operate incorrectly.
6. Do not set final gear ratio to anything other than GENERAL MOTORS factory specification.
   The set value of the final gear ratio is programmed into the ABS/ESC control unit. If the final gear ratio is changed, the ABS/ESC systems may not operate correctly.
7. Do not operate the vehicle with any combination of tires other than GENERAL MOTORS factory-specified tires. When brakes are applied, the ABS/ESC systems monitor the rotational speed differences of the front and rear tires and rely on a preset value for the tire diameter programmed into the control unit. Using tires that are different from the preset values or using tires that vary greatly in diameter from front to rear, may negatively impact braking performance and cause abnormal operation of the ABS/ESC systems. Contact GM Upfitter before equipping any tires other than GENERAL MOTORS factory- specified tires.
8. Contact GM Upfitter before changing the wheelbase. Changing the wheelbase may impair the ESC system.
9. Do not upfit chassis into a tractor or 5$^{th}$ wheel (Hot Shot) configuration.

**ADVICE:**

When installing the following components in the vicinity of ABS/ESC equipment (e.g., electro-hydraulic control unit, speed sensor, yaw rate sensor, steering sensor, etc.), maintain more than 100mm (3.94in) of clearance:

- Communication radio devices and their antennas.
- Motors, relays, and other devices that generate noise.

Wires for the ABS/ESC components are located within the main vehicle harness. In order to help prevent interference with the ABS/ESC wires and signals, do not route antenna wiring near the main vehicle harness.

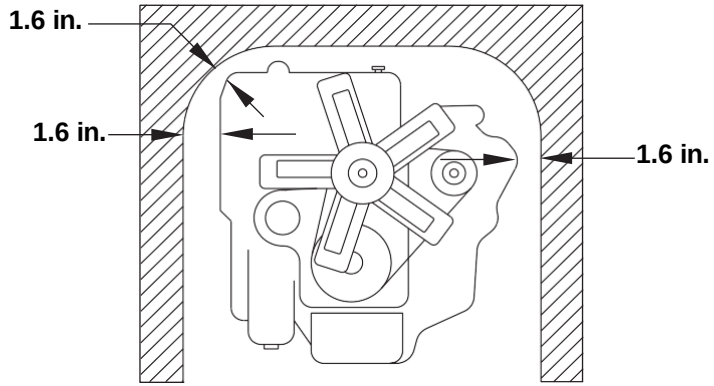
ESC calibration is necessary when replacing and/or removing any of the following components (contact a Chevrolet dealership for more details):

- Electro-hydraulic control unit and/or yaw rate sensor.
- Steering sensor and/or steering-related components and steering wheel.

## Installation of Body and Special Equipment

***Engine***

At least 1.6 inches of clearance should be maintained around the engine. At least 1 inch of clearance should be maintained to the front and rear of the engine. No obstacles should be added in front of the radiator or intercooler.




**Front and Back Clearance: 1 inch**

Figure 1

***Transmission***

The transmission is removed from the rear. Enough clearance must be provided to allow for rearward movement of the transmission assembly. At least 2 inches of clearance should be maintained above the automatic transmission to allow for transmission removal. At least 1 inch of clearance should be maintained to the front and rear of the transmission. Clearance should be sufficient to allow 5 to 6 inches of unrestricted movement of the transmission assembly. In addition, provide at least 2 inches of clearance around the control lever on the side of the transmission to allow free movement without any binding.

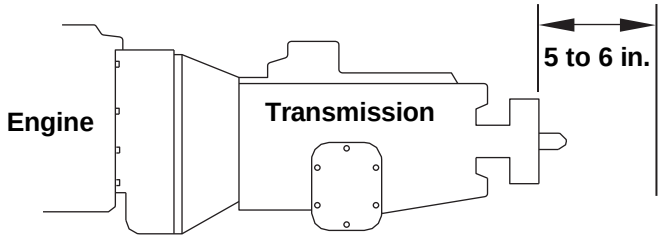



Figure 2

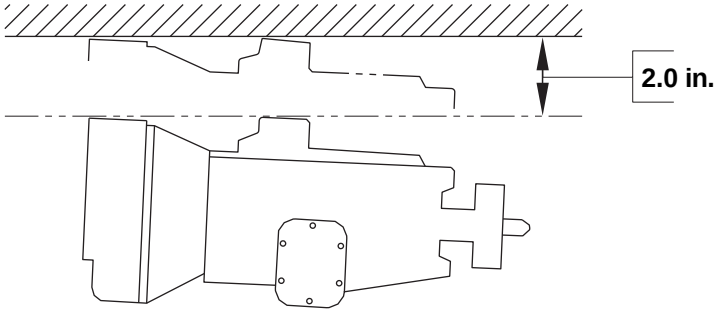



Figure 3

**Front and Back Clearance: 1 inch**

***Front and Center Propeller Shafts***

At least 1.25 inches of clearance should be maintained around front and center propeller shafts.

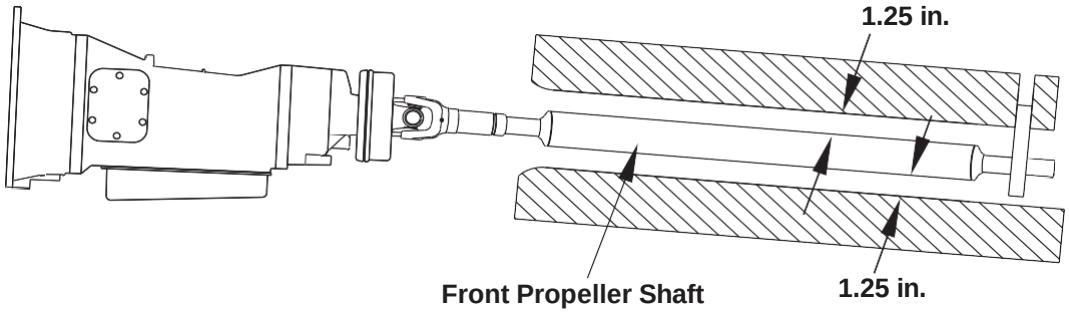



Figure 4

***Rear Propeller Shaft***

With the rear springs at maximum deflection, at least 1.25 inches of clearance should be provided over the rear propeller shaft.

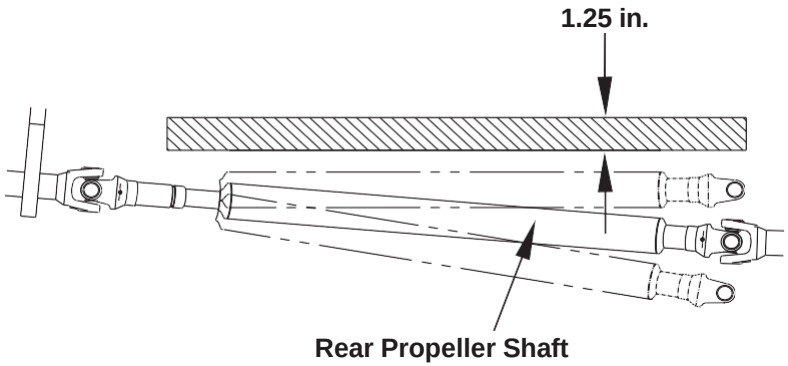



Figure 5

***Rear Wheel and Axle***

The design and installation of the body should allow sufficient clearance for full vertical movement of the rear wheels and axle when the vehicle travels over rough or unleveled surfaces.

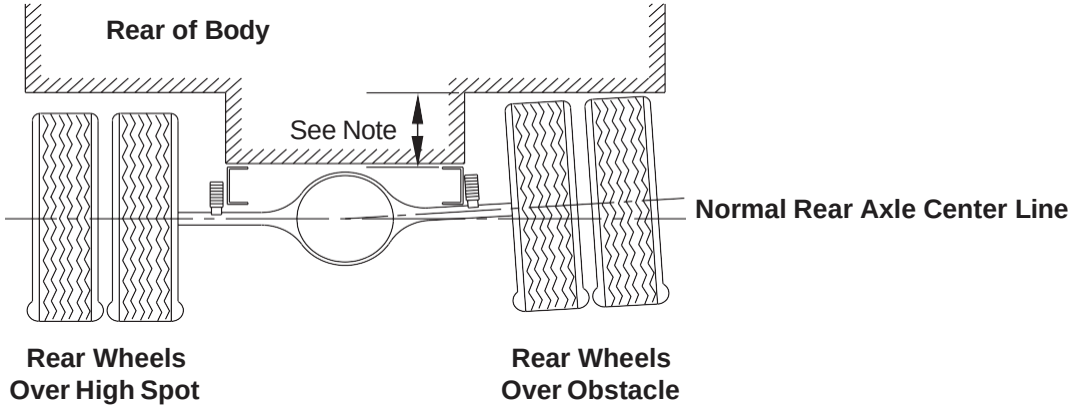



Figure 6

**Note:** For recommended clearances, please refer to the Rear Axle Chart in each model's respective section.

***Other Clearances***

The transmission control cable may be broken if it is bent by or interferes with the body and its fixtures. To prevent this, 1 inch of minimum clearance should be provided. When cable is detached from body mounting, be sure not to bend the cable.

Accessibility to the grease nipple on the rear spring bracket/shackle should be provided so that serviceability with a grease gun is not hampered.

| Parts | Location | Minimum Clearance (in) |
|---|---|---|
| Brake Hose | Axle Side | 6.7 |
| | Frame Side | 1.6 |
| Shock Absorber | Axle Side | 2.4 |
| | Frame Side | 1.2 |
| Parking Brake Cable | - | 1.2 |
| Fuel Hose | - | 1.6 |

Figure 7

***Exhaust Pipe Clearances***

If flammable materials such as wood are used in the body, provide at least 3.9 inches of clearance between the body and any parts of the exhaust pipe, DPF/ SCR Package. If it is impossible to maintain the minimum clearance, use a heat shield. Also use a heat shield if an oil pump or line is located above the exhaust pipe, muffler or catalytic converter.

1. Clearances around SCR system components must be greater than 1.0 inch at all times to avoid potential contact between the body and the exhaust components. The 1.0 inch allows for thermal expansion and assembly tolerance of the exhaust system. It does not account for dynamic movement in the body due to road conditions and other loads. Body companies are instructed to adjust this 1.0 inch clearance as required to account for body displacement while driving. This guidance does not supersede guidance or exhaust clearances for temperature sensitive or flammable components.
2. Exhaust temperatures have not changed since the introduction of DPF in 2007.

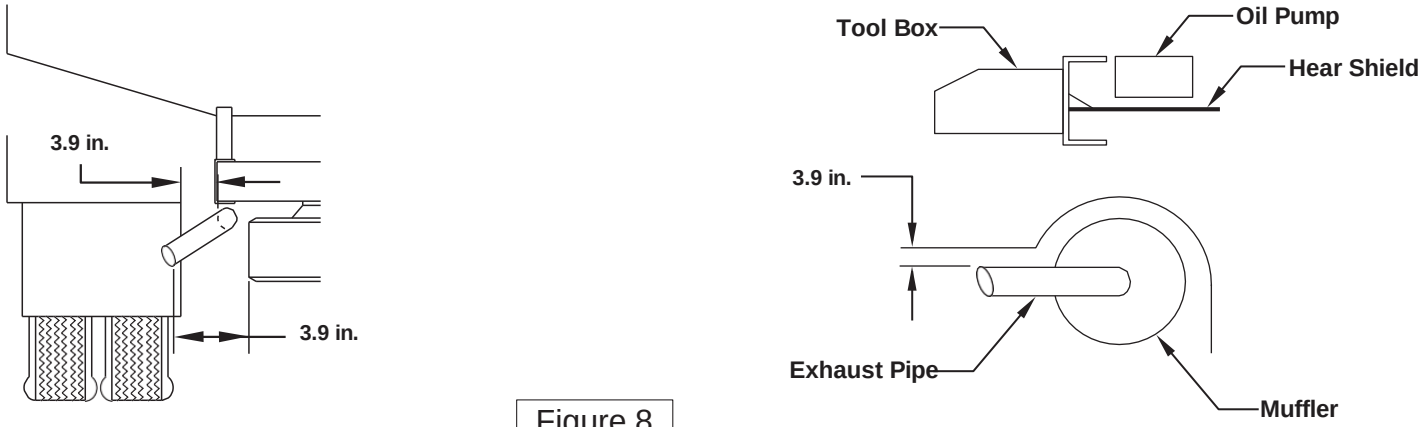



Figure 8

***Exhaust Heat Clearances***

During the DPF regeneration cycle, exhaust gas temperatures are hot. Therefore, care should be exercised in placement of the pipe's end location and angle. Do not locate any body components or equipment around the exhaust pipe's end area.

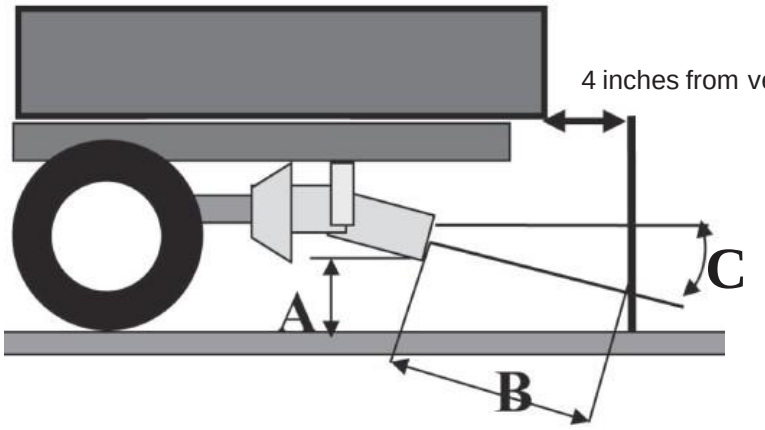



Figure 9

| Dimension | Clearance |
|---|---|
| A | 8 in. (minimum) |
| B | 18 in. (minimum) |
| C | 45 deg. (maximum) |

## Exhaust System

The exhaust system has a crucial role in meeting 2010 EPA regulations. In order to maintain compliance with the 2010 EPA emissions levels the Diesel Particulate Filter (DPF) and SCR package must not be moved. The distance between the engine exhaust manifold down pipe and Diesel Particulate Filter (DPF) / Selective Catalytic Reduction Package (SCR) must be maintained and the pressure in the system must be sustained at a constant level. Due to increased temperatures in the exhaust system during the regeneration cycle and the heat stress caused by these temperatures, body builders should closely evaluate the placement of equipment and provide protection to these added components as needed.

### *Diesel Particulate Filter (DPF) and Selective Catalytic Reduction (SCR) Restrictions*

1. The DPF/SCR has exhaust pressure pipes and temperature sensors. Care must be taken when a body is installed so as to not damage pipe sensors.
2. The DPF/SCR should be free from impact or vibration during body installation.
3. The DPF/SCR must have enough room for disassembly of the unit for service and cleaning.
4. The DPF/SCR switch in the cab should not be removed or disabled. No modification or relocation of the DPF/SCR unit, pressure pipes, and sensor is permitted.

### *Exhaust System Modification*

Modification of the exhaust system should be avoided. If modifications are absolutely necessary, the following points should be maintained.

1. Maintain the clearance specified in the table below between all parts of the exhaust system and any fuel lines, brake lines, brake hoses, electrical cables, etc. The exhaust outlet should not point toward any of these parts.

| Component | Clearance Dimension |
|---|---|
| Brake Lines | 2.4 in. or more. If the combined section of a group of parallel brake lines is more than 7.8 in., a clearance of 7 in. or more should be provided. |
| Flexible Brake Hoses | 7.8 in. or more. The temperature of flexible brake hoses should not exceed 158°F. If the highest temperature is not measurable, a clearance of more than 15.7 in. should be maintained between the hoses and the exhaust system. |
| Wiring Harnesses and Cables | 7.8 in. or more. The temperature of flexible brake hoses should not exceed 158°F. If the highest temperature is not measurable, a clearance of more than 15.7 in. should be maintained between the hoses and the exhaust system. |
| Steel Fuel Lines | 3.1 in. or more. |
| Rubber or Vinyl Fuel Hoses | 5.9 in. or more. |

Figure 10

2. If a toolbox is installed, it should preferably be made from steel. If a wooden toolbox is installed, at least 7.8 inches of clearance should be maintained between the toolbox and any parts of the exhaust system.
3. If the exhaust system is modified, it is the responsibility of those making the modification to ensure that the noise level meets appropriate standards.
4. If the exhaust system is modified, it is the responsibility of those making the modification to ensure that the emission levels meet appropriate standards.
5. Exhaust system component temperatures are sufficient to ignite flammable materials; efforts should be made to prevent flammable materials from interacting with the exhaust system.

***6500 & 7500 No Modification Zones***

The DPF/SCR unit **CANNOT** be modified or moved. The DEF tank and pump **CANNOT** be modified or removed. DEF lines and coolant lines **CANNOT** be modified or rerouted.

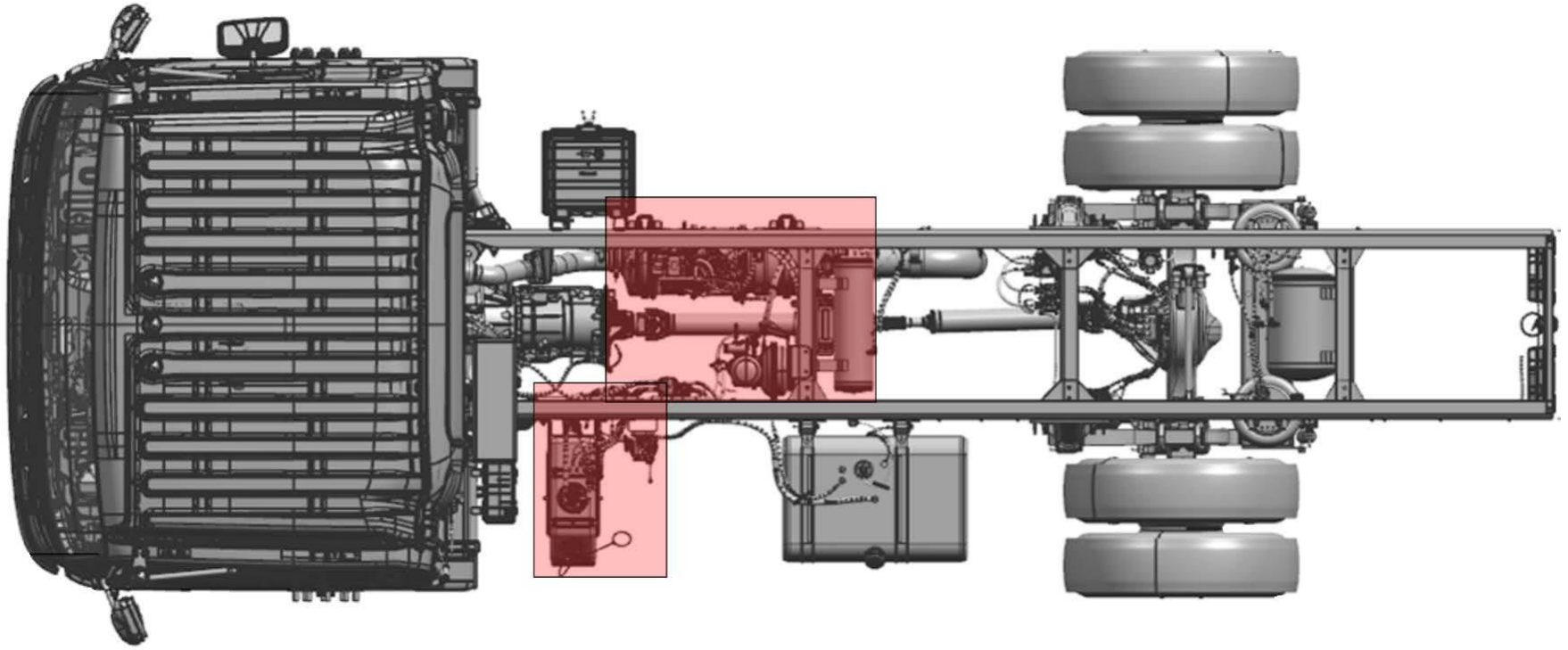


Figure 11

## Body Installation

### Mirrors

The Chevrolet LCF chassis will accommodate up to 96 inch wide bodies without modification to the mirror brackets. Bodies wider than 96 inches and up to 102 inches wide will require modified mirror brackets. This Modification can be made at the port and the vehicle order label will indicate a Regular Product Option (RPO) of I4Q, I5Q, or I6Q indicating 102" wide compatible mirrors are installed.

### Special Equipment on the Chassis

When installing special equipment on the chassis, extra consideration must be given to the weight and construction of the equipment to assure proper distribution of the load. Localization of the load should be prevented. All special equipment should be properly secured into position. We recommend the use of subframe members when installing special equipment.

### Subframe Design and Mounting

The sub frame assembly should be mounted as close to the cab as possible. It should be contoured to match the shape and dimensions of the chassis frame as closely as possible. See model specification sections for frame and crossmember layout.

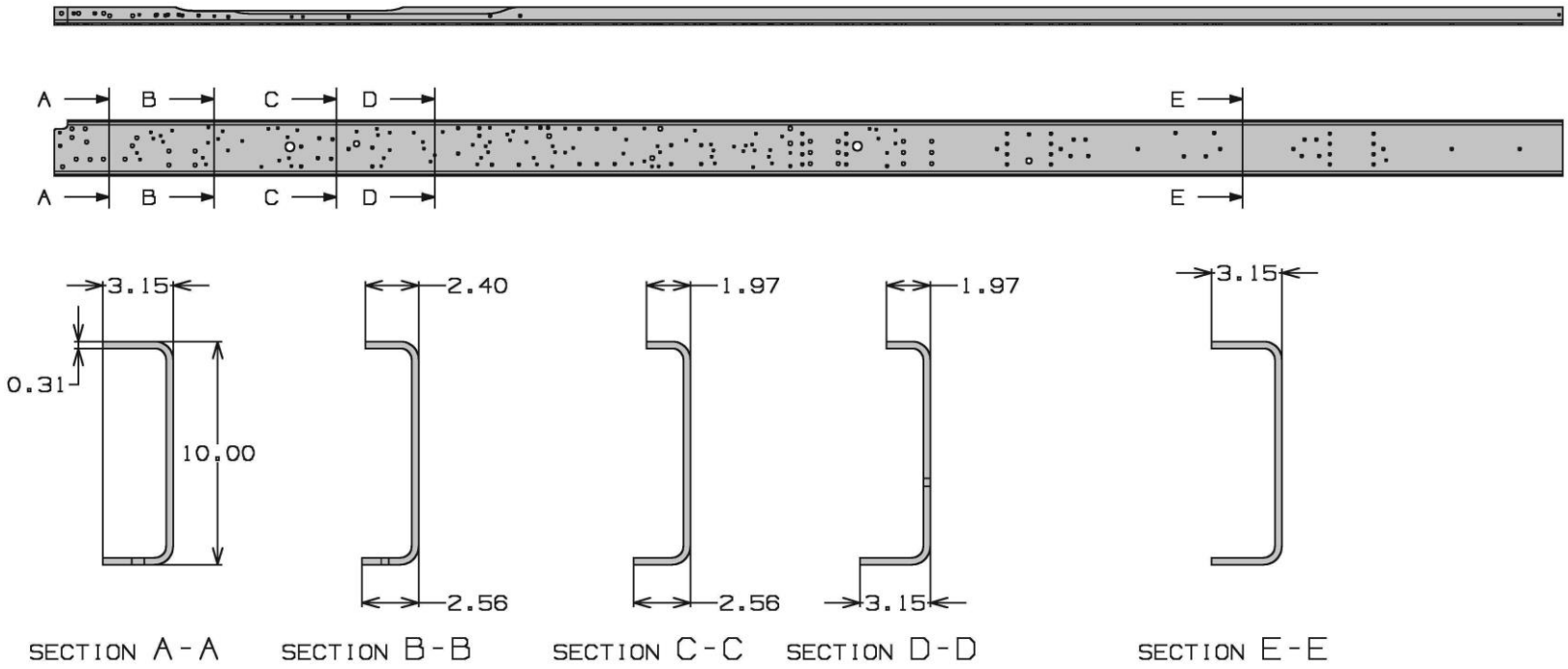
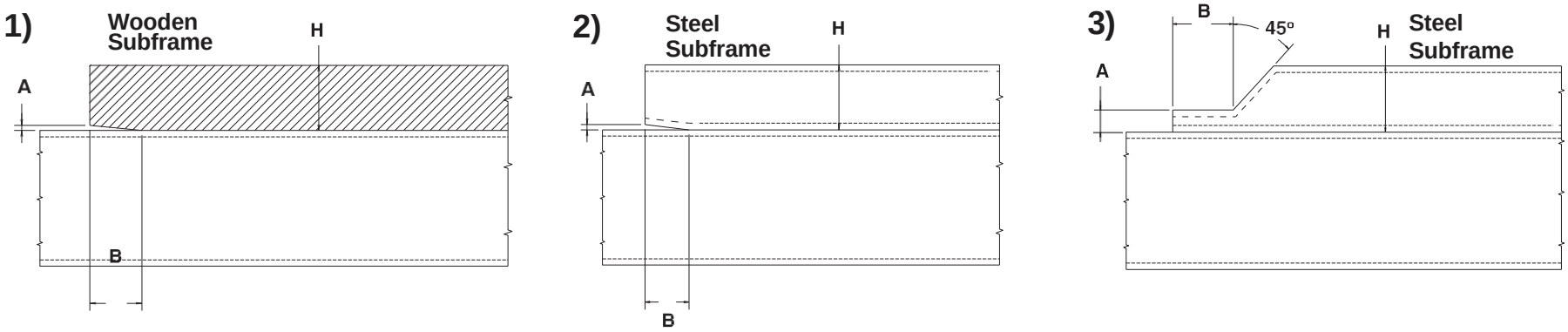



Figure 12

***Subframe Contour***

Contouring of the front end of the subframe members as shown in the three illustrations below will prevent stresses from being concentrated on certain areas of the chassis frame.




| Drawing | A | B |
|---|---|---|
| 1) | 0.2 in. | $\frac{H}{2} \cong H$ |
| 2) | 0.2 in. | H or greater |
| 3) | $\frac{H}{3}$ | H or greater |

Figure 13

When using a steel subframe, do not close off the end of the subframe.

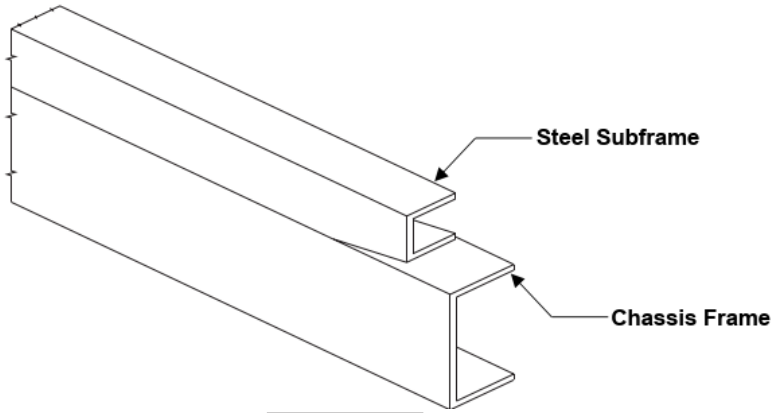



Figure 14

***Prohibited Attachment Areas***

Do not attach the subframe to the chassis frame with a bolt or bracket at the points indicated in the following illustrations.

1. At the front end of the subframe. The attaching bolt or bracket must be at least 2 inches behind the kick up point of the subframe (Figure 15).
2. Within 8 inches of bends in the chassis frame or the attachment points of any crossmembers (Figure 16).

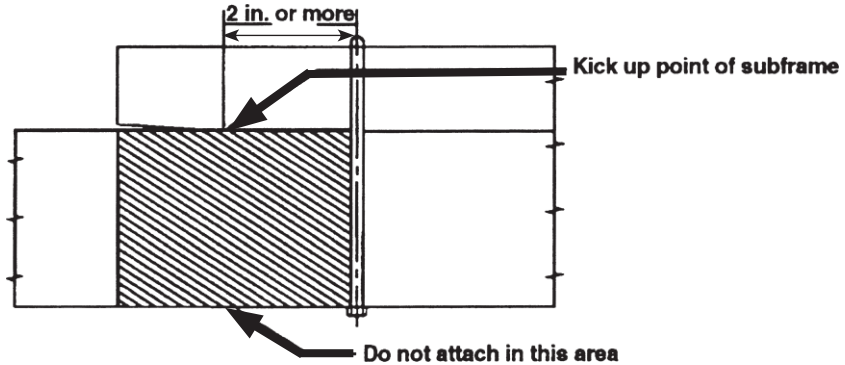



Figure 15

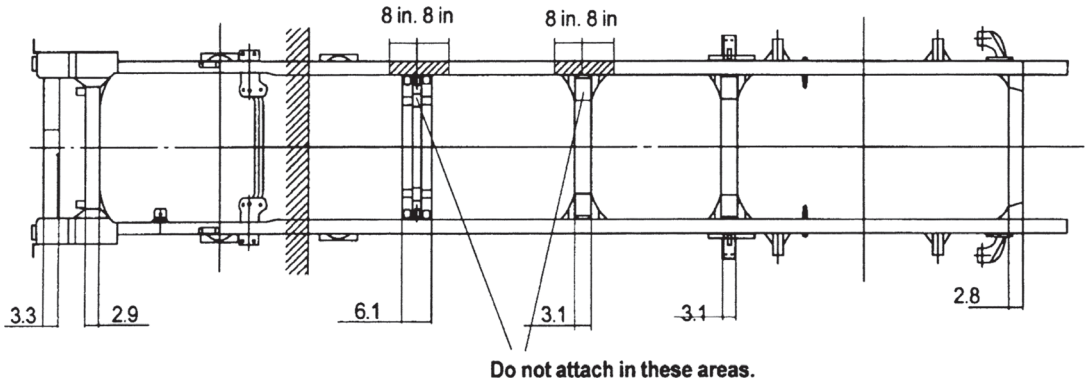



Figure 16

***Subframe Mounting - Bracket Installation***

Mounting brackets should be clamped to the chassis frame using bolts. For proper positions in which to install the bolts, refer to the preceding section and the section “Modifications to the Chassis Frame.” In addition to the illustrated bracket and U-bolts a shear plate may be required for adequately body mounting. The body company will be responsible for engineering their own mounting system.

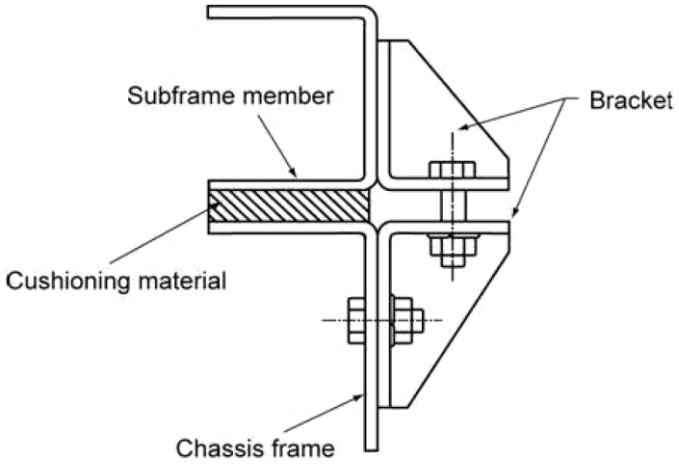
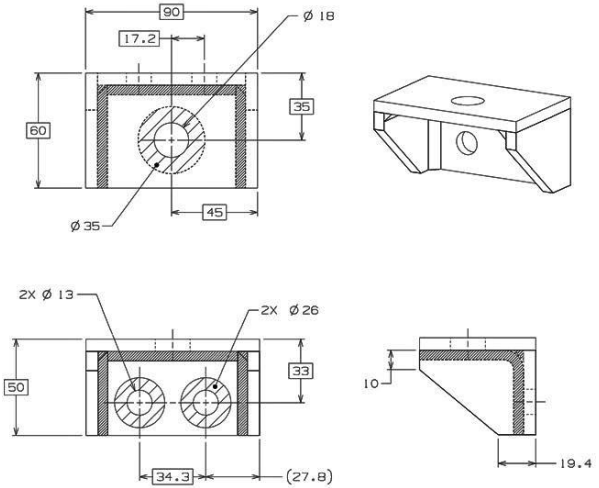



Figure 17




**Note:** (3) Body mounting brackets are bolted to the frame from the factory, and they will be painted “YELLOW” of easy identification

***U-bolt Installation***

When U-bolts are used to retain the subframe, reinforcement blocks must be installed in the frame members. This will prevent distortion of the frame flange as they are tightened. The drawing indicates the correct placement of reinforcement blocks. If you use wood blocks, be sure that there is sufficient clearance between them and any parts of the exhaust system. If any fluid lines or electric cables are located near the reinforcement blocks, you must provide at least 0.4 inches of clearance between rigid or stationary portions, and at least 1.6 inches between movable or flexible portions of the lines.

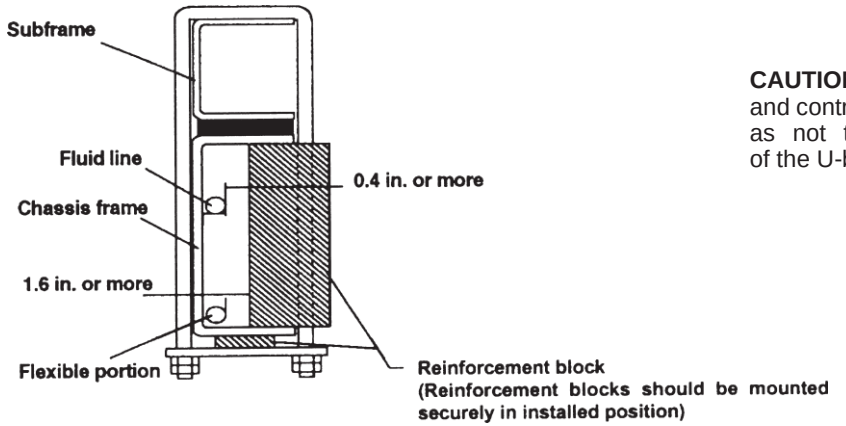



Figure 18

**CAUTION:** U-Bolt placement is critical with new emission systems and controls. Extra care must be taken when placing bodies on chassis so as not to damage these components. For the installation positions of the U-bolts, refer to “Prohibited Attachment Areas.”

***Front Body Mounting Brackets and Crush Block Mounting Locations***

Due to the location of the after treatment device and other interior frame components, if body mounting is required in the area directly behind the cab, the supplied body mounting blocks provided on the chassis should be used. The chassis will be supplied with two (2) body mounting blocks (painted yellow) attached to the frame in the locations shown in the figure below. Body Builders will be required to design a mating bracket for attaching the body to the yellow painted chassis body mounting brackets. No U-bolt type attaching is allowed in these locations.

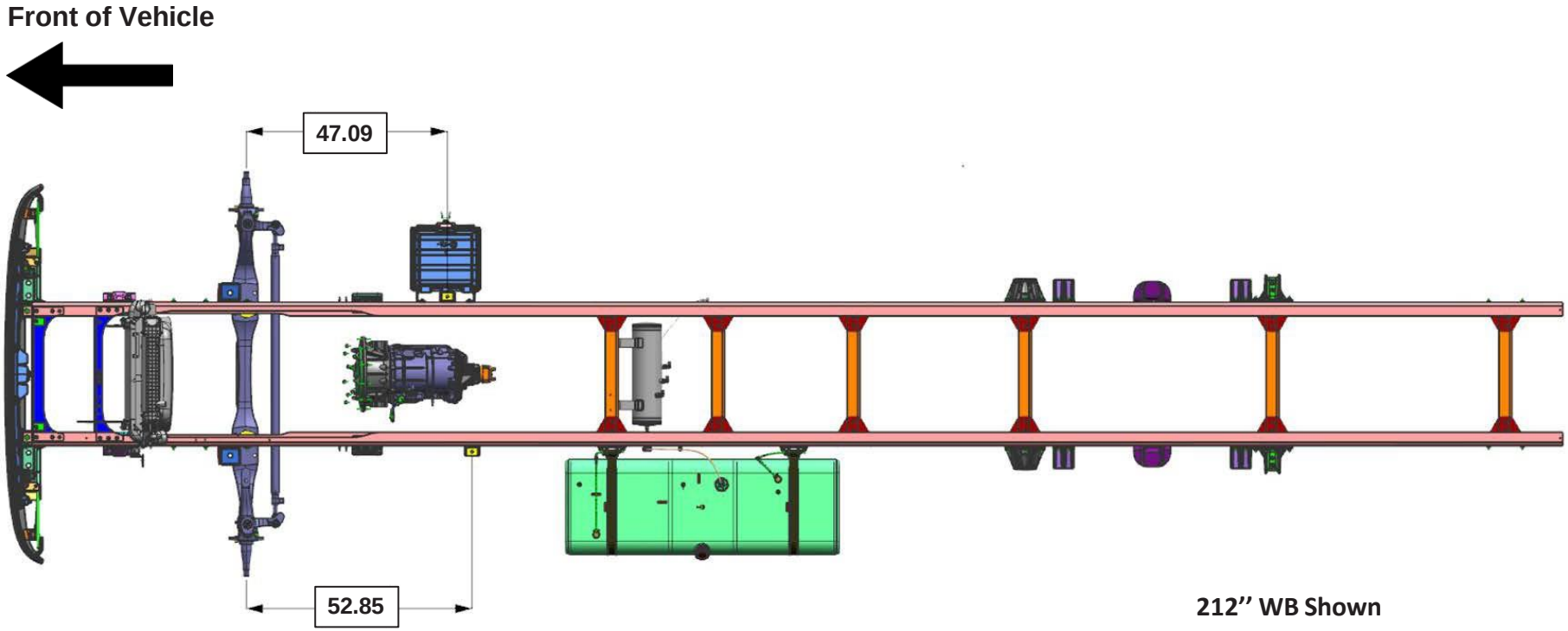



Figure 19

## ***Modification of the Frame***

Modifications of the chassis frame should be held to an absolute minimum. Modification work should be performed according to the instructions in the following paragraphs.

When modification is complete, chassis frame members should be carefully inspected to eliminate the possibility of any safety-related defects.

**NOTE: PLEASE REFER TO NOTES ON CHASSIS FRAME MODIFICATION WITH ANTILOCK BRAKES.**

***Working on Chassis frame***

The chassis frame is designed and built with consideration for proper load distribution. Sufficient physical strength is provided when the load is evenly distributed. Installation of special equipment on the chassis frame can cause variations in load distribution. If even distribution of load is not kept in mind when the equipment is installed, localization of stresses on specific areas of the frame could cause cracking of the chassis frame members or other problems, even if the total weight of the equipment is within the design limit.

The chassis frame is designed as an integral unit. Therefore, we do not recommend cutting the chassis frame under any circumstances.

***Drilling and Welding***

**IMPORTANT NOTE: For vehicles equipped with electronic engines and or electronic or hydra-matic transmissions, electric arc welding must be done with the negative battery cable disconnected.**

1. Do not drill or weld in the shaded portions of the chassis frame members (see below). Do not weld within 0.8 inches from the edges of any existing holes.
2. Hold the length of any welding beads within 1.2-2.0 inches. Allow at least 1.57 inches between adjacent welding beads.
3. All holes must be drilled. Do not use a torch to make any holes.
4. All riveting must be done with cold rivets. Do not use hot rivets.
5. The flange of the chassis frame must not be cut under any circumstances.
6. The subframe must be attached to the chassis frame with bolts. Do not weld.
7. Repaint exposed metal after drilling.

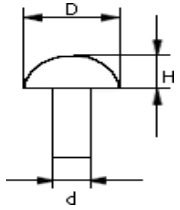
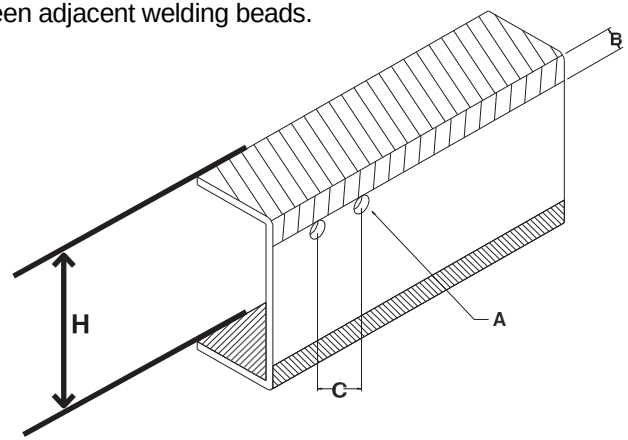



Figure 20

**Rivet size detail:**

D - 18mm (medium duty truck) / 21mm (heavy duty truck)
d - 11mm (medium duty truck) / 13mm (heavy duty truck)
H - 7.7mm (medium duty truck) / 11mm (heavy duty truck)




**Dimensio**

Figure 21

A - no more than 0.59 inches in diameter
B - must be more than H/5 for welding and H/7 for holes
C - must be more than 1.57 inches
H = Frame Height

***Reinforcement of Chassis Frame***

Reinforcements must be installed to prevent the considerable variation in the section modulus. They must be welded so as to avoid localized stresses. The drawing below illustrates the correct and incorrect methods of frame reinforcement.

***Welding***

Keep reinforcement plates and chassis frame free from moisture and water. Avoid cooling with water after welding. Use a suitable means to protect pipes, wires, rubber parts, leaf springs, etc. against heat and effect of sputtering. Remove fuel tank assembly when welding portions near the fuel tank. Remove coat of paint completely when welding painted areas. Repaint exposed metal after welding.

When installing reinforcement by riveting or plug welding, place plugs or rivets in a zigzag pattern. When performing plug welding, be sure that electrical components, such as electric harnesses on the inner side of a chassis frame side member, are a minimum of 50mm apart from welding site. When inserting a rivet in a hole from which another rivet has previously been removed, the rivet should be 1 or 2mm larger in diameter than the removed one. Cold rivet only.

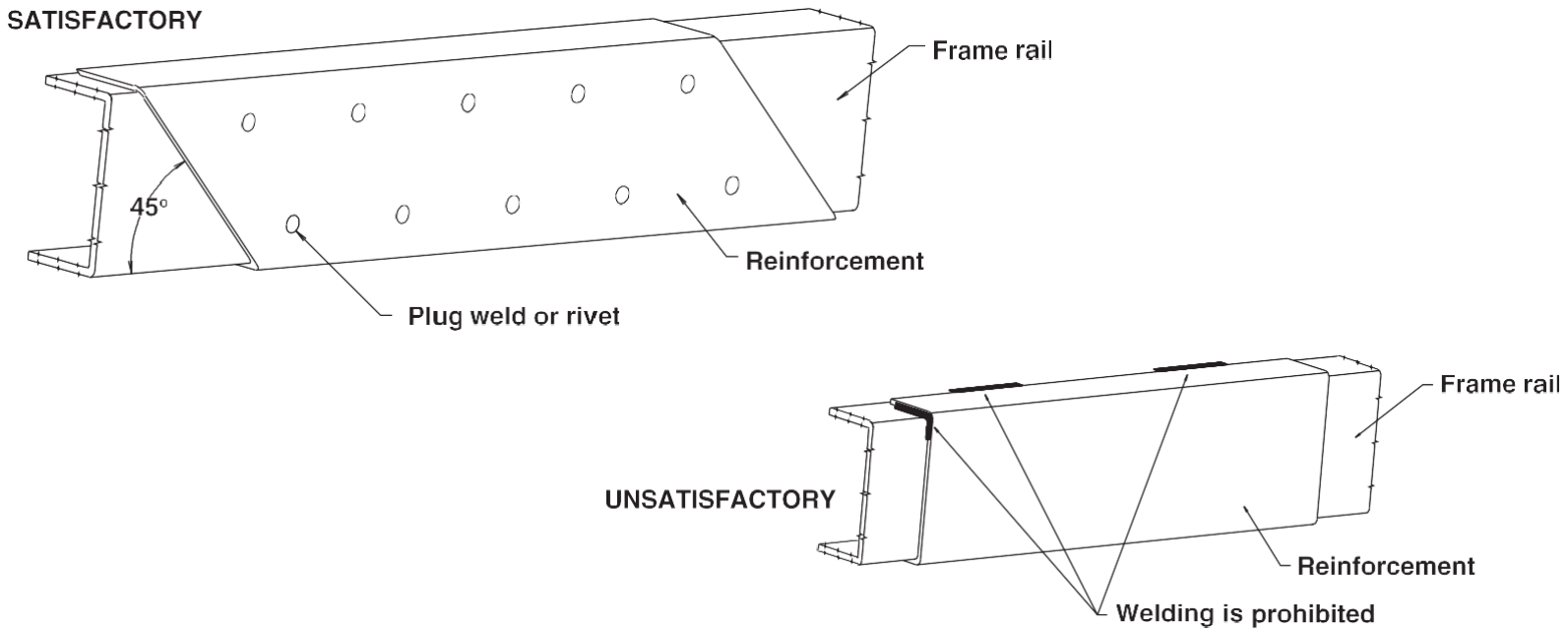



Figure 22

## ***Crossmember Modification***

Alligator type cross member - For alligator type, hole drilling, notch making, and welding are prohibited.

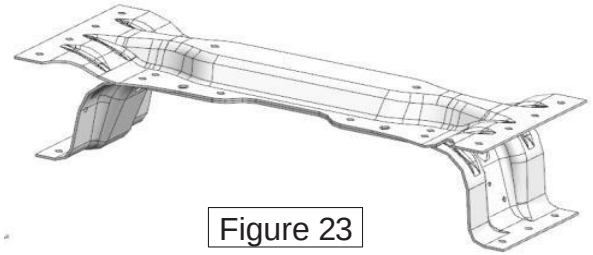


Figure 23

Channel type cross member: a – Allowable maximum hole diameter is 9mm, and this hole should be used only for piping or harness routing.
b – Prohibited area, no drilling should be done in this area.
c – See Figure 24 for minimum required distance.

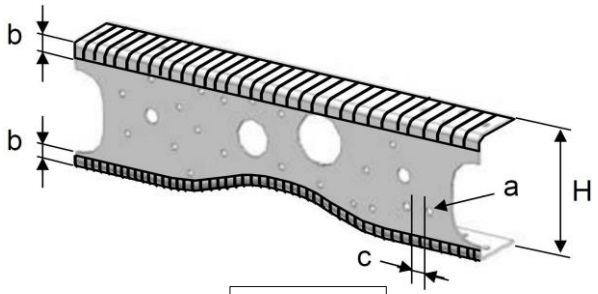
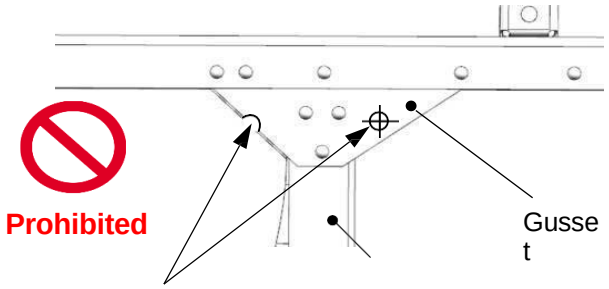



Figure 24

Gusset: Hole drilling and notch making are prohibited.




Cutting or machining strictly prohibited

Figure 25

## ***Rear Overhang Modification***

If a body protrudes outward from the rear end of the chassis frame by 300 mm (11.8 in.) or more, lengthen the rear overhang of the chassis frame as indicated below. If it is necessary to cut the chassis frame, ensure that the cut location does not split existing holes.

1. Extension material
    - The extension material should be equivalent to that of side members. Refer to specification information for the vehicle model in consideration.
    - Thickness and bending radius of the extension material should be the same as that of side members. Refer to specification information for the vehicle model in consideration.

2. Installing extension material
    - **Extension material is 300mm or shorter:** Join extension material and chassis frame with a continuous butt weld around the entire circumference. After welding, grind finish weld surface.

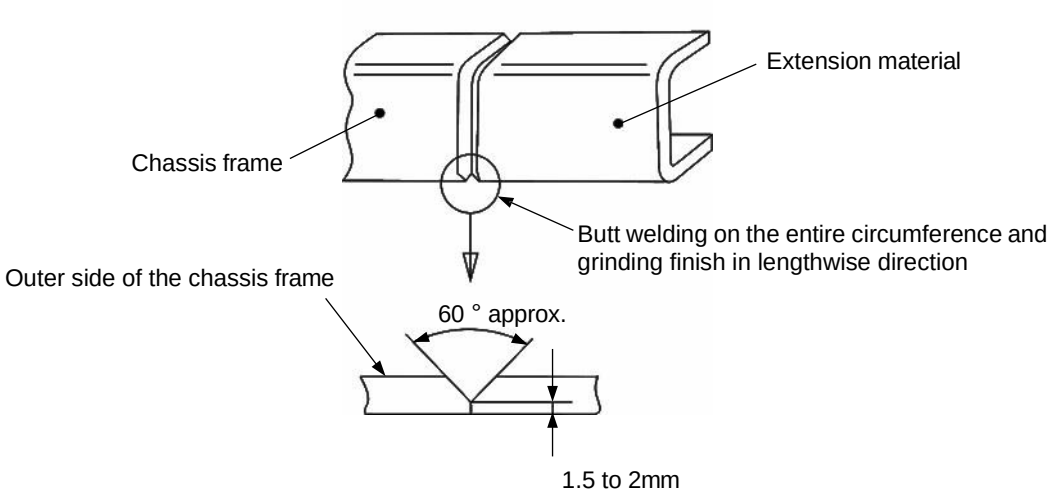
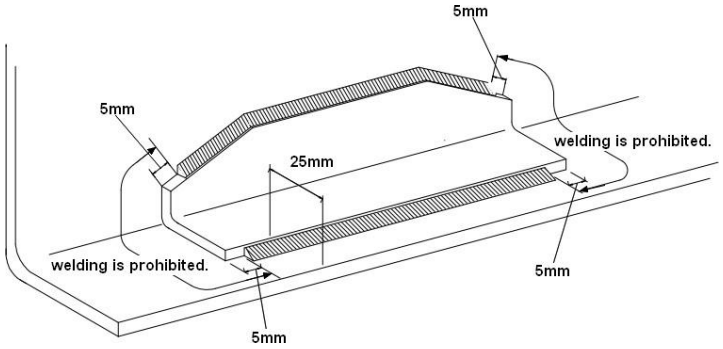



Figure 26

- **Extension material is longer than 300mm:** Join extension material and chassis frame with a continuous butt weld around the entire circumference, and then fit a reinforcement on the inner side of the chassis frame and extension material.




| Side member thickness [mm] | Reinforcement material thickness (recommendation value) [mm] |
|---|---|
| 8.0 at minimum | 7.0 |
| 7.5 | 5.5 to 7.0 |
| 7.0 | 4.5 to 6.0 |
| 4.0 to 6.0 | 4.5 |

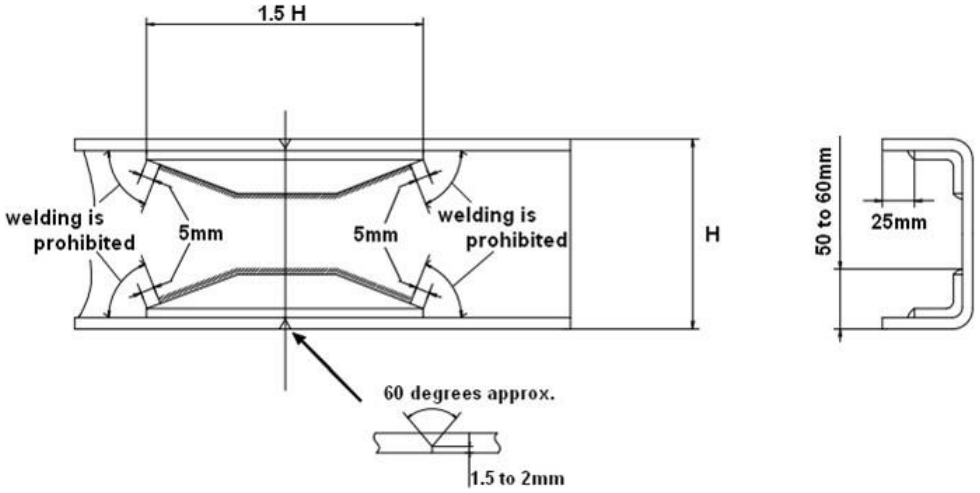



Figure 27

## Fluid Lines

Do not disturb the layout of any brake lines or fuel lines unless absolutely necessary. When modification is needed, follow the instructions below carefully to ensure safety. Brake fluid lines must not be cut and spliced under any circumstances. We do not recommend the cutting or splicing of any fuel lines, but if it is absolutely necessary, be sure that the correct fitting and tools are used to form the joint, and then pressure test the joint. Steel lines are metric sizes.

### *Preparation of Additional Lines*

1. Where possible, use only genuine GM lines as supplied by authorized GM dealers.
2. Use the correct metric flaring and bending tools to form the lines.
3. Avoid repeated bending. Do not use heat for flaring and bending the lines. Before and after forming the new lines, examine them carefully for scratches, distortion, dents, and the presence of any foreign matter.

### *Installation of Additional Lines*

Install new lines away from adjacent parts and away from any sources of heat.

1. A minimum clearance of 0.4 inches must be maintained between lines. Where necessary, clip the lines into position in order to maintain this minimum clearance.
2. Minimize any crossing between lines. If a crossing is unavoidable, use the following procedure:
    a. At least 0.4 inches of clearance should be maintained between lines at the crossing point.
    b. If the 0.4 inches of clearance cannot be maintained, or if the lines are subject to vibration, clip them securely.
3. Plan the bends and clipping points of the lines to minimize vibration and the resulting fatigue.
4. Use rust-proofed clips and apply vinyl coating to the portions of the lines to be clipped.
5. Install new lines in positions where they are protected against water, dirt, grit, sand, rocks and other foreign matter that can come from above or below or can be flung up by the wheels.

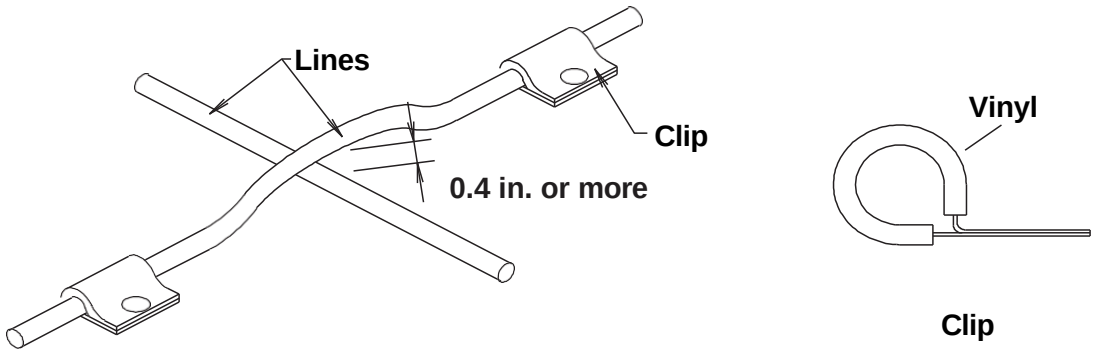



Figure 28

## ***Electrical Wiring and Harnessing***

To increase the reliability of the wiring, all frame harnesses are covered with corrugated vinyl tubing. The following instructions apply to extending or modifying these harnesses. See the Electrical Section for information on commonly used circuits in the F-Series Chassis.

### *Wiring*

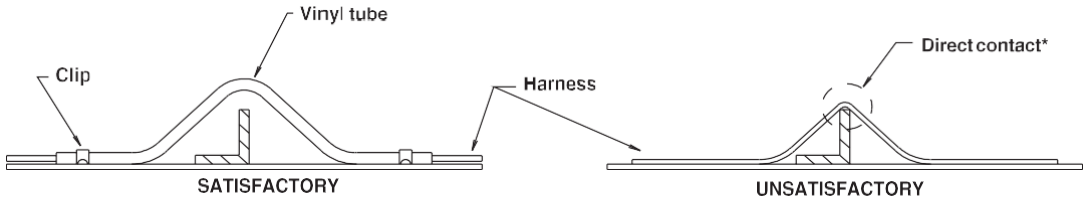
1. Most wiring connections on GM vehicles are made with terminals. We recommend the use of terminals when splicing cables and wires.
2. When splicing, use new wire of the same gauge, and do not make splices inside the corrugated tubing.
3. When making connections to the end of the harness, make sure the connections are electrically perfect. Use insulating tape as needed to prevent the entry of water, which results in short circuits and/or corrosion.
4. When making new circuits, or modifying circuits already installed, make the cables only just taut enough to remove any slack. Use clips or grommets where required to protect cables from heat or sharp edges. When cables must run near the exhaust system, see the instructions in the “Exhaust System” section.
5. Always use rustproof clips and apply vinyl coating to that portion of the clips in direct contact with the harnesses. No scotch clips or connectors.
6. To minimize the vibration of the harness, clipping points should be set up according to the table below.
7. When changing the length of the battery cable, do not cut or splice the existing cable. Make up a new cable of the correct length and wire gauge for the load and distance, without splices.
8. When using connectors, use a socket (female) connector on the electrical source side and a plug (male) connector on the electrical load side to lower the possibility of a short circuit when disconnected.
9. When connecting cables to moving or vibrating parts such as the engine or transmission, be sure to maintain sufficient slack in the wiring to absorb the vibration. Follow the example of existing cables connected by GM. Keep flexible cables clear of other parts.
10. Do not use vinyl tape in the engine compartment. The heat will tend to make it peel off. Use plated steel clips coated with rubber or vinyl.
11. When locating auxiliary equipment or lines near the ECM caution should be used in order to protect the ECM from excessive vibration, heat or chemical reactions.

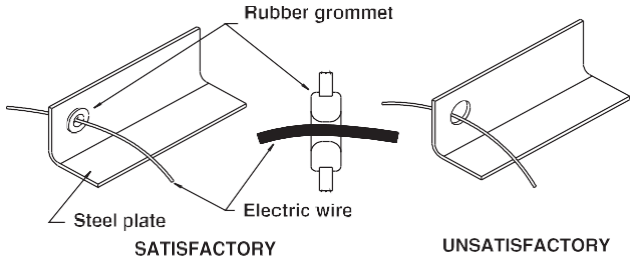
*Wiring Harness Clip Distances*

| Harness Diameter | Clip Distance |
|---|---|
| less than 0.2 in. | less than 11.8 in. |
| 0.2 in. ~ 0.4 in. | approx. 15.7 in. |
| 0.4 in. ~ 0.8 in. | approx. 19.7 in. |

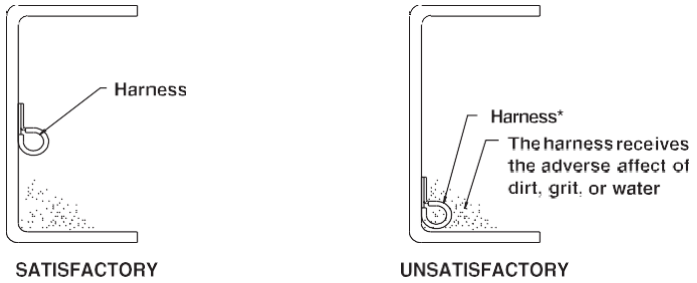
Figure 29

***Wiring Harness Detail***




* Cables should not be in contact with sharp edges or piercec holes.




* Harnesses should not be installed on inside lower face of the chassis frame.

* Harnesses should not be taped to fuel lines or other lines. A sufficient clearance should be maintained between harness and pipe lines.

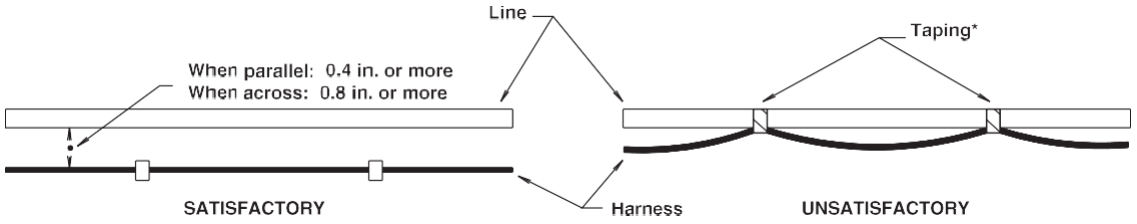



Figure 30

***Wire Color Code***

The electrical circuits of the LCF Chassis Cab are connected with low-voltage stranded wire for automotive applications. The color-coding standards are as follows for the LCF Chassis Cab:

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| (1) | Black | B | Starter circuits and grounds | (5) | Yellow | Y | Instrument circuit |
| (2) | White | W | Generator (alternator) circuit | (6) | Brown | Br | Accessory circuit |
| (3) | Red | R | Lighting circuit | (7) | Light Green | Lg | Other circuit |
| (4) | Green | G | Signal circuit | (8) | Blue | L | Windshield wiper motor circuit |

*Maximum Allowable Current by Wire Size*

| Harness Design Diameter (mm) | AWG Equivalent | No. of Wires/Wire Diameter (mm) | Cross Sectional Area (mm2) | Maximum Allowable Current (Amps) |
|---|---|---|---|---|
| 100 | 00 | 217/0.80 | 109.1 | 363 |
| 85 | 0 | 169/0.80 | 84.96 | 305 |
| 60 | 1 | 127/0.80 | 63.84 | 248 |
| 50 | 1 | 108/0.80 | 54.29 | 223 |
| 40 | 1 | 85/0.80 | 42.73 | 191 |
| 30 | 2 | 70/0.80 | 35.19 | 171 |
| 20 | 4 | 41/0.80 | 20.61 | 123 |
| 15 | 6 | 84/0.45 | 13.36 | 93 |
| 8 | 8 | 50/0.45 | 7.952 | 68 |
| 5 | 8 | 65/0.32 | 5.228 | 51 |
| 3 | 12 | 41/0.32 | 3.297 | 39 |
| 2 | 14 | 26/0.32 | 2.091 | 29 |
| 1.25 | 16 | 16/0.32 | 1.287 | 21 |
| 0.85 | 18 | 11/0.32 | 0.8846 | 17 |
| 0.5 | 20 | 7/0.32 | 0.5629 | 13 |

**Reference:** The values given in the “maximum allowable current” column are based on the ambient temperature condition of 104°F with temperature increase of 104°F.

Figure 31

***Electrical System Modifications***

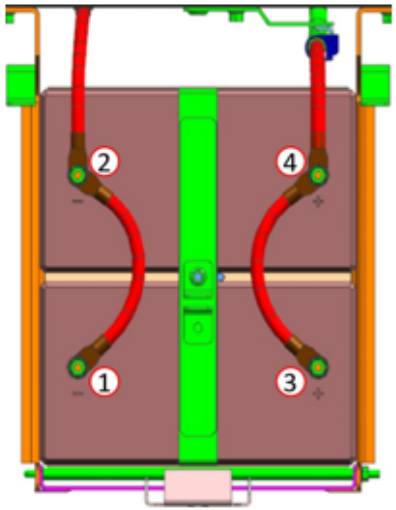
Modifications/add-on wiring must be carefully reviewed to ensure compatibility with the base vehicle wiring by reviewing system schematics, wire routing paths, harness connections, etc. Due to the wide range of modifications that may be required for vocational needs, it is not feasible for the O.E.M. to take into account all potential revisions. For this reason, any person modifying existing vehicle wiring must assume responsibility that the revisions have not degraded the electrical system performance. Any add-on wiring needs to be properly fused and routed to prevent cut, pinch, and chafe problems, as well as avoid exposure to excessive heat. Care must be exercised that existing vehicle interfaces do not have their current load capabilities exceeded, and that the respective control devices are not overloaded. Added wire size should be at least as large as the wire to which it is attaching in order for fuse protection to be maintained.

A Packard electric wiring repair kit is available through Kent-Moore (P/N J38125-B) (Phone # 1-800-345-2233). This kit contains instructions, tools, and components for making repairs to wiring harness components. This kit would also greatly assist in accomplishing necessary add-on wiring such as body marker lamps, so that system reliability/durability is maintained.

Electrical wiring components can be obtained through your authorized GM dealers. Packard Electric components are also available through Power and Signal (www.powerandsignal.com). Power and Signal may also be able to assist in making necessary wiring additions by providing custom wiring stubs or jumpers to your specifications.

**CAUTION:** Before servicing any electrical component, the ignition key must be in the LOCK position and all electrical loads must be OFF, unless instructed otherwise in GM service procedures. If a tool or equipment could easily come in contact with a live exposed electrical terminal, also disconnect the negative battery cable. Do not disconnect cable within 3 minutes after turning the ignition key to the Lock position. Failure to follow these precautions may cause personal injury and/or damage to the vehicle or its components.

*Battery Terminal Tightening Torque*




| No. | NUT SIZE | TORQUE |
|---|---|---|
| ① ~ ④ | 3/8-16 (inch) | 15±2 (N·m) |

Figure 32

***Fuel System***

Relocation of the fuel tank, or installation of additional fuel tanks, is not recommended. If modifications to the fuel system are unavoidable, follow these recommendations:

1. Maintain adequate clearance between the fuel tank and any other device or structure.
2. Do not connect any additional fuel hose.

***Rear Lighting***

Brackets installed are temporary. Please do not use these brackets for body installation.

***Serviceability***

No matter what other modifications or changes are made, access to components requiring daily preventive maintenance or other routine service must not be obstructed. This includes the following items:

1. Inspection, filling and draining of engine oil and cooling water.
2. Inspection, filling and draining of transmission fluid.
3. Adjustment, removal and installation of the fan belts.
4. Inspection, filling and removal of the battery and battery cover.
5. Inspection and filling of brake fluid.
6. Inspection and bleeding of the brake system and servo unit.
7. Maintenance of clearance for tightening of check bolt on brake safety cylinder.
8. Operation of the spare tire carrier, including mounting and dismounting of the spare tire.
9. Adjustment, removal and installation of distributor and/or cover.

## Wheelbase Alteration

With certain applications, it may become necessary to alter the wheelbase of the chassis. The following pages provide the suggested guidelines for accomplishing either shortening or lengthening of the wheelbase.

### *Shortening/Lengthening the Wheelbase Without Altering the Frame*

Since the frame is an integral part of the chassis, it is recommended for the frame not be cut if it is avoidable. When shortening or lengthening the wheelbase on some models, it is possible to do so without cutting the frame. This is possible on models which have a straight frame rail. If the chassis does not have a straight frame rail, it may still be necessary to cut the frame. For instructions on shortening or lengthening these chassis, refer to the "Altering the Wheelbase by Altering the Frame" section of this book. Otherwise, the wheelbase may be shortened or lengthened by removing the rear suspension, drilling new suspension mounting holes at the appropriate spot in the frame, and sliding the rear suspension, suspension liner, and suspension crossmembers forward or aft.

The suspension and suspension crossmembers' rivet holes left in the frame rail flange must be filled with GRADE 8 bolts and hardened steel washers at both the bolt head and nut, HUC bolts or GRADE 8 flanged bolts and hardened steel washers at the nut. When shortening/lengthening the wheelbase in this manner, the following guidelines must be adhered to:

1. All frame drilling must comply with the DRILLING AND WELDING section of this book.
2. All rivet holes left in the frame rail flange from the suspension and suspension crossmembers must be either filled with GRADE 8 bolts and hardened steel washers at both the bolt head and nut, HUC bolts or GRADE 8 flanged bolts and hardened steel washers at the nut.
3. The components required to be slid forward or aft are the suspension and suspension hangers, suspension crossmembers and suspension frame liner.

### *Altering the Wheelbase by Altering the Frame*

Even on a straight frame rail, it may be desirable to cut the frame and lengthen or shorten the wheelbase rather than simply sliding the rear suspension back or forward. The following section offers some guidelines and suggestions for cutting and lengthening or shortening the frame.

### *Glossary of Terms – Chassis Wheelbase Alteration*

CA – Length from back-of-cab to rear axle centerline in inches.
AL – Added length (in case of a lengthened wheelbase). Difference between WB (new) and WB (old).
SL – Shortened length (in case of shortened wheelbase). Difference between WB (old) and WB (new).

1. Determine the added length (AL) or shortened length (SL) required to lengthen or shorten chassis. (For added wheelbase: New CA = CA + AL; For shortened wheelbase: New CA = CA – SL.)

2. Obtain the material to be used as the insert for the lengthened wheelbase in the correct length (AL). The insert must have the same cross-sectional dimensions and yield strength as the original frame rail.

3. Divide the new CA by two (2). Measure new CA/2 from the center of the rear axle forward and mark this point on the chassis frame (see figure below).

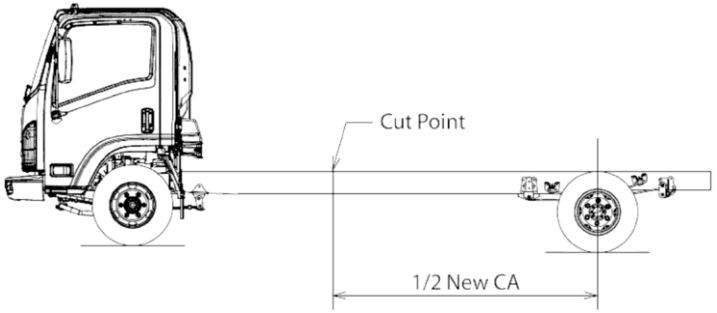



Figure 34

4. Cut the chassis frame at this point. If the wheelbase is to be lengthened, addition of the previously obtained insert (of length AL determined in step 1) will be made at this time. If the wheelbase is to be shortened, measure the distance (SL) forward of this cut and remove a length (SL) section from the chassis frame (see figure below). Ensure that an adequate area on the frame remains for the required addition of the necessary reinforcements. These are the only suggested places for cutting the frame and reinforcements but may be changed upon the advice of GM Upfitter engineering.

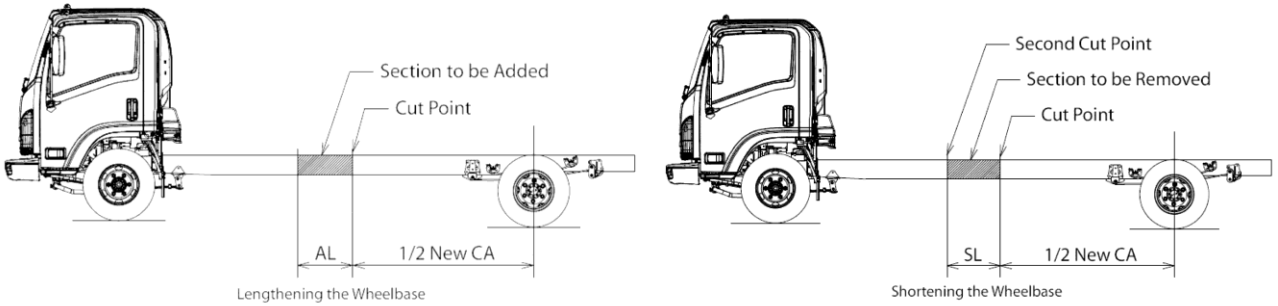



Figure 35

5. When welding the insert (length AL for wheelbase lengthening) to the original frame rail, a continuous butt weld must be used at the splices. When shortening the wheelbase, weld the ends of the chassis frame together with a continuous butt weld over the junction of the frame ends. Weld can be both the inside and outside of the frame rails using welding techniques prescribed by established welding standards (ref. SAE J1147) and in accordance with this manual. An example of this weld is shown below.

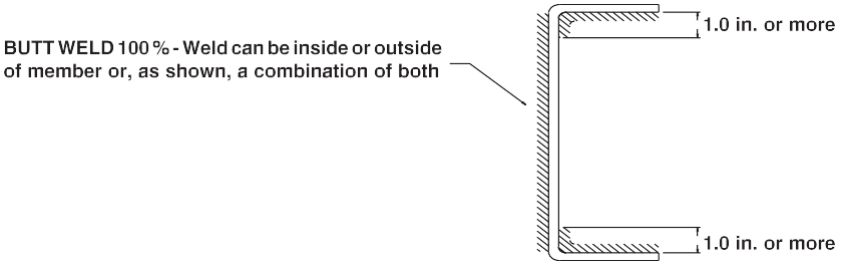



Figure 36

***Installation position of reinforcement material***

・Ends of outer reinforcement and inner reinforcement should not overlap.
・An end of outer reinforcement and cross member should not overlap.
・An end of outer reinforcement and spring bracket should not overlap.

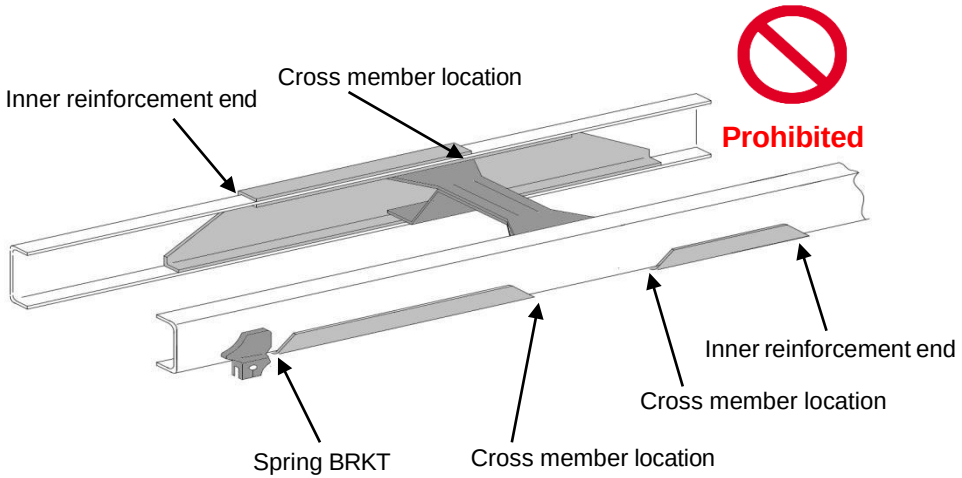
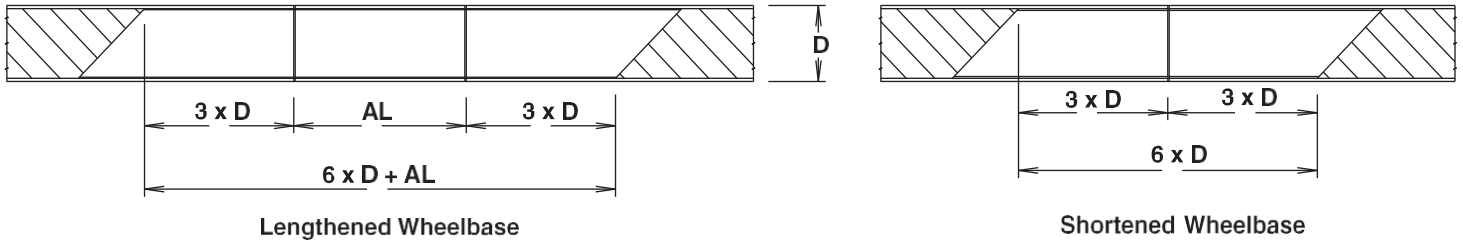



Figure 37

6. Determine the appropriate additional internal reinforcements which are required using this equation:

Reinforcement Length = AL + 6 x (original frame rail web depth).

The figure below shows how this reinforcement is to be placed over the extended or shortened section of the frame rail.




D = Original frame rail web depth

Figure 38

The suggested cross section of this reinforcement is a snug fit inner channel. If the new wheelbase exceeds the upper limit of the optional wheelbases of this model, i.e.; a “long bridge”, it may be necessary to use an “inverted L” reinforcement in addition to the snug fit channel reinforcement. Application Engineering should be consulted for approval of such cases. It should be noted that these methods of reinforcements, and any other methods which may be used, require a 45° angled cut at both ends to avoid stress concentrations in the frame (note the figures under item 7).

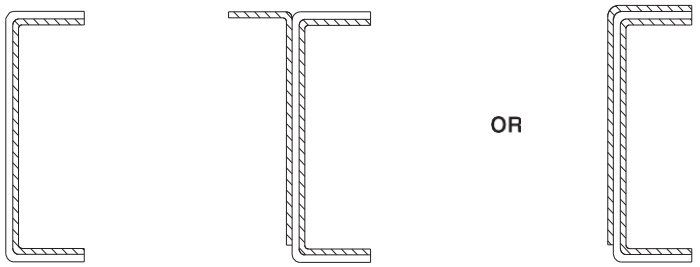



Figure 39

D D D channel Snug fit inner channel with "Inverted L" for "Long Bridge" wheelbases

7. The reinforcements must be fastened securely to only the web of the original chassis frame rail. The reinforcement must be held rigidly in place using either HUC bolts, GRADE 8 bolts and hardened steel washers at both the bolt head and nut, or GRADE 8 flanged bolts and hardened steel washers at the nut. Below are some suggested bolt patterns. It should be noted that these bolt patterns must not align the bolts vertically, i.e.: the bolt pattern must be staggered.

Figure 40

9. The propeller shafts' overall length will also need to be lengthened or shortened. If the extension is within the limits of the optional wheelbases of the respective model, the exact propeller shaft lengths and angles are given on or about Page 12 of the respective sections of this book. If the modified wheelbase exceeds the optional wheelbases of the respective model, the following guidelines must be adhered to:
   a) Propeller Shaft Length - the maximum propeller shaft lengths (pin to pin) for the respective models are shown in the table below.

| ENGINE | DIESEL |
|---|---|
| Model | 6500/7500 |
| Propeller Shaft Diameter (in.) | 4.0 |
| Maximum Propeller Shaft Length (in.) | 67.9 |

Figure 41

   b) Propeller Shaft Angles - the maximum propeller shaft angles, with respect to the previous shaft, are shown in the table below.
   c) The propeller shaft angles must be designed such that the angles will cancel to avoid propeller shaft whip.
   d) The propeller shaft yokes must be assembled such that the propeller shaft yokes are "in phase."

| ENGINE | DIESEL |
|---|---|
| Model | 6500/7500 |
| Maximum Propeller Shaft Angle | 3.4° |

Figure 42

10. Extending the frame will also require relocation and/or addition of crossmembers. If the extension is within the limits of the optional wheelbases of the respective model, the exact crossmember locations and dimensions are given in the respective model sections of this book. If the modified wheelbase exceeds the optional wheelbases of the respective model, the following guidelines must be adhered to:
   a) The crossmember location will largely be determined by the propeller shaft lengths and where the center carrier bearing locations are for the propeller shaft assembly.
   b) A crossmember must be located at the front and rear spring hangers of the rear suspension (refer to the appropriate section of this book to see where these suspension crossmembers are to be located).

c) The crossmember must be constructed such that it supports both the upper and lower flange on each frame rail (see drawing on next page). A crossmember such as the one on the next page may be constructed, or LCF crossmembers may be obtained from your Chevrolet parts dealer.

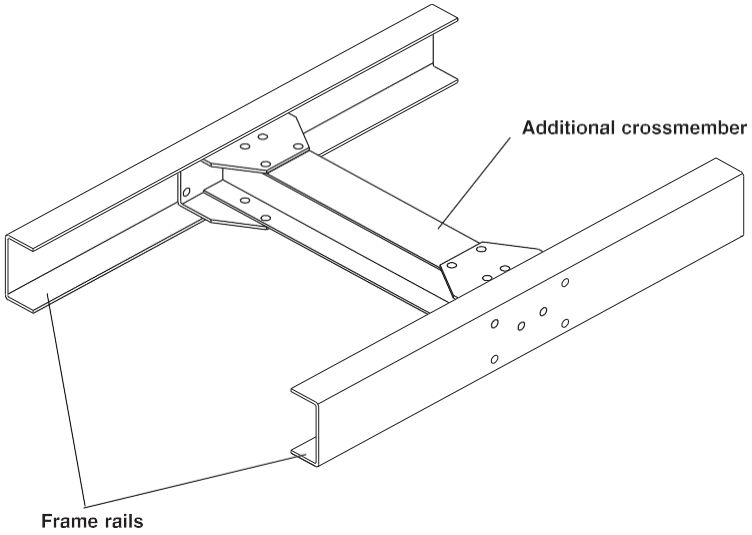



Figure 43

d) The maximum distance between crossmembers for the respective models is given in the table below.

| ENGINE | DIESEL |
|---|---|
| Model | 6500/7500 |
| Maximum Distance Between Crossmembers (in.) | 35.7 |

Figure 44

e) The drilling for any additional holes in the frame rails must comply with the DRILLING AND WELDING section of this book.

11. All other aspects of lengthening or shortening the wheelbase must comply with the applicable section of this Body Builder's Manual.

12. Please contact GM Upfitter for guidelines on 6500 XD Chassis frame modifications when the vehicle is equipped with an anti-lock brake system.

# 2025 Chevrolet Low Cab Forward



## LCF Gas & Diesel Body Application Summary Chart

| MODEL GVWR | MODEL CODE | WB (in) | BOC (in) | BODY LENGTHS | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | 10 ft. | 12 ft. | 14 ft. | 16 ft. | 18 ft. | 20 ft. | 22 ft. | 24 ft. |
| 3500 GAS 12,000 lbs | 1C1 | 109 | 7.7 | X | X | | | | | | |
| | 1C2 | 132.5 | 7.7 | | | X | | | | | |
| | 1C3 | 150 | 7.7 | | | | X | X | | | |
| | 1C4 | 176 | 7.7 | | | | | | X | | |
| 3500 CREW CAB GAS 12,000 lbs | 1D3 | 150 | 5 | | X | | | | | | |
| | 1D4 | 176 | 5 | | | | X | | | | |
| 4500 GAS 14,500 lbs | 1F1 | 109 | 7.7 | X | X | | | | | | |
| | 1F2 | 132.5 | 7.7 | | | X | | | | | |
| | 1F3 | 150 | 7.7 | | | | X | | | | |
| | 1F4 | 176 | 7.7 | | | | | X | X | | |
| 4500 CREW CAB GAS 14,500 lbs | 1G3 | 150 | 5 | | X | | | | | | |
| | 1G4 | 176 | 5 | | | | X | | | | |
| 5500 GAS 17,950 lbs | 1R2 | 132.5 | 7.7 | | X | X | | | | | |
| | 1R3 | 150 | 7.7 | | | | X | | | | |
| | 1R4 | 176 | 7.7 | | | | | X | X | | |
| 5500 CREW CAB GAS 17,950 lbs | 1S3 | 150 | 5 | | X | | | | | | |
| | 1S4 | 176 | 5 | | | | X | | | | |
| 5500 GAS 19,500 lbs | 1U2 | 132.5 | 7.7 | | X | X | | | | | |
| | 1U3 | 150 | 7.7 | | | | X | | | | |
| | 1U4 | 176 | 7.7 | | | | | X | X | | |
| 5500 CREW CAB GAS 19,500 lbs | 1V3 | 150 | 5 | | X | | | | | | |
| | 1V4 | 176 | 5 | | | | X | | | | |
| 4500 DIESEL 14,500 lbs | 3F1 | 109 | 7.7 | | X | | | | | | |
| | 3F2 | 132.5 | 7.7 | | | X | | | | | |
| | 3F3 | 150 | 7.7 | | | | X[1] | X | | | |
| | 3F4 | 176 | 7.7 | | | | | | X[1] | | |
| 4500 CREW CAB DIESEL 14,500 lbs | 3G3 | 150 | 5.3 | | X[1] | | | | | | |
| | 3G4 | 176 | 5.3 | | | | X[1] | | | | |
| 4500 DIESEL 16,000 lbs | 3Y1 | 109 | 7.7 | X | X | | | | | | |
| | 3Y2 | 132.5 | 7.7 | | | X | | | | | |
| | 3Y3 | 150 | 7.7 | | | | X | X | | | |
| | 3Y4 | 176 | 7.7 | | | | | X | X | | |
| 4500 CREW CAB DIESEL 16,000 lbs | 3Z3 | 150 | 5.3 | | X | | | | | | |
| | 3Z4 | 176 | 5.3 | | | | X | | | | |
| 5500 DR DIESEL[4] 17,950 lbs | 3U1 | 109 | 7.7 | X | | | | | | | |
| | 3U2 | 132.5 | 7.7 | | X[1] | X | | | | | |
| | 3U3 | 150 | 7.7 | | | | X | X | | | |
| | 3U4 | 176 | 7.7 | | | | | | X | | |
| | 3U5 | 200 | 7.7 | | | | | | | X | |
| 5500 DR CREW CAB DIESEL[4] 17,950 lbs | 3V3 | 150 | 5.3 | | X | | | | | | |
| | 3V4 | 176 | 5.3 | | | | X | | | | |
| 5500 DIESEL 19,500 lbs | 3U1 | 109 | 7.7 | X | | | | | | | |
| | 3U2 | 132.5 | 7.7 | | X[1] | X | | | | | |
| | 3U3 | 150 | 7.7 | | | | X | | | | |
| | 3U4 | 176 | 7.7 | | | | | X | X | | |
| | 3U5 | 200 | 7.7 | | | | | | | X | |
| | 3U6 | 212 | 7.7 | | | | | | | | X |
| 5500 CREW CAB DIESEL 19,500 lbs | 3V3 | 150 | 5.3 | | X | | | | | | |
| | 3V4 | 176 | 5.3 | | | | X | | | | |

**Notes:**

[1] Indicated body size and chassis wheelbase combination requires the installation of a liftgate for an acceptable weight distribution.

[2] WARNING - Body selection recommendations are based on water level weight distribution and no accessories (i.e liftgates or refrigeration units). This table is intended for reference and does not preclude the necessity for an accurate weight distribution calculation.

[3] The BOC (back of cab) values shown are the minimum requirements for the chassis. A weight distribution analysis should be performed for the completed vehicle to determine the necessary BOC value.

[4] Available through PIO ordering

# 2025 Chevrolet Low Cab Forward



## 6500 XD & 7500 XD Body Application Summary Chart

### 6500 XD

| BODY APPLICATION SUMMARY | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MODEL CODE | GVWR (lbs) | WB (in) | BOC (in) | 14 ft. | 16 ft. | 18 ft. | 20 ft. | 22 ft. | 24 ft. | 26 ft. | 28 ft. | 30 ft. |
| MT1 | 25,950 | 152 | 10.4 | X | X | | | | | | | |
| MT2 | | 170 | | | | X | | | | | | |
| MT3 | | 188 | | | | | X | | | | | |
| MT4 | | 200 | | | | | | X | | | | |
| MT5 | | 212 | | | | | | | X | | | |
| MT6 | | 224 | | | | | | | | X | | |
| MT7 | | 236 | | | | | | | | | X | |
| MT8 | | 248 | | | | | | | | | | X |

### 7500 XD Derate

| BODY APPLICATION SUMMARY | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MODEL CODE | GVWR (lbs) | WB (in) | BOC (in) | 14 ft. | 16 ft. | 18 ft. | 20 ft. | 22 ft. | 24 ft. | 26 ft. | 28 ft. | 30 ft. |
| MW1 | 25,950 | 152 | 10.4 | X | X | | | | | | | |
| MW2 | | 170 | | | | X | | | | | | |
| MW3 | | 188 | | | | | X | | | | | |
| MW4 | | 200 | | | | | | X | | | | |
| MW5 | | 212 | | | | | | | X | | | |
| MW6 | | 224 | | | | | | | | X | | |
| MW7 | | 236 | | | | | | | | | X | |
| MW8 | | 248 | | | | | | | | | | X |

**Notes:**

[1] WARNING - Body selection recommendations are based on water level weight distribution and no accessories (i.e.liftgates or refrigeration units). This table is intended for reference and does not preclude the necessity for an accurate weight distribution calculation.

[2] The BOC (back of cab) values shown are the minimum requirements for the chassis. A weight distribution analysis should be performed for the completed vehicle to determine the necessary BOC value.

# 2025 Chevrolet Low Cab Forward

## 7500 XD: Dry Freight Bodies

| BODY APPLICATION SUMMARY | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MODEL CODE | GVWR (lbs) | WB (in) | BOC (in) | BODY ONLY | | | | | | | | |
| | | | | 14 ft. | 16 ft. | 18 ft. | 20 ft. | 22 ft. | 24 ft. | 26 ft. | 28 ft. | 30 ft. |
| MV1 | 33,000 | 152 | 10.4 | X | | | | | | | | |
| MV2 | | 170 | | | X | | | | | | | |
| MV3 | | 188 | | | | X | | | | | | |
| MV4 | | 200 | | | | | X | | | | | |
| MV5 | | 212 | | | | | | X | | | | |
| MV6 | | 224 | | | | | | | X | | | |
| MV7 | | 236 | | | | | | | X | X | | |
| MV8 | | 248 | | | | | | | | X | X | |

## 7500 XD: Dry Freight Bodies with Liftgate

| BODY APPLICATION SUMMARY | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MODEL CODE | GVWR (lbs) | WB (in) | BOC (in) | BODY LENGTHS W/ LIFTGATE | | | | | | | | |
| | | | | 14 ft. | 16 ft. | 18 ft. | 20 ft. | 22 ft. | 24 ft. | 26 ft. | 28 ft. | 30 ft. |
| MV1 | 33,000 | 152 | 10.4 | X | | | | | | | | |
| MV2 | | 170 | | | X | | | | | | | |
| MV3 | | 188 | | | | X | | | | | | |
| MV4 | | 200 | | | | | X | | | | | |
| MV5 | | 212 | | | | | | X | | | | |
| MV6 | | 224 | | | | | | X | | | | |
| MV7 | | 236 | | | | | | | X | | | |
| MV8 | | 248 | | | | | | | | X | X | |

## 7500 XD: Refrigerated Freight Bodies

| BODY APPLICATION SUMMARY | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MODEL CODE | GVWR (lbs) | WB (in) | BOC (in) | BODY LENGTHS W/ REEFER | | | | | | | | |
| | | | | 14 ft. | 16 ft. | 18 ft. | 20 ft. | 22 ft. | 24 ft. | 26 ft. | 28 ft. | 30 ft. |
| MV1 | 33,000 | 152 | 10.4 | X | | | | | | | | |
| MV2 | | 170 | | | X | X | | | | | | |
| MV3 | | 188 | | | | X | X | | | | | |
| MV4 | | 200 | | | | | X | X | | | | |
| MV5 | | 212 | | | | | | X | | | | |
| MV6 | | 224 | | | | | | | X | | | |
| MV7 | | 236 | | | | | | | | X | | |
| MV8 | | 248 | | | | | | | | | X | X |

**Notes:**

[1] WARNING - Body selection recommendations are based on water level weight distribution and no accessories unless indicated (i.e., liftgates or refrigeration units). This table is intended for reference and does not preclude the necessity for an accurate weight distribution calculation.

[2] The BOC (back of cab) values shown are the minimum requirements for the chassis. A weight distribution analysis should be performed for the completed vehicle to determine the necessary BOC value.

# 2025 Chevrolet Low Cab Forward



## Mechanical and Cab Specifications
## Engine Horsepower and Torque Chart

| ENGINE | MODEL(S) | NET HP[1] HP/RPM | NET TORQUE[1] HP/RPM | GROSS HP[1] HP/RPM | GROSS TORQUE[1] LBS-FT/RPM |
|---|---|---|---|---|---|
| GMPT 6.6L-V8 | 3500 HG GAS<br>4500 HG GAS<br>5500 HG GAS<br>5500 XG GAS | 350/4500 | 425/3800 | - | - |
| ISUZU 4HK1-TC | 4500 HD DIESEL<br>4500 XD DIESEL<br>5500 XD DIESEL | 210/2500 | 441/1850 | 215/2550 | 452/1850 |
| CUMMINS B6.7 | 6500 XD<br>7500 XD DERATE<br>7500 XD | - | - | 260/2400 | 660/1600 |

NOTES: [1] HORSEPOWER AND TORQUE RATINGS ARE MEASURED UNDER SAE J1349

## GVWR / GCWR Ratings

The following table presents GVW ratings and corresponding GCW ratings for each model truck:

| TRUCK MODEL | GVWR (lbs) | GCWR (lbs)* |
|---|---|---|
| 3500 HG GAS | 12,000 | 18,000 |
| 4500 HG GAS | 14,500 | 20,500 |
| 5500 HG GAS | 17,950 | 23,950 |
| 5500 XG GAS | 19,500 | 25,500 |
| 4500 HD DIESEL | 14,500 | 20,500 |
| 4500 XD DIESEL | 16,000 | 22,000 |
| 5500 XD DERATE DIESEL | 17,950 | 23,950 |
| 5500 XD DIESEL | 19,500 | 25,500 |
| 6500 XD DIESEL | 25,950 | 30,000 |
| 7500 XD DERATE DIESEL | 25,950 | 33,000 |
| 7500 XD DIESEL | 33,000 | 33,000 |

* The 4500 HD, 4500 XD, 5500 XD are not approved for Hot Shot applications.

# 2025 Chevrolet Low Cab Forward

## Paint Code Chart

### PAINT CODE INFORMATION

| GM COLOR NAME | AKZO NOBEL CODE | DUPONT CODE | NEXA COLOR CODE | PPG CODE | SHERWIN WILLIAMS/ MARTIN SENOUR | SPIES HECKER CODE | STANDOX CODE | PANTONE (1) |
|---|---|---|---|---|---|---|---|---|
| Arc White | FLNA40156 | 729 | 729 | 91508 | 729 | 729 | 729 | 7541C |
| Wheatland Yellow | FLNA10182 | 812 | 812 | 83931 | 812 | 812 | 812 | 137C |
| Woodland Green | FLNA60181 | 807 | 807 | 48339 | 807 | 807 | 807 | 3308C |
| Cardinal Red | ISU736 | 736 | 736 | 75097 | 736 | 736 | 736 | 202C |
| Dark Blue | ISU695 | 695 | 695 | 909649 | 695 | 695 | 695 | 655C |
| Ebony Black II | ISU508 | 508 | 508 | N/A | 508 | 508 | 508 | Black 6C |

(1) The Pantone colors listed are the closest Pantone color numbers to the OEM paint colors and are given for reference only.

## Low Cab Forward Towing Procedure

**When towing a vehicle:** Proper equipment must be used to prevent damage to vehicles during any towing. State and local laws which apply to vehicles in tow must be followed. Vehicles should not be towed at speeds in excess of 55 MPH (88 km/h). Connect to the main structural parts of the vehicle. Do not attach to bumpers, tow hooks or brackets. Use only equipment designed for this purpose. Follow the instructions of the wrecker manufacturer. A safety chain system must be used. The procedures below must be followed when towing to prevent possible damage.

**Front End Towing (Front Wheels Off Ground)**
To prepare a disabled vehicle for front end towing with front wheels raised off the ground, the following steps are necessary:
- Block the rear wheels of the disabled vehicle.
- Disconnect the propeller shaft at the rear axle. Secure the propeller shaft to the frame or cross member.

**CAUTION: When towing, disconnect the driveshaft at the rear axle to ensure the transmission is not damaged.**
If there is damage or suspected damage to the rear axle, remove the axle shafts.
Cover the hub openings to prevent the loss of lubricant or entry of dirt or foreign objects.
Place a 10 cm (4 in) wood beam against the towing manual behind the bumper.
(If no 10 cm (4 in) is available, then remove the bumper.) Ensure towing chains do not come into contact with the horns or the bumper.

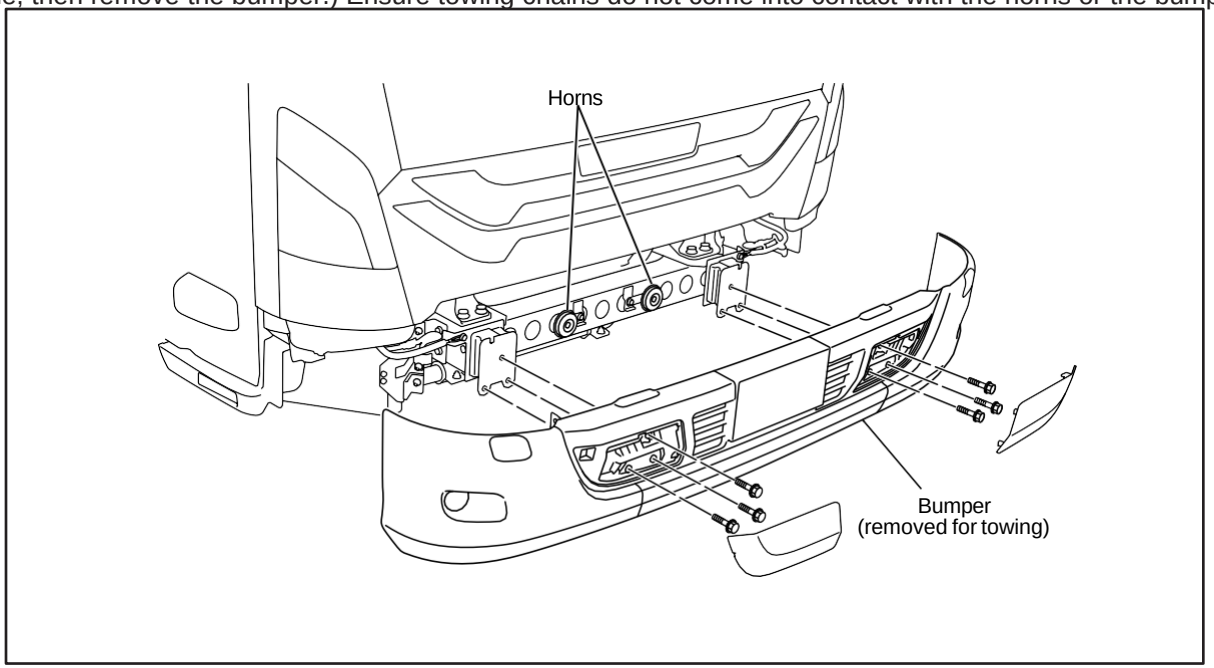



Figure 1

**After Towing**
After towing the vehicle, block the rear wheels and install axle shafts or driveshaft. Apply the parking brake before disconnecting from the towing vehicle.

**Front End Towing (All Wheels On the Ground)**
Your vehicle may be towed on all wheels provided the steering is operable. Remember that power steering and brakes will not have power assist. There must be a tow bar installed between the tow vehicle and the disabled vehicle.

**Towing with all wheels on the ground**
To prepare a disabled vehicle for front end towing with all wheels on the ground, the following steps are necessary:

- Block the wheels of the disabled vehicle.

- Disconnect the propeller shaft at the rear axle. Secure the propeller shaft to the frame or crossmember.

**CAUTION:**
When towing, disconnect the driveshaft at the rear axle to ensure the transmission is not damaged. Provide wood blocking to prevent towing chains and bar from coming into contact with the bumper. If there is damage or suspected damage to the rear axle, remove the axle shafts. Cover the hub openings to prevent the loss of lubricant or entry of dirt or foreign objects.

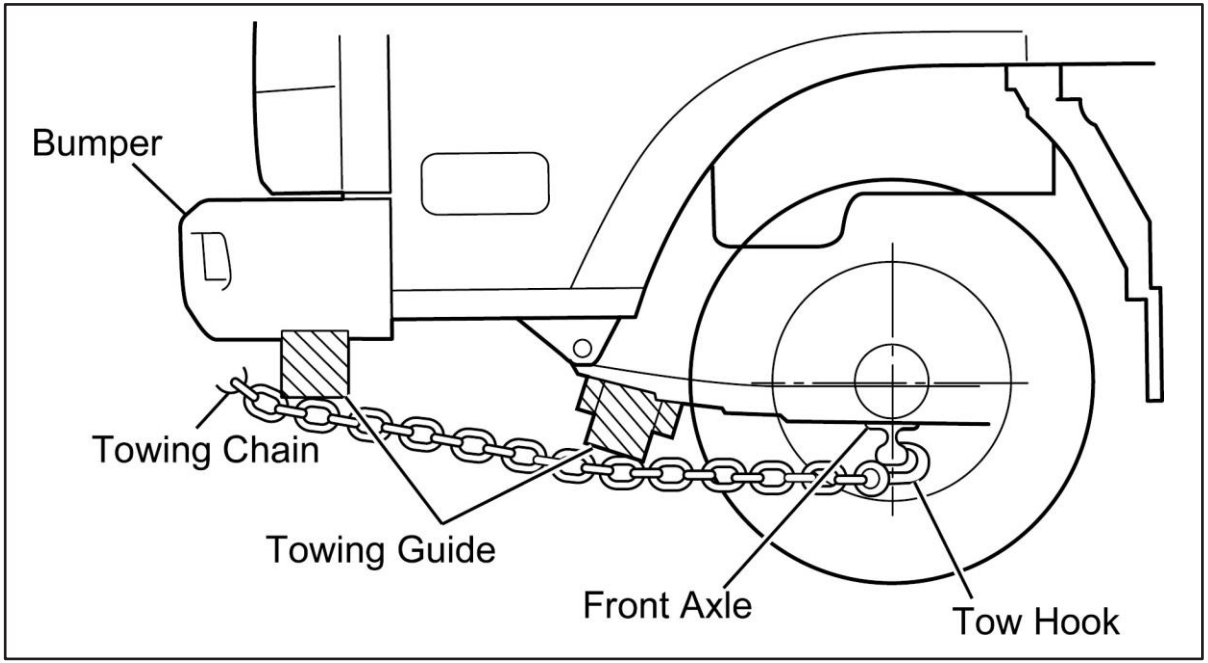



Figure 2

**CAUTION:**
When towing, disconnect the driveshaft at the rear axle to ensure the transmission is not damaged. Provide wood blocking to prevent towing chains and bar from coming into contact with the bumper. If there is damage or suspected damage to the rear axle, remove the axle shafts. Cover the hub openings to prevent the loss of lubricant or entry of dirt or foreign objects.

**After Towing**
After towing the vehicle, block the rear wheels and install axle shafts or propeller shaft. Apply the parking brake before disconnecting from the towing vehicle. Check and fill rear axle with oil, if required.

**Rear End Towing**
When towing a vehicle with rear wheels raised, secure the steering wheel to maintain straight-ahead position. Make certain that the front axle is not loaded beyond the front axle gross axle weight rating (GAWR) as indicated on the vehicle's VIN and weight rating plate.

**Special Towing Instructions**

1. All state and local laws regarding such items as warning signals, night illumination, speed, etc., must be followed.

2. Safety chains must be used.

3. No vehicle should ever be towed over 55 MPH (88 km/h).

4. Loose or protruding parts of damaged vehicles should be secured prior to moving.

5. A safety chain system completely independent of the primary lifting and towing attachment must be used.

6. Operators should refrain from going under a vehicle which is being lifted by the towing equipment unless the vehicle is adequately supported by safety stands.

7. No towing operation which for any reason jeopardizes the safety of the wrecker operator or any bystanders or other motorists should be attempted.

## 6500 XD & 7500 XD Series Towing Procedure

**When towing a vehicle:** To move a disabled vehicle, it is best to rely on someone in the wrecker or tow truck business. If that is not possible, follow these procedures. When towing, use appropriate equipment and comply with state and local legal requirements. Do not try to start the engine by towing or pushing the vehicle.

**CAUTION:**

- **Be sure to chock the wheels when disconnecting the axle shaft. The vehicle could start to move and cause a serious accident. The vehicle will start moving upon disconnecting the axle shaft.**
- **Place the gearshift lever in the "N" position, and tow for a maximum distance of 6.2 miles (10 km) at speeds less than 25 MPH (40 km/h). Other than the above, disconnect the axle shaft when towing to avoid damage to the transmission.**
- **Whenever possible, tow a vehicle with the engine started. If the engine is not started:**
- **The brakes will not be as effective.**
- **The steering wheel will be hard to turn.**
- **The steering wheel could lock, making it impossible to move. This is extremely dangerous. (When the ignition key is removed.)**
- **If you apply any one of the air brake parking controls while the vehicle is moving, your rig will stop suddenly. If you are not ready for this, you or others could be injured. Do not apply any one of these controls while you are driving unless you have to make an emergency stop.**

**Front End Towing (All wheels on the ground, or the front wheels are off the ground):** When it is possible to operate the steering wheel, the vehicle can be towed with all wheels on the ground. If the engine cannot be started, the power steering system does not work, making steering difficult. In addition, when air pressure is low, the brakes will not work. Either install a tow bar between the towing vehicle and the disabled vehicle or use a tow truck to move the disabled vehicle. To prevent damage to the differential and pinion seal, the axle shafts need to be removed whenever the vehicle is towed with the rear tires on the ground. Remove the axle shaft and plug up the opening of the hub to prevent differential gear oil from leaking, or to prevent dirt or foreign objects from entering the axle. When towing, disconnect the axle shaft at the rear axle to ensure the transmission is not damaged.

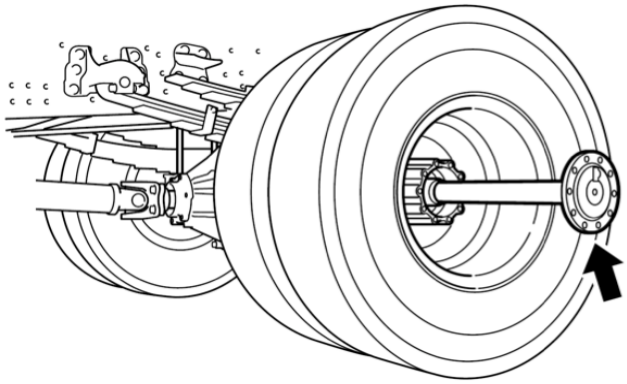


Figure 3

1. If the vehicle is towing or is towed, firmly attach a rope to the front towing hook on the same side.

2. During towing, carefully watch the stop lights of the towing vehicle in order to prevent slack in the rope. Ensure that there are no strong shocks or lateral force applied to the vehicle. Excessive towing load can damage the towing hook.

**CAUTION:**

**• Do not tow a vehicle at an angle of greater than 15°. This could exert too much stress on the vehicle and damage it.**
**• Attach a rope to the towing hook only. Attaching a rope to any other part of the vehicle could damage it.**
**• Make sure there are no people near the towing rope and hook before towing a vehicle. If the rope snaps, people nearby could be injured.**
**• The towing hook is for use to tow a vehicle with about the same weight as the towing vehicle on good roads.**
**• When coming to channels or muddy areas, unload the vehicle. Do not use the towing hook to tow, but tow with a rope attached to the axle.**

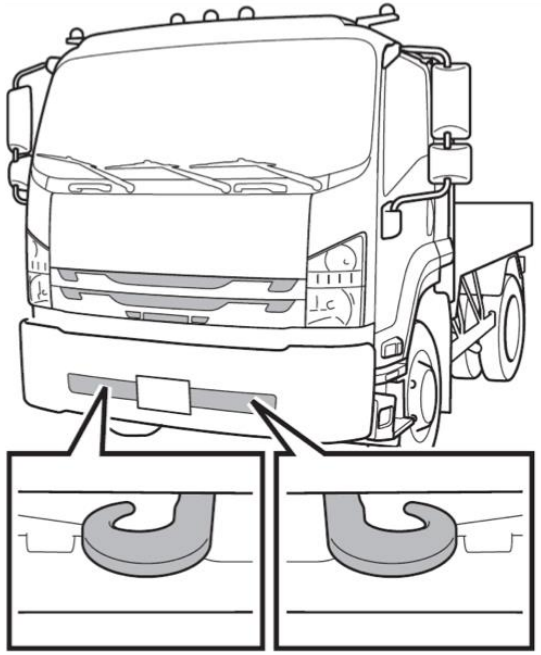
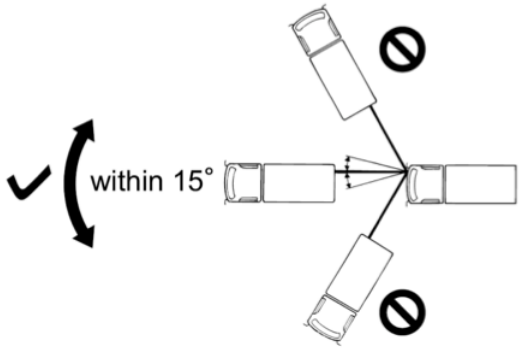


Figure 4



## Weight Distribution Concepts

## Weight Restrictions

The Gross Vehicle Weight Rating (GVWR) and the Gross Axle Weight Rating (GAWR) of each Incomplete Vehicle are specified on the cover of its Incomplete Vehicle Document in conformance to the requirements of Part 568.4 of the Federal Motor Vehicle Safety Regulations. The final stage manufacturer is responsible under Part 567.5 to place the GVWR and the GAWR of each axle on the Final Vehicle Certification Label. The regulation states that the appropriate rating "shall not be less than the sum of the unloaded vehicle weight, rated cargo load, and 150 pounds times the vehicle's designated seating capacity."

Unloaded vehicle weight means the weight of a vehicle with maximum capacity of all fluids necessary for operation of the vehicle, but without cargo or occupants.

During completion of this vehicle, GVWR and GAWR may be affected in various ways, including but not limited to the following:

1. The installation of a body or equipment that exceeds the rated capacities of this Incomplete Vehicle.
2. The addition of designated seating positions which exceeds the rated capacities of this Incomplete Vehicle.
3. Alterations or substitution of any components such as axles, springs, tires, wheels, frame, steering and brake systems that may affect the rated capacities of this Incomplete Vehicle.

Use the following chart to assure compliance with the regulations. Chassis curb weight and GVW rating is located in each vehicle section. Always verify the results by weighing the completed vehicle on a certified scale.

| | | |
|---|---|---|
| Curb Weight of Chassis (lbs.) | | _____ (From required vehicle section) |
| **PLUS** weight of added body components, accessories or other permanently attached components. | + | _____ (Body, liftgate, reefer, etc.) |
| **PLUS** total weight of passengers, air conditioning and all load or cargo. | + | _____ (Driver, passengers, accessories and load) |
| **EQUALS** Gross Vehicle Weight (lbs.) (GVW) of completed vehicle. | = | _____ (Should equal GVWR from required vehicle section) |

Figure 1

## Gross Axle Weight Rating

The Gross Vehicle Weight is further restricted by the Gross AxIe Weight Rating (GAWR). The maximum GAWR for both front and rear axles is listed in each Vehicle Section. Weight distribution calculations must be performed to ensure GAWR is not exceeded. Always verify the results by weighing the completed vehicle on a certified scale.

**NOTE:** Although the Front Gross Axle Weight Rating (FGAWR) plus the Rear Gross Axle Weight Rating (RGAWR) may exceed the Gross Vehicle Weight Rating (GVWR), the total GVW may not exceed the respective maximum GVWR.

The variation in the GAWRs allow the second stage manufacturer some flexibility in the design of the weight distribution of the attached unit.

## Weighing the Vehicle

Front and rear GAWRs and total GVWR should be verified by weighing a completed loaded vehicle. Weigh the front and rear of the vehicle separately and combine the weights for the total GVWR. All three weights must be less than the respective maximum shown in the vehicle sections.

## Tire Inflation

Tire inflation must be compatible with GAWR and GVWR as specified on the cover of the Incomplete Vehicle Document for each vehicle.

## Center of Gravity

The design of the truck body should be such that the center of gravity of the added load does not exceed the guidelines as listed in each Vehicle Section. If the body is mounted in such a way that the center of gravity height exceeds the maximum height of the center of gravity designated for each model, the directional stability at braking and roll stability at cornering will be adversely affected. A vertical and/or horizontal center of gravity calculation must be performed if a question in stability arises to ensure the designed maximum height of the center of gravity is not violated.

# 2025 Chevrolet Low Cab Forward

## Weight Distribution

A truck as a commercial vehicle has one purpose. That purpose is to haul some commodity from one place to another. A short distance or a long distance, the weight to be hauled, more than any other factor, determines the size of the truck. A small weight requires only a small truck; a large weight requires a large truck. A simple principle, but it can easily be misapplied. In any case, selecting the right size truck for the load to be hauled will ensure that the job will be done and that it will be able to be done with some degree of reliability and within the legal limitations of total gross weight and axle gross weights.

Not only must a truck be selected that will handle the total load, but the weight must also be properly distributed between the axles. This is of extreme importance from both a functional and economic aspect. If a truck consistently hauls less than its capacity, the owner is not realizing full return on his investment and his operating costs will be higher than they should be. If the truck is improperly loaded or overloaded, profits will be reduced due to increased maintenance costs and potential fines resulting from overloading beyond legal limitations. Careful consideration must be given to distribution of the load weight in order to determine how much of the total, including chassis, cab, body and payload, will be carried on the front axle and how much will be carried on the rear axle, on the trailer axles and the total. Moving a load a few inches forward or backward on the chassis can mean the difference between acceptable weight distribution for the truck or an application that will not do the job satisfactorily.

Every truck has a specific capacity and should be loaded so that the load distribution is kept within Gross Axle Weight Ratings (GAWR) and the truck's Gross Vehicle Weight Rating (GVWR) or Gross Combination Weight Rating (GCWR) for a tractor/trailer and the weight laws and regulations under which the truck will operate.

Another key concept in weight distribution is ensuring that the proper percentage of total vehicle weight (GVW) is distributed to each individual axle. This is typically analyzed by calculating what percentage of the total vehicle weight is being supported by the front axle. To ensure proper traction and vehicle operation, please reference the chart below for the recommended minimum front axle loading percentage by chassis model.

| Minimum Recommended Front Axle Loading % by Chassis Model | | |
|---|---|---|
| MODEL | GVWR (lbs) | Minimum FA % |
| 3500 HG GAS | 12,000 | 30.0% |
| 4500 HG GAS | 14,500 | 30.0% |
| 5500 HG GAS | 17,950 | 25.8% |
| 5500 XG GAS | 19,500 | 25.8% |
| 4500 HD DIESEL | 14,500 | 30.0% |
| 4500 XD DIESEL | 16,000 | 30.0% |
| 5500 XD DIESEL DERATED | 17,950 | 30.0% |
| 5500 XD DIESEL | 19,500 | 30.0% |
| 6500 XD DIESEL | 25,950 | 30.0% |
| 7500 XD DIESEL DERATED | 25,950 | 30.0% |
| 7500 XD DIESEL | 33,000 | 30.0% |

An improper weight distribution will cause problems in many areas:

1. Excessive front-end wear and failure
    a. Tie-rod and kingpin wear
    b. Front axle failure
    c. Overloading of front suspension
    d. Wheel bearing failure
2. Rapid tire wear - When the weight on a tire exceeds its rating capacity, accelerated wear will result and could result in tire failure.
3. Rough, erratic ride - If the center of the payload is directly over or slightly behind the rear axle, the lack of sufficient weight on the front axle will create a bobbing effect, very rough ride, and erratic steering. This condition will be magnified when the truck is going uphill.
4. Hard steering
    a. When loads beyond the capacity of the front axle are imposed upon it, the steering mechanism is also overloaded, and hard steering will result.
    b. Excessive overloading could result in steering component damage or failure.
5. Unsafe operating and conditions
    c. Poor traction on the steering axle effects the safety of the driver and equipment, particularly on wet, icy and slippery surfaces. Experience indicates that approximately 30% of the total weight at the ground on a truck or tractor should be on the front axle with a low cab forward vehicle.
    d. When a truck is overloaded, a dangerous situation may exist because minimum speeds cannot always be maintained, directional control may not be precise and insufficient braking capacity can cause longer than normal braking distances.
6. High maintenance costs - Improper weight distribution and overloading cause excessive wear and premature failure of parts. Additional stresses imposed on the frame by the misapplication of wheelbases may be instrumental in causing the frame to crack or break.
7. Noncompliance with weight laws and regulations - When there is the possibility that axle loads will exceed existing weight laws and regulations, careful weight distribution is necessary to provide a correct balance between front and rear axle loads and total load within legal limitations.

In this way, maximum payloads may be carried without exceeding legal limits. If the body is too long for a wheelbase, the center of the body and payload is placed directly over the rear axle. This places all the payload on the rear axles, resulting in overloading the rear tires, rear axle springs and wheel bearings and potentially exceeding the rear axle legal weight limit. The front axle is then carrying no part of the payload and is easily lifted off the ground when going over rough terrain, creating a very rough ride and temporary loss of steering control. If the body is too short for the wheelbase used, frame stress may be increased and may result in excessive loads on the front axle. Excessive front axle loads increase wear on the kingpins and bushings, wheel bearings and steering gear. Excessive front axle loads also overstress the front axle, springs, tires, and wheels. All of these contribute directly to higher maintenance costs and hard steering, both of which are undesirable.

Weight distribution analysis involves the application of basic mathematical principles to determine the proper positioning of the payload and body weight in relation to the wheelbase of the truck chassis.

It is much less expensive to work all of this out on paper, make mistakes on paper and correct them there than to set up the truck incorrectly and either have it fail to do the job or, much worse, fail completely.

It is important to become familiar with the dimensions of the truck, as these will be needed to perform the necessary calculations.

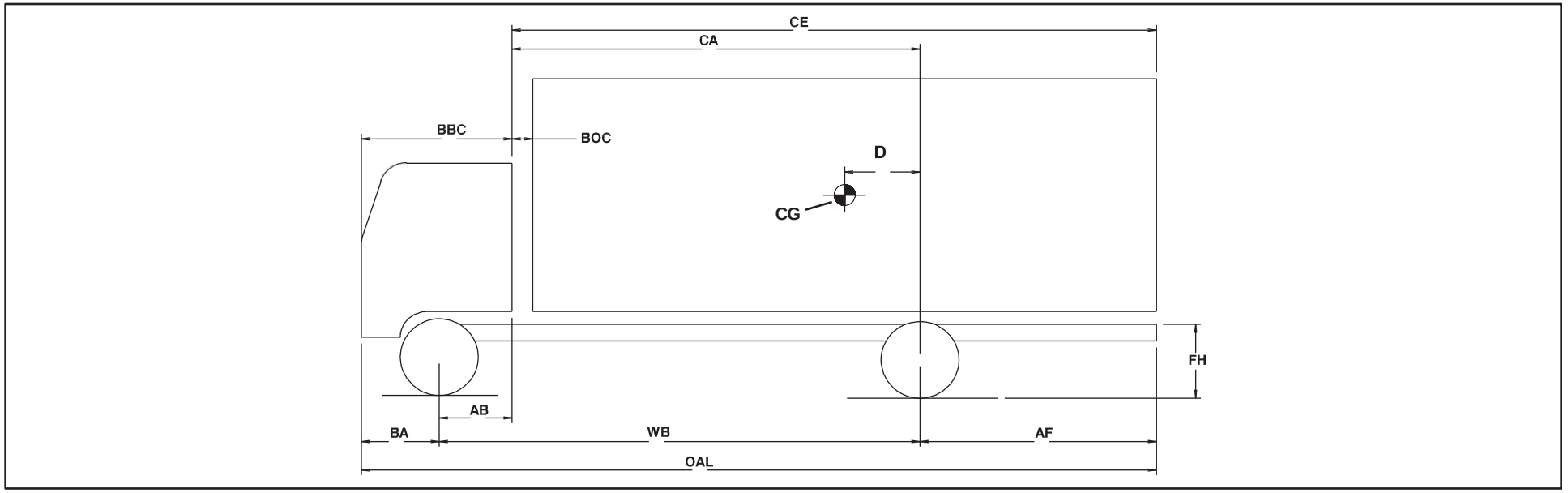



Figure 2

## *Glossary of Dimensions*

**BBC** – Bumper to back of cab
**BA** – Bumper to axle
**CA** – Cab to axle
**AB** – Axle to back of cab
**BOC** – Back of cab clearance
**CE** – Cab to end of frame
**CG** – Center of gravity of body and payload
**WB** – Wheelbase
**OAL** – Overall length
**AF** – Axle to end of frame
**FH** – Frame height

## Weight Distribution Formulas

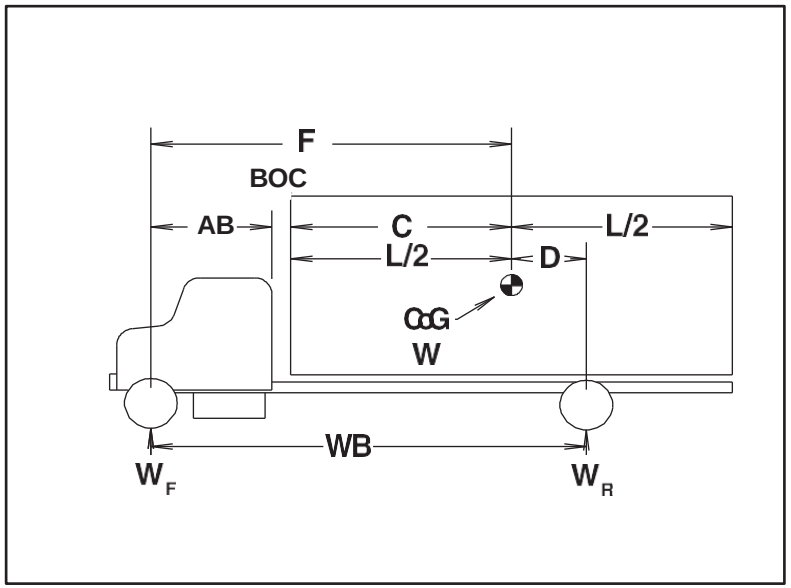



Figure 3

**AB** – Front axle to back of cab
**BOC** – Distance between cab and body or trailer
**C** – Front of body to C.G. or front of trailer to kingpin
**D** – Distance C.G. of body or fifth wheel is ahead of rear axle
**F** – (AB + BOC +C) or distance C.G. of weight of fifth wheel is behind front axle
**WB** – Wheelbase
**W** – Weight of body plus payload, or kingpin load
**Wf** – Portion of W transferred to front axle
**Wr** – Portion of W transferred to rear axle
**C** – Length of body divided by 2
**L/2** – Load location at half of body length
**L** – Distance over which the payload is spread within the Body

*Basic Formulas*

**(a)** W x D = Wf x WB

**(b)** W x F = Wr x WB

**or**

**(c)** WB = (AB + BOC + C + D) = (F + D)

**(d)** W = Wf + Wr

**1.** $W_f = \frac{W \times D}{WB}$

**2.** $D = \frac{W_f \times WB}{W}$

**3.** $WB = \frac{W \times D}{W_f}$

**4.** $W = \frac{W_f \times WB}{D}$

**5.** $W_r = \frac{W \times F}{WB}$

**6.** $F = \frac{W_r \times WB}{W}$

**7.** $WB = \frac{W \times F}{W_r}$

**8.** $W = \frac{W_r \times WB}{F}$

## *Weight Distribution Formulas in Words*

To find:

| | | | |
|---|---|---|---|
| **1.** | Weight transferred to front axle | = | (Total weight) x (Distance C.G. is ahead of the rear axle) / (Wheelbase) |
| **2.** | Distance C.G. must be placed ahead of rear axle | = | (Weight transferred to the front axle) x (Wheelbase) / (Total weight) |
| **3.** | Wheelbase | = | (Total weight) x (Distance C.G. is ahead of the rear axle) / (Weight to be transferred to the front axle) |
| **4.** | Total Weight | = | (Weight to be transferred to the front axle) x (Wheelbase) / (Distance C.G. is ahead of the rear axle) |

**1.** Weight transferred to rear axle = $\frac{\text{(Total weight) x (Distance C.G. is behind the front axle)}}{\text{(Wheelbase)}}$

**2.** Distance C.G. must be placed behind the front axle = $\frac{\text{(Weight transferred to the rear axle) x (Wheelbase)}}{\text{(Total weight)}}$

**3.** Wheelbase = $\frac{\text{(Total weight) x (Distance C.G. is behind the front axle)}}{\text{(Weight to be transferred to the rear axle)}}$

**4.** Total Weight = $\frac{\text{(Weight to be transferred to the rear axle) x (Wheelbase)}}{\text{(Distance C.G. is behind the front axle)}}$

**9.** Remember = Total weight must always equal weight transferred to the rear axle plus the weight transferred to the front axle

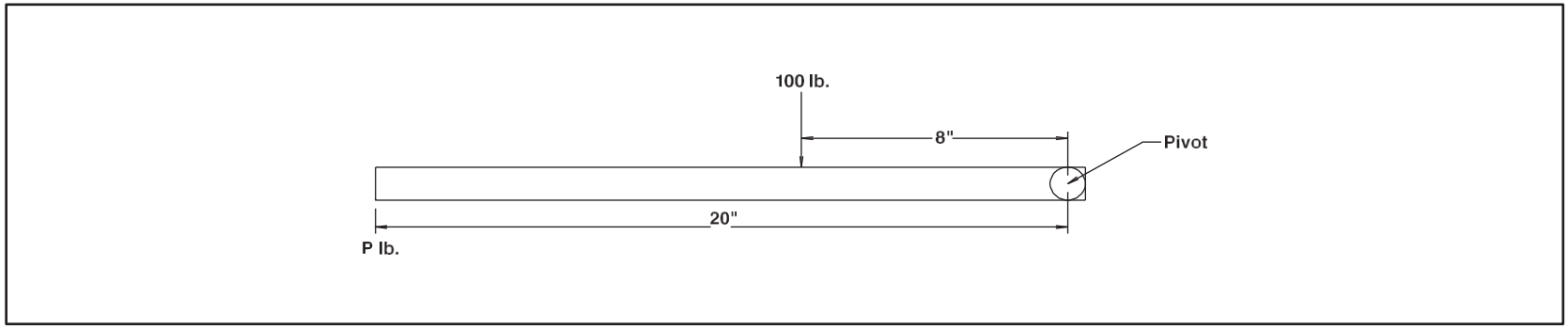



Figure 4

To find the value of “P”, the leverages must be equal for balance.

***Example:*** 100 lbs. x 8 in. = “P” x 20 in.

or “P” = $\frac{\text{100 lbs. x 8 in.}}{\text{20 in.}}$

Therefore: “P” = 40 lbs.

This same approach is used to determine axle loadings on a tractor or truck chassis. Assuming the rear axle serves as a pivot point, the front axle load can be determined by applying the lever principle.

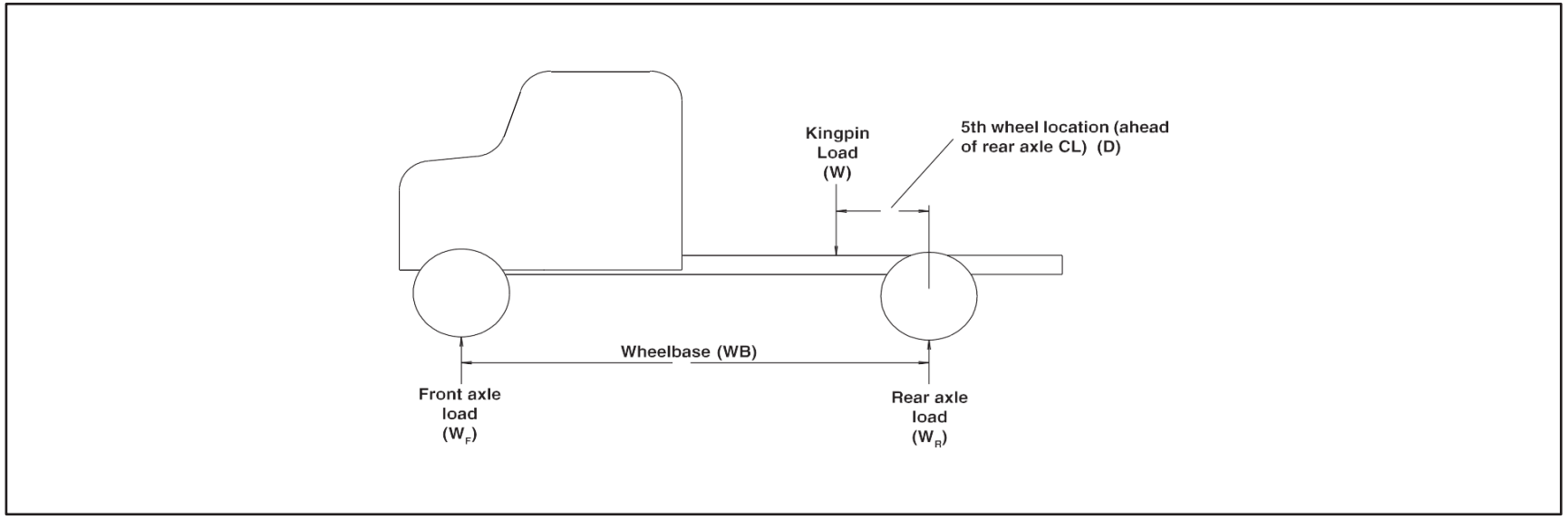



Figure 5

Front Axle Load: = $\frac{\text{Kingpin Load x 5th Wheel Location}}{\text{Wheelbase}}$

Rear Axle Load: = Kingpin Load – Front Axle Load

***Example:*** (4) A tractor has a wheelbase of 150 inches. If the kingpin load is 20,000 lbs. and the fifth wheel location is 15 inches, find the total weight on the front and rear axles. The tare weight of the tractor is 7,000 lbs. on the front axle and 4,400 lbs. on the rear axle.

Front Axle Load = $\frac{20{,}000 \times 15}{150 \text{ WB}}$ = 2,000 lbs.

Rear Axle Load = 2,000 + 7,000 lbs. = 9,000 lbs.

Therefore:
Total Front Axle Weight = 2,000 + 9,000 lbs. = 11,000 lbs.

Total Rear Axle Weight = 4,400 + 18,000 lbs. = 22,400 lbs.

In calculating the weight distribution for a truck, the same lever principle is applied; however, there is one change in the initial consideration of the method of loading the truck body. Instead of the trailer kingpin location ahead of the rear axle centerline, we must determine the position of the center of gravity of the payload and body weight in relation to the rear axle centerline.

For our calculations, we assume that the payload is distributed in the truck body so that the load is supported evenly over the truck body floor (water-level distribution). The weight of the body itself is also considered to be evenly distributed along the truck frame. In this manner, we can add the payload and body weights together and calculate the distribution on the vehicle chassis as an evenly distributed load on the truck frame rails.

So that we can make the necessary calculation in a simple manner, the total body and payload weight is considered to act at the center of gravity which will be at the center of the body length.

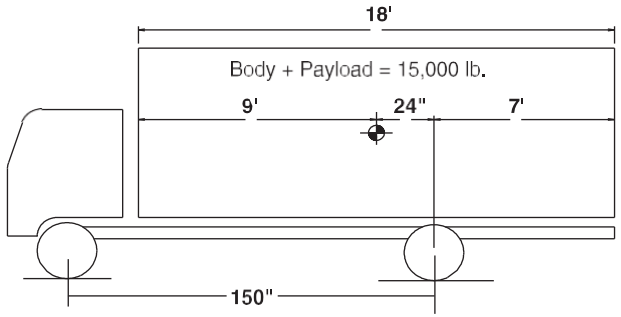



Figure 6

***Example:***

Front Axle Load =
$\frac{\text{(Body Weight + Payload) x C of G location}}{\text{Wheelbase}}$

Rear Axle Load =
(Body Weight + Payload) – Front Axle Load

Therefore, Front Axle Load =
$\frac{15{,}000 \times 24}{150}$ = 2,400 lbs.

Rear Axle Load = 15,000 – 2,400 = 12,600 lbs.

If the truck tare weight without the body is 5,000 lbs. on the front axle and 2,400 lbs. on the rear axle, then
Total Front Axle Weight = 5,000 + 2,400 = 7,400 lbs. and
Total Rear Axle Weight = 2,400 + 12,600 = 15,000 lbs.

This same lever principle is applied in all calculations of weight distribution, whether we are dealing with concentrated loads as with a kingpin load acting on a fifth wheel or if it be with an evenly distributed load as with a truck body. The same approach is made in calculating an evenly distributed load on a trailer.

In the case of a tractor/trailer or a tractor with a set of double or triple trailers, each unit is handled as a separated unit and then combined to determine the total.

This simple example illustrates how the principles are applied. Using the formulas, find the weight distributed to each axle.

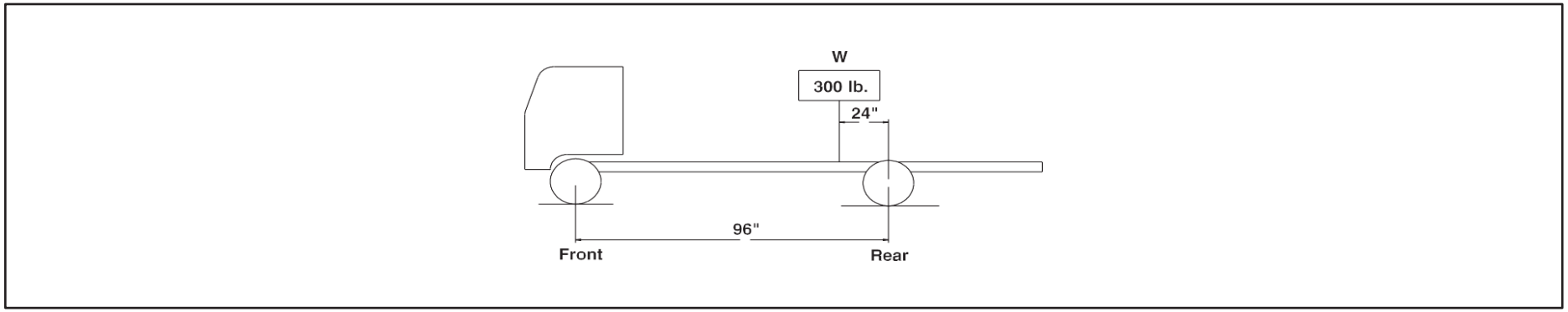



Figure 7

| | **Front Weight** | | **Rear Weight** |
|---|---|---|---|
| A. | $Wf = \frac{W \times D}{WB}$ | A. | $W - Wf$ |
| B. | $\frac{300 \times 24}{96}$ | B. | $300 - 75$ |
| C. | = 75 lbs. | C. | = 225 lbs. |

The body manufacturer can provide the body length and weight, or actual measurements of the body may be taken with a tape. Generally, (D) is unknown. This you must find logically, or with a tape measure.

Find (D) and then solve for Wf and Wr.

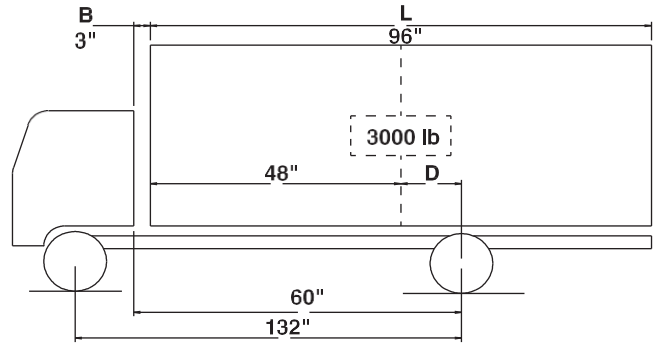



Figure 8

D = 60–3–48 = 9 in.

$W_f$ = 205

$W_r$ = 2,795

## Recommended Weight Distribution % of Gross Vehicle Weight by Axle

***Conventional (2 Axle)***

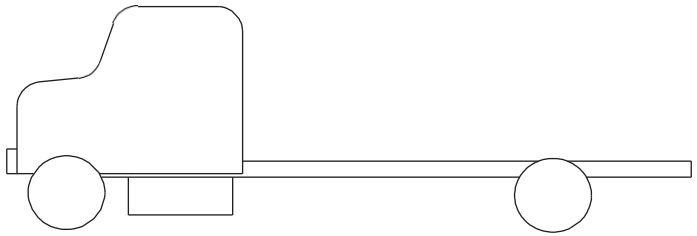



Figure 9

***COE (2 Axle)***

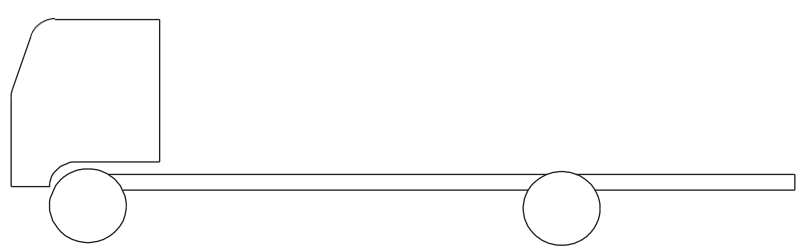



Figure 10

***Conventional (3 Axle)***

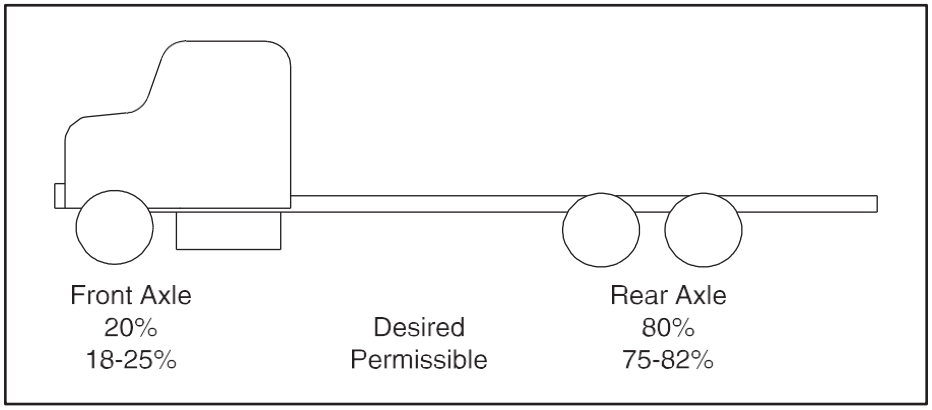



Figure 11

***COE (3 Axle)***

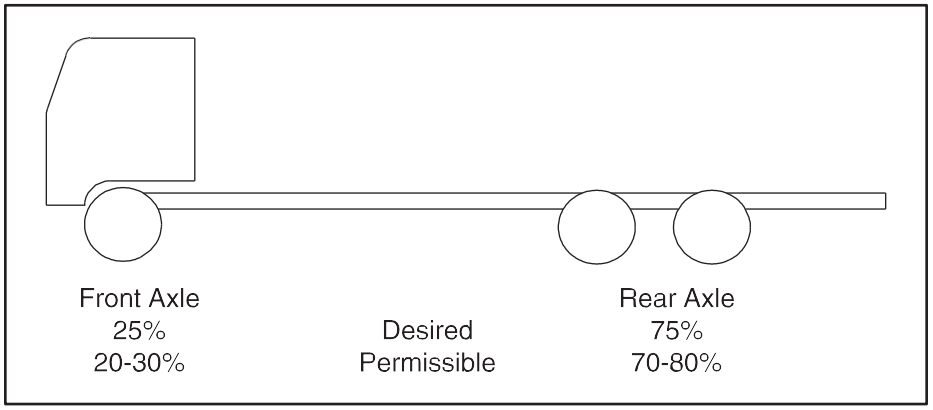
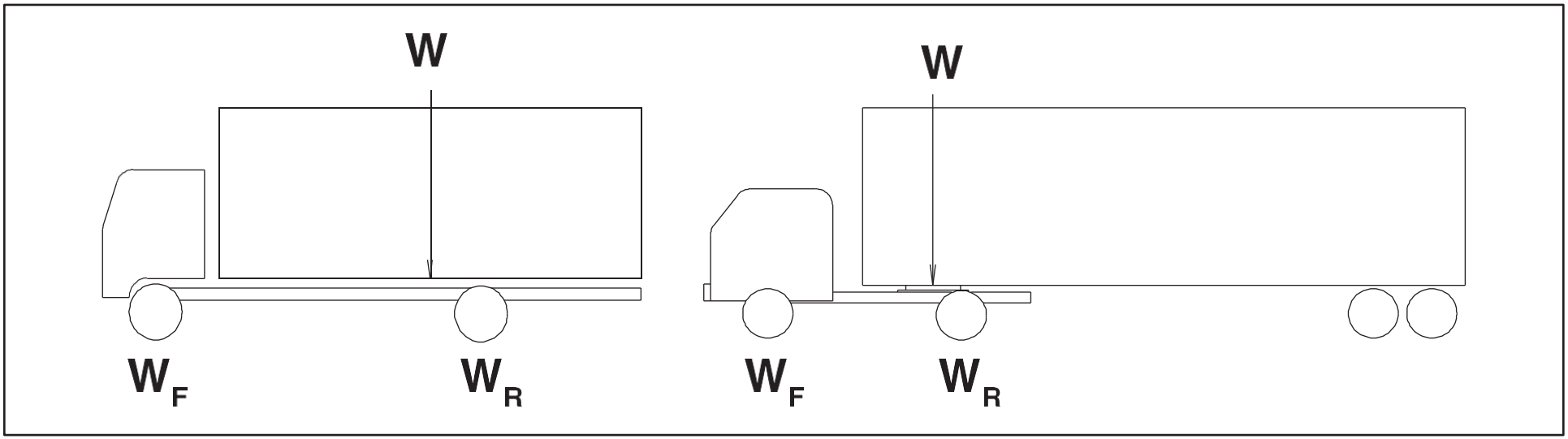



Figure 12

Calculating tractor/trailer weight distribution can be thought of in the same terms as calculating full trucks.




The weight at the center of the body and the load when applied is the same as the single point load of the kingpin on the fifth wheel.

Figure 13

## Trailer Weight

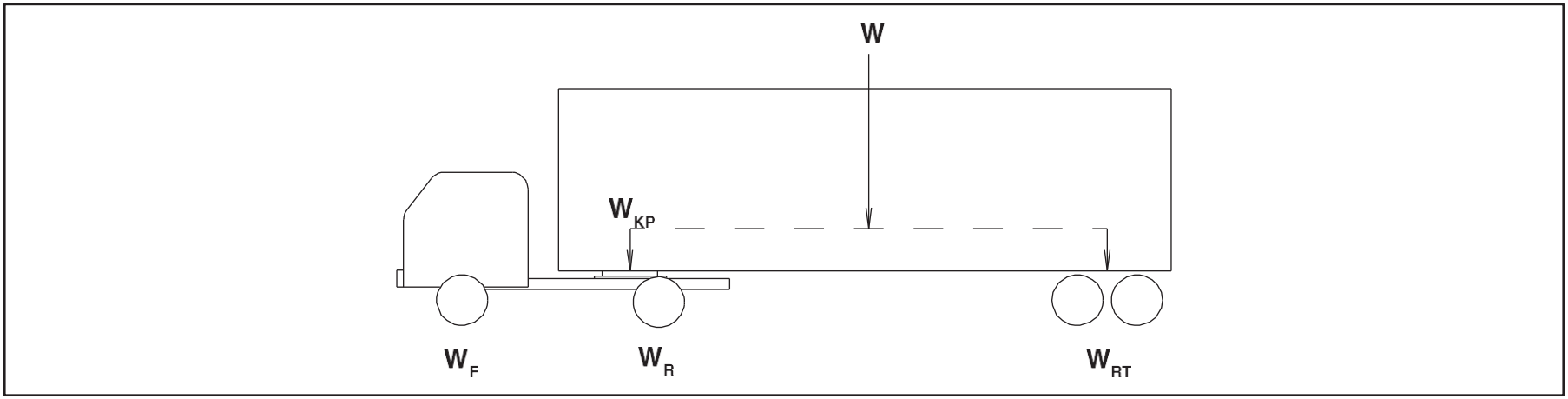
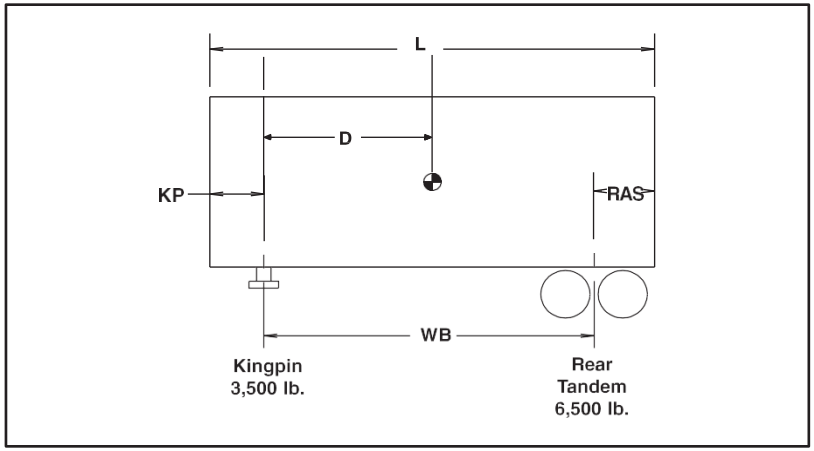
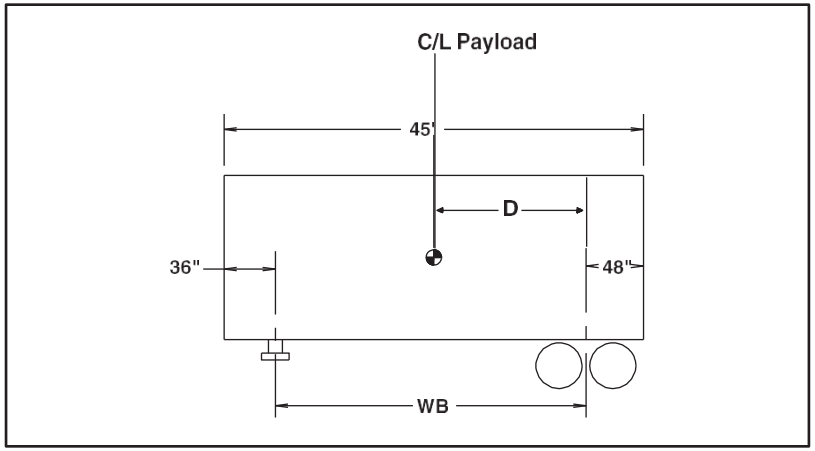



Figure 14




In the following example, a 50,000-pound payload at water-level loading. Calculate the payload (PL) weight transfer to kingpin and the rear axle.
**NOTE:** Apply the same principles used with truck chassis.

Figure 15

Figure 16

***Payload at Kingpin***

$$\mathbf{PL_{kp} = \frac{W \times D}{WB}}$$

Calculate the “D” dimension.

OAL/2 – AF = D
45 feet/2 – 48 inches – 36 inches = 186 inches

$$PL_{kp} = \frac{50{,}000 \text{ lbs.} \times 186 \text{ in.}}{456 \text{ in.}} = 20{,}394 \text{ lbs.}$$

**$PL_{kp}$ =20,394 lbs.**

***Payload at Rear Tandem***

**$PL_{rt} = W - PL_{kp}$**

$PL_{rt}$ = 50,000 lbs. – 20,394 lbs. = 29,606 lbs.

**$PL_{rt}$ = 29,606 lbs.**

Once the weight on the kingpin is determined, it can then be treated on the tractor the same as a weight on a straight truck.

Due to the variations in hauling and wheelbase requirements from one truck application to another, there is no one specific fifth wheel setting that will apply in all cases.

A “rule of thumb” which has proven satisfactory in many cases sets the fifth wheel one inch ahead of the rear axle for every 10 inches of wheelbase. In the case of tandem axles, the wheelbase is measured from the center line of the front axle to the midpoint between the tandem rear axles. The location of the fifth wheel fixes the load distribution between the front and rear axles. Too far forward and the front axle is overloaded. If too far back, the front axle may be too lightly loaded and cause an unsafe steering and braking control situation at the front axle.

*(Weight Distribution Concepts Section – continued from previous page)*

A tractor on a hill with the fifth wheel set at the axle center line or too close to it will result in an unsafe handling situation by transferring too much weight to the rear axle and actually unloading the front axle.

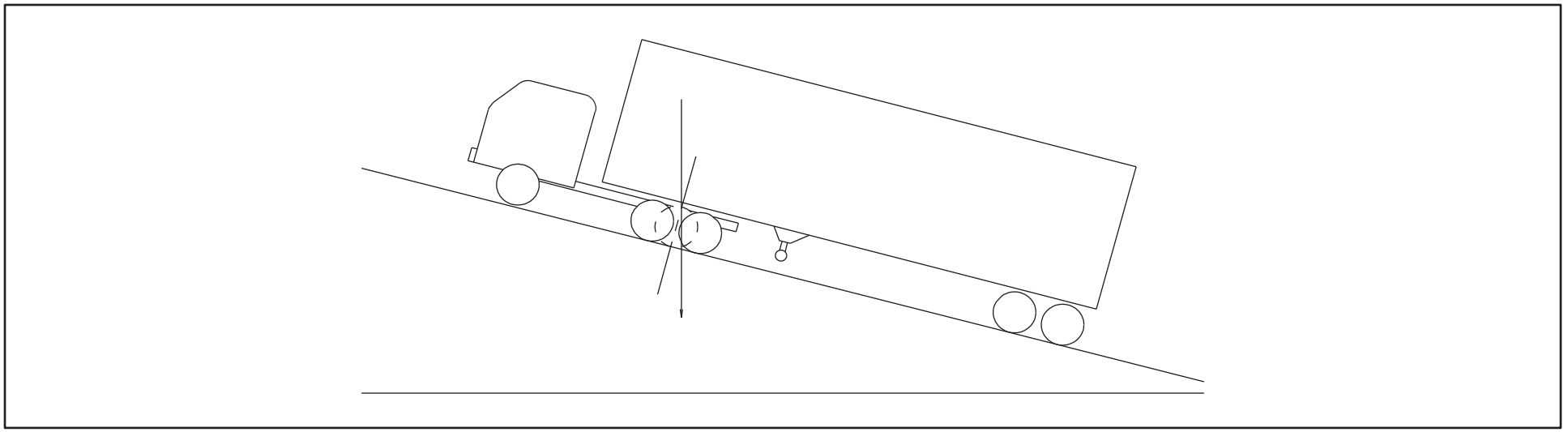


Figure 17

## *Performance Calculations*

The following calculations have been included to help you determine the performance characteristics required by your customers and to select the appropriate model vehicle:

***1. Speed Formula***

This formula can be used to determine:

1. Top speed of the vehicle.

2. Speed in a given gear.

3. Final ratio required for a given speed.

4.

$$\textbf{MPH @ Governed Speed} = \frac{\textbf{(60) x (RPM)}}{\textbf{(Rev/Mile) x (Gear Ratio)}}$$

Definitions in formula:

| | | |
|---|---|---|
| RPM | = | Revolutions per minute of the engine at Governed Speed |
| Rev/Mile | = | Tire revolutions per mile |
| Gear Ratio | = | The product of the axle ratio times the transmission ratio |
| 60 | = | Time Constant |

**Example:** LCF 12,000 GVWR automatic transmission.

| | | |
|---|---|---|
| RPM | = | 3,000 |
| Rev/Mile | = | 674 |
| Gear Ratio | = | .703 x 5.375 |

**MPH @ Governed Speed** = $\frac{(60) \times (3{,}000)}{(674) \times (.703 \times 5.375)}$

MPH @ Governed Speed = 70 MPH

***2. Grade Horsepower Formula***

This formula can be used to determine horsepower required for a given grade and speed.

**Horsepower Req'd. for a given grade** = $\frac{\textbf{GVWR x Grade x Speed}}{\textbf{37,500 x Efficiency Factor}}$ **+ AHP**

Definitions in formula:

| | | |
|---|---|---|
| GVWR | = | Gross Vehicle Weight Rating |
| Grade | = | Grade anticipated in percent |
| Speed | = | Speed in miles per hour |
| 37,500 | = | Constant |
| Efficiency Factor | = | Factor for losses in drivetrain due to friction (use 0.9 for a 90% efficient driveline) |
| AHP Resistance | = | Horsepower required to overcome wind force |

***Example:*** LCF 11,050 GVWR automatic transmission with a van body.

| | | |
|---|---|---|
| GVWR | = | 12,000 lbs. |
| Grade | = | 1 percent |
| Speed | = | 55 MPH |
| 37,500 | = | Constant |
| Efficiency Factor | = | 0.9 |
| AHP Resistance | = | 53.6 HP (see the following formula for calculation) |

$$\textbf{HP Required for Grade} = \frac{\textbf{12,000 x 1 x 55}}{\textbf{37,500 x 0.9}} \textbf{ + 53.67}$$

HP Required for Grade = 73.22

***3. Air Resistance Horsepower Formul***a

This formula is used to determine the horsepower required to overcome air resistance at a given speed.

$$\textbf{Air Resistance Horsepower} = \frac{\textbf{FA x Cd x (MPH)}^3}{\textbf{156,000}}$$

Definitions in formula:

| | | |
|---|---|---|
| FA | = | Frontal area of vehicle in square feet |
| Cd | = | Aerodynamic Drag Coefficient |
| MPH | = | Speed of vehicle in miles per hour |
| 156,000 | = | Constant |

Frontal area is calculated by multiplying the height of the vehicle by the width of the vehicle and subtracting the open area under the vehicle from the total.

Aerodynamic Drag Coefficients (Source Material: Motor Truck Engineering Handbook):

| | |
|---|---|
| 0.70 | for most trucks, semitrailer combinations with tanks or van bodies |
| 0.77 | for double and triple trailers and flatbeds with loads |

***Example:*** LCF 12,000 GVWR van body with 96” wide, 115” high (84” body height + 31” frame height).

$$\textbf{FA} = \frac{\textbf{(96) x (115)}}{\textbf{(12) x (12)}} - \textbf{3.2}$$

FA = 73.47 ft.2
Cd = 0.70
Speed = 55 mph

$$\text{Air Resistance HP} = \frac{73.47 \times 0.70 \times (55)^3}{156{,}000}$$

$$\text{Air Resistance HP} = 54.85$$

***4. Engine Horsepower Formula***

This formula can be used to derive the output at a given RPM and torque.

$$\textbf{Horsepower} = \frac{\textbf{Torque x RPM}}{\textbf{5,252}}$$

Definitions in formula:

Torque = Twisting output of engine given in lbs.-ft.
RPM = Revolutions per minute of engine
5,252 = Constant

***Example:*** LCF 12,000 GVWR automatic transmission.

Torque = 347 lbs.-ft.
RPM = 2,000

$$132\ \text{HP} = \frac{(347) \times (2{,}000)}{5{,}252}$$

***5. Gradeability Formula***

This formula can be used to determine how large of a grade a vehicle can climb.

$$\textbf{Percent Grade} = \frac{\textbf{1,200 x (T) x (E) x (C) x (R)}}{\textbf{GVWR x r}} - \textbf{RR}$$

Definitions in formula:

| | | |
|---|---|---|
| 1,200 | = | Constant |
| T | = | Maximum Torque of Engine |
| E | = | Engine Efficiency (0.9) |
| C | = | Driveline Efficiency (0.9) |
| R | = | Transmission Ration x Axle Ratio |
| RR | = | Rolling Resistance (see following chart) |
| GVWR | = | Gross Vehicle Weight Rating |
| r | = | Loaded radius of tire |

***Example:*** LCF 12,000 GVWR automatic transmission on concrete highway.

| | | |
|---|---|---|
| T | = | 347 lbs.-ft. |
| E | = | 0.9 |
| C | = | 0.9 |
| R | = | .703 x 5.375 (in overdrive) |
| RR | = | 1.0 |
| GVWR | = | 12,000 |
| r | = | 14.1 in. |

$$\textbf{Percent Grade} = \frac{\textbf{1,200 x (347) x (0.9) x (0.9) x (.703) x (5.375)}}{\textbf{12,000 x 14.1}} - \textbf{1.0}$$

Percent Grade = 7.53 - 1

Gradeability = 6.53%

| Road Rolling Resistance | | | |
|---|---|---|---|
| Road Rolling Resistance – Expressed in Percent Grade | | | |
| **Road Surface** | **Grade Road** | **Surface** | **Grade** |
| Concrete, excellent | 1.0 | Cobbles, ordinary | 5.5 |
| Concrete, good | 1.5 | Cobbles, poor | 8.5 |
| Concrete, poor | 2.0 | Snow, 2 inches | 2.5 |
| Asphalt, good | 1.25 | Snow, 4 inches | 3.75 |
| Asphalt, fair | 1.75 | Dirt, smooth | 2.5 |
| Asphalt, poor | 2.25 | Dirt, sandy | 3.75 |
| Macadam, good | 1.5 | Mud | 3.75 to 15.0 |
| Macadam, fair | 2.25 | Sand, level soft | 6.0 to 15.0 |
| Macadam, poor | 3.75 | Sand, dune | 16.0 to 30.0 |

Figure 19

***6. Startability Formula***

This formula is used to determine what type of a grade a vehicle can be started on.

$$\textbf{Startability} = \frac{\textbf{(1,200) x (CET) x (E) x (C) x (R)}}{\textbf{(GVWR x r)}} - \textbf{10\%}$$

Definitions in formula:

1,200 = Constant
CET = Clutch Engagement Torque
E = 0.9
C = 0.9
R = Transmission x Axle Ratio
10% = Average break away resistance and static inertia constant
GVWR = Gross Vehicle Weight Rating
r = Loaded radius of tire

***Example:*** LCF 12,000 GVWR manual transmission.

CET = 260 lbs.-ft.
R = 6.02 x 4.10
GVWR = 12,000 lbs.
r = 14.1 in.

$$\text{Startability} = \frac{(1{,}200) \times (260) \times (0.9) \times (0.9) \times (6.02 \times 4.10)}{(12{,}000 \times 14.1)} - 10\%$$

Startability = 26.86%

***7. Vertical Center of Gravity Formula***

These formulas are used to estimate the vertical center of gravity of a completed vehicle in order to determine whether maximum allowable limits have been exceeded. This formula should be used when encountering high center of gravity loads.

7.1 Wv x (Vv) = Mv
7.2 Wb x (Vb) = Mb
7.3 Wp x (Vp) = Mp
7.4 We x (Ve) = Me

$$\text{7.5 } \mathbf{VCg} = \frac{\mathbf{(Mv + Mb + Mp + Me)}}{\mathbf{(Wv + Wb + Wp + We)}}$$

Definitions in formula:

VCg = The total average vertical center of gravity of the completed vehicle (vehicle, body, payload and equipment)
Wv = Weight of vehicle
Wb = Weight of body
Wp = Weight of payload
We = Weight of equipment

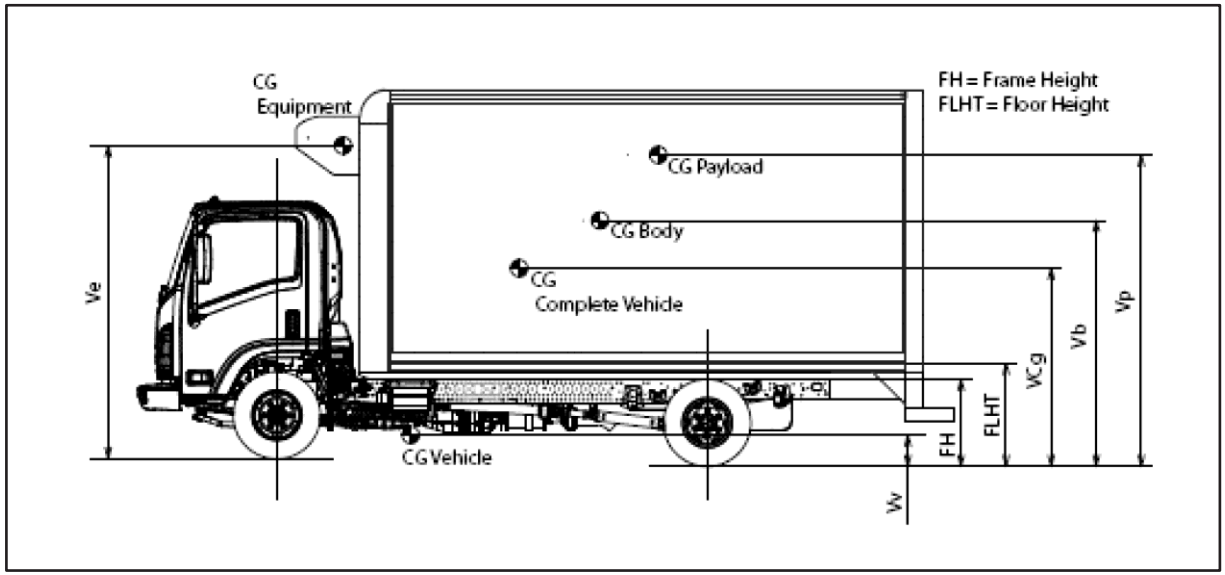



Figure 20

Definitions in formula (continued):

Vv = Distance from ground to center of gravity of the vehicle
Vb = Distance from ground to center of gravity of the body
Vp = Distance from ground to center of gravity of the payload
Ve = Distance from ground to center of gravity of the equipment
Mv = Moment of vehicle
Mb = Moment of body
Mp = Moment of payload
Me = Moment of equipment

***Example:*** LCF 12,000 GVWR automatic transmission, 132” WB, 14’ body length, 84” high body, full payload of boxes stacked to a maximum height of 48” above the flooring.

Wv = 5,291 lbs. (from vehicle specifications)
Wb = 2,100 lbs. (from body manufacturer)
Wp = 4,609 lbs. (GVWR – (Wv + Wb + We)
Vv = 24.9 in. (from Body Builder’s Manual, LCF Section)
Vb = 80 in. (from body manufacturer)
Vp = 62 in. (1/2 of payload height + frame height + height from frame to flooring)
Mv = 5,291 x 24.9 = 131,746 lbs.-in. (from 7.1)
Mb = 2,100 x 80 = 168,000 lbs.-in. (from 7.2)
Mp = 4,609 x 62 = 285,758 lbs.-in. (from 7.3)

We, Ve, Me = None in this example

$$VCg = \frac{(131,746+168,000+285,758)}{(5,291 + 2,100 + 4,609)}$$

$$VCg = \frac{(528,504)}{(12,000)} = 48.8 \text{ inches}$$

***8. Horizontal Center of Gravity Formula***

These formulas are used to estimate the horizontal center of gravity of a completed vehicle in order to determine whether it exists between the centerlines of the front and rear axles. This formula should be used when a load and/or permanent equipment (liftgate, reefer unit, snowplow, etc.) is installed on either extreme along the completed vehicle's overall length.

8.1 Wv x (Hv) = Mv

8.2 Wb x (Hb) = Mb

8.3 Wp x (Hp) = Mp

8.4 We x (He) = Me

$$\textbf{8.5 HCg} = \frac{\textbf{(Mv+Mb+Mp+Me)}}{\textbf{(Wv + Wb + Wp + We)}}$$

Definitions in formula:

| | | |
|---|---|---|
| HCg | = | The total average horizontal center of gravity of the completed vehicle (vehicle, body, payload and equipment) |
| Wv | = | Weight of vehicle |
| Wb | = | Weight of body |
| Wp | = | Weight of payload |
| We | = | Weight of equipment |
| Hv | = | Distance from front axle to center of gravity of the vehicle |
| Hb | = | Distance from front axle to center of gravity of the body |
| Hp | = | Distance from front axle to center of gravity of the payload |
| He | = | Distance from front axle to center of gravity of the equipment |
| Mv | = | Moment of vehicle |
| Mb | = | Moment of body |
| Mp | = | Moment of payload |
| Me | = | Moment of equipment |

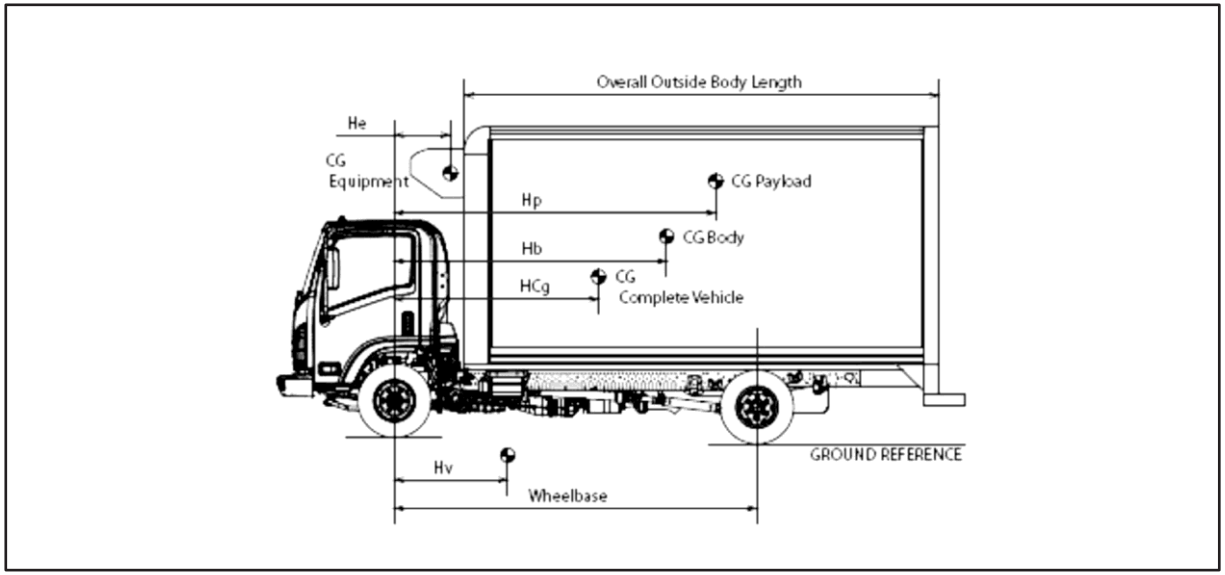



Figure 21

Example: LCF Diesel 12,000 GVWR automatic transmission, 132” WB, 14’ body length, full payload of boxes stacked and distributed evenly throughout the flooring, 1,000 lb. reefer unit attached in front of body.

| | | | |
|---|---|---|---|
| Wv | = | 5,291 lbs. | (from vehicle specifications) |
| Wb | = | 2,100 lbs. | (from body manufacturer) |
| Wp | = | 3,609 lbs. | (GVWR – (Wv + Wb + We)) |
| We | = | 1,000 lbs. | (from equipment manufacturer) |
| Hv | = | 42.4 in. | (from Body Builder’s Manual, LCF Section) |
| Hb | = | 107.5 in. | (from body manufacturer) |
| Hp* | = | 107.5 in. | (1/2 of payload length + distance from front axle to front of body) |
| He | = | 17.5 in. | (from equipment manufacturer) |
| Mv | = | 5,291 x 42.4 = 224,338 lbs.-in. | (from 8.1) |
| Mb | = | 2,100 x 107.5 = 225,750 lbs.-in. | (from 8.2) |
| Mp | = | 3,609 x 107.5 = 387,967 lbs.-in. | (from 8.3) |
| Me | = | 1,000 x 17.5 = 17,500 lbs.-in. | (from 8.4) |

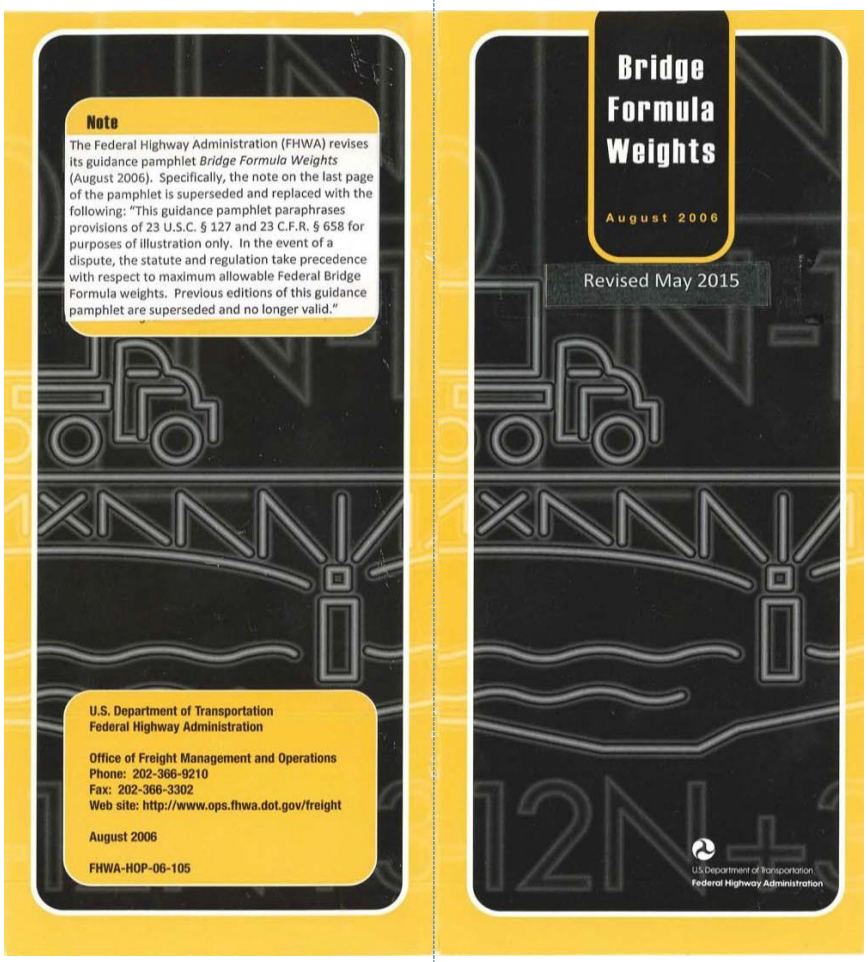
$$HCg = \frac{(224{,}338 + 225{,}750 + 387{,}967 + 17{,}500)}{(5{,}291 + 2{,}100 + 3{,}609 + 1{,}000)}$$

$$HCg = \frac{(855{,}555)}{(12{,}000)} = 71.3 \text{ inches}$$

71.3 < 132 inches (132 inches is the wheelbase dimension)

Since HCg for this truck is not greater than the WB or negative (–) (denotes HCg forward of front axle centerline), it exists between the centerlines of the front and rear axles.

NOTE: Hp and Hb dimensions are the same in this example because CG of body and payload happen to be at the same point.



**Note**

The Federal Highway Administration (FHWA) revises its guidance pamphlet *Bridge Formula Weights* (August 2006). Specifically, the note on the last page of the pamphlet is superseded and replaced with the following: "This guidance pamphlet paraphrases provisions of 23 U.S.C. § 127 and 23 C.F.R. § 658 for purposes of illustration only. In the event of a dispute, the statute and regulation take precedence with respect to maximum allowable Federal Bridge Formula weights. Previous editions of this guidance pamphlet are superseded and no longer valid."


U.S. Department of Transportation
Federal Highway Administration

Office of Freight Management and Operations
Phone: 202-366-9210
Fax: 202-366-3302
Web site: http://www.ops.fhwa.dot.gov/freight

August 2006

FHWA-HOP-06-105


**Bridge Formula Weights**

August 2006

Revised May 2015

U.S. Department of Transportation
Federal Highway Administration

## Bridge Formula Weights

With a few exceptions noted in this pamphlet, the Bridge Formula establishes the maximum weight any set of axles on a motor vehicle may carry on the Interstate highway system. This pamphlet describes the Bridge Formula, why it was established, and how it is used.

### What Is It?

Congress enacted the Bridge Formula in 1975 to limit the weight-to-length ratio of a vehicle crossing a bridge. This is accomplished either by spreading weight over additional axles or by increasing the distance between axles.

Compliance with Bridge Formula weight limits is determined by using the following formula:

$$W = 500 \left[ \frac{LN}{N-1} + 12N + 36 \right]$$

**W** = the overall gross weight on any group of two or more consecutive axles to the nearest 500 pounds.

**L** = the distance in feet between the outer axles of any group of two or more consecutive axles.

**N** = the number of axles in the group under consideration.

In addition to Bridge Formula weight limits, Federal law states that single axles are limited to 20,000 pounds, and axles closer than 96 inches apart (tandem axles) are limited to 34,000 pounds. Gross vehicle weight is limited to 80,000 pounds (23 U.S.C. 127).

### Is the Formula Necessary?

Bridges on the Interstate System highways are designed to support a wide variety of vehicles and their expected loads. As trucks grew heavier in the 1950s and 1960s, something had to



The truck shown in Figure 8 satisfies the single-axle weight limit (12,000 pounds are less than 20,000 pounds), the tandem-axle limit (30,000 pounds are less than 34,000 pounds) and the gross-weight limit (57,000 pounds are less than 80,000 pounds). With these restrictions satisfied, a check is done for Bridge Formula requirements, axles 1 through 4.

**Actual Weight**= 12,000 + 15,000 + 15,000 + 15,000 = 57,000 pounds.

**Maximum weight (W)** = 57,500 pounds (Bridge Table for "L" of 23 feet and "N" of 4 axles).

**Since axles 1 through 4 are satisfactory, check axles 2 through 4:**

**Actual weight** = 15,000 + 15,000 + 15,000 = 45,000 pounds.

**Maximum weight (W)** = 42,500 pounds (Bridge Table for "L" of 9 feet and "N" of 3 axles).

This is a violation because the actual weight exceeds the weight allowed by the Bridge Formula. The load must either be reduced, axles added, or spacing increased to comply with the Bridge Formula.

**Quality Assurance Statement**

The Federal Highway Administration (FHWA) provides high-quality information to serve Government, industry, and the public in a manner that promotes public understanding. Standards and policies are used to ensure and maximize the quality, objectivity, utility, and integrity of its information. FHWA periodically reviews quality issues and adjusts its programs and processes to ensure continuous quality improvement.

## Exception to Formula and Bridge Table

In addition to the grandfather rights noted on page 3, Federal law (23 U.S.C. 127) includes one other exception to the Bridge Formula and the Bridge Table—two consecutive sets of tandem axles may carry 34,000 pounds each if the overall distance between the first and last axles of these tandems is 36 feet or more. For example, a five-axle tractor-semitrailer combination may carry 34,000 pounds both on the tractor tandem (axles 2 and 3) and the trailer tandem (axles 4 and 5), provided axles 2 and 5 are spaced at least 36 feet apart. Without this exception, the Bridge Formula would allow an actual weight of only 66,000 to 67,500 pounds on tandems spaced 36 to 38 feet apart.

## Bridge Formula Application to Single-Unit Trucks

The procedure described above could be used to check any axle combinations, but several closely spaced axles usually produce the most critical situation.

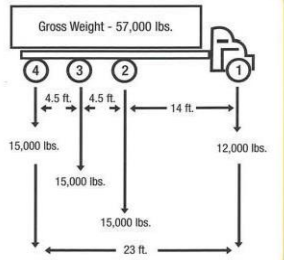



Figure 8



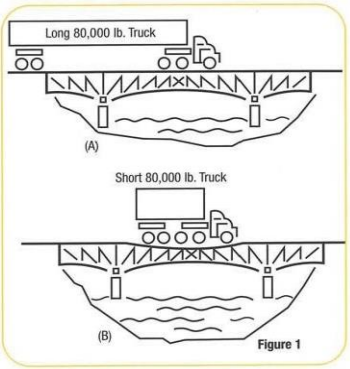



Figure 1

be done to protect bridges. The solution was to link allowable weights to the number and spacing of axles.

Axle spacing is as important as axle weight in designing bridges. In Figure 1A, the stress on bridge members as a longer truck rolls across is much less than that caused by a short vehicle as shown in Figure 1B, even though both trucks have the same total weight and individual axle weights. The weight of the longer vehicle is spread out, while the weight of the shorter vehicle is concentrated on a smaller area.

## How Is the Formula Used?

The weight on various axle configurations must be checked to determine compliance with the Bridge Formula. Three definitions are needed to use the Bridge Formula correctly.

**Gross Weight**—the weight of a vehicle or vehicle combination and any load thereon. The Federal gross weight limit on the Interstate System is 80,000 pounds unless the Bridge Formula dictates a lower weight limit.

**Single-Axle Weight**—The total weight on one or more axles whose centers are spaced not more 40 inches apart. The Federal single-axle weight limit on the Interstate System is 20,000 pounds.

**Tandem-Axle Weight**—The total weight on two or more consecutive axles whose centers are spaced more than 40 inches apart but not more than 96 inches apart. The Federal tandem-axle weight limit on the Interstate System is 34,000 pounds.

Interstate System weight limits in some States may be higher than the figures noted above due to "grandfather" rights. When the Interstate System axle and gross weight limits were first adopted in 1956, and amended in 1975, States were allowed to keep or "grandfather" weight limits that were higher.

Bridge Formula calculations yield a series of weights (Bridge Table, pages 5-6). It is important to note that the single-axle weight limit replaces the Bridge Formula weight limit on axles not more than 40 inches apart, and the tandem-axle weight limit replaces the Bridge Formula weight limit for axles over 40 but not more than 96 inches apart. At 97 inches apart, for example, two axles may carry 38,000 pounds (Figure 2A), and three axles may carry 42,000 pounds, as shown in Figure 2B.

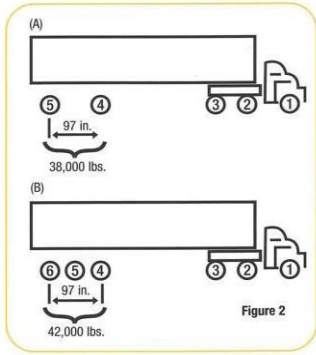



Figure 2

3

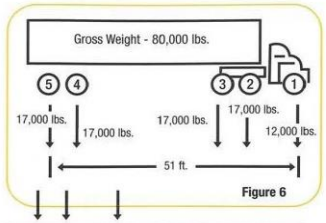



Figure 6

**Now check axles 1 through 5 (Figure 6)**

**Actual weight** = 12,000 + 17,000 + 17,000 + 17,000 + 17,000 = 80,000 pounds.

**Maximum weight (W)** = 80,000 pounds (Bridge Table for "L" of 51 feet and "N" of 5 axles).

Therefore, this axle spacing is satisfactory.

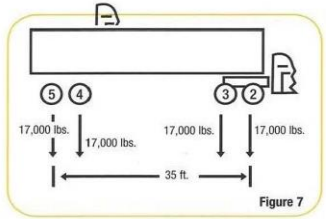



Figure 7

**Now check axles 2 through 5 (Figure 7)**

**Actual weight** = 17,000 + 17,000 + 17,000 + 17,000 = 68,000 pounds.

**Maximum weight (W)** = 65,500 pounds (Bridge Table for "L" of 35 feet and "N" of 4 axles).

This is a violation because the actual weight exceeds the weight allowed by the Bridge Formula. To correct the situation, some load must be removed from the vehicle or the axle spacing (35 feet) must be increased.

8

Before checking for compliance with the Bridge Formula, a vehicle's single-axle, tandem-axle, and gross weight should be checked. Here the single axle (number 1) does not exceed 20,000 pounds, tandems 2-3 and 4-5 do not exceed 34,000 pounds each, and the gross weight does not exceed 80,000 pounds. Thus, these preliminary requirements are satisfied. The first Bridge Formula combination is checked as follows:

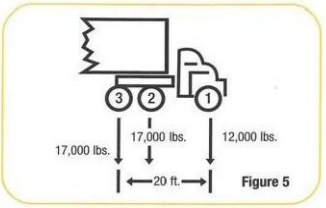



Figure 5

**Check axles 1 through 3 (Figure 5)**

**Actual weight** = 12,000 + 17,000 + 17,000 = 46,000 pounds.

**N** = 3 axles

**L** = 20 feet

$$W = 500 \left[ \frac{LN}{N-1} + 12N + 36 \right]$$

$$W = 500 \left[ \frac{(20 \times 3)}{(3 - 1)} + (12 \times 3) + 36 \right] = 51{,}000 \text{ lbs.}$$

**Maximum weight (W)** = 51,000 pounds, which is more than the actual weight of 46,000 pounds. Thus, the Bridge Formula requirement is satisfied.

**Example From the Bridge Table** (pages 5 & 6)
The same number (51,000 pounds) could have been obtained from the Bridge Table by reading down the left side to L = 20 and across to the right where N = 3.



Federal law states that any two or more consecutive axles may not exceed the weight computed by the Bridge Formula even though single axles, tandem axles, and gross weight are within legal limits. As a result, the axle group that includes the entire truck—sometimes called the "outer bridge" group—must comply with the Bridge Formula. However, interior combinations of axles, such as the "tractor bridge" (axles 1, 2, and 3) and "trailer bridge" (axles 2, 3, 4, and 5), must also comply with weights computed by the Bridge Formula (Figure 3).

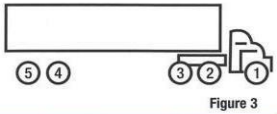



Figure 3

Figure 3 shows the most common vehicle checked for compliance with weight limit requirements. Although the Bridge Formula applies to each combination of two or more axles, experience shows that axle combinations 1 through 3, 1 through 5, and 2 through 5 are critical and must be checked. If these combinations are found to be satisfactory, then all of the others on this type of vehicle normally will be satisfactory.

The vehicle with weights and axle dimensions shown in Figure 4 is used to illustrate a Bridge Formula check.

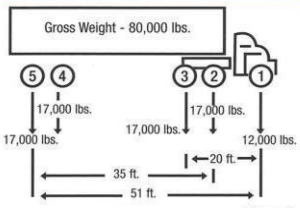



Figure 4

# 2025 Chevrolet Low Cab Forward



## Permissible Gross Loads for Vehicles in Regular Operation[1]

**Based on weight formula** $W = 500\left[\frac{LN}{N-1} + 12N + 36\right]$

| Distance in feet (L) between the extremes of any group of 2 or more consecutive axles | | Maximum load in pounds carried on any group of 2 or more consecutive axles[2] | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| L | N= | 2 AXLES | 3 AXLES | 4 AXLES | 5 AXLES | 6 AXLES | 7 AXLES | 8 AXLES | 9 AXLES |
| Tandem Axle Weight (see pages 3 & 4) 4 | | 34,000 | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| 5 | | 34,000 | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| 6 | | 34,000 | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| 7 | | 34,000 | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| 8 | | 34,000 | 34,000 | ..... | ..... | ..... | ..... | ..... | ..... |
| More than 8/less than 9 | | 38,000 | 42,000 | ..... | ..... | ..... | ..... | ..... | ..... |
| 9 | | 39,000 | 42,500 | ..... | ..... | ..... | ..... | ..... | ..... |
| 10 | | 40,000 | 43,500 | ..... | ..... | ..... | ..... | ..... | ..... |
| 11 | | ..... | 44,000 | ..... | ..... | ..... | ..... | ..... | ..... |
| 12 | | ..... | 45,000 | 50,000 | ..... | ..... | ..... | ..... | ..... |
| 13 | | ..... | 45,500 | 50,500 | ..... | ..... | ..... | ..... | ..... |
| 14 | | ..... | 46,500 | 51,500 | ..... | ..... | ..... | ..... | ..... |
| 15 | | ..... | 47,000 | 52,000 | ..... | ..... | ..... | ..... | ..... |
| 16 | | ..... | 48,000* | 52,500 | 58,000 | ..... | ..... | ..... | ..... |
| 17 | | ..... | 48,500 | 53,500 | 58,500 | ..... | ..... | ..... | ..... |
| 18 | | ..... | 49,500 | 54,000 | 59,000 | ..... | ..... | ..... | ..... |
| 19 | Example | ..... | 50,000 | 54,500 | 60,000 | ..... | ..... | ..... | ..... |
| 20 | (see page 7) | ..... | 51,000 | 55,500 | 60,500 | 66,000 | ..... | ..... | ..... |
| 21 | | ..... | 51,500 | 56,000 | 61,000 | 66,500 | ..... | ..... | ..... |
| 22 | | ..... | 52,500 | 56,500 | 61,500 | 67,000 | ..... | ..... | ..... |
| 23 | | ..... | 53,000 | 57,500 | 62,500 | 68,000 | ..... | ..... | ..... |
| 24 | | ..... | 54,000 | 58,000 | 63,000 | 68,500 | 74,000 | ..... | ..... |
| 25 | | ..... | 54,500 | 58,500 | 63,500 | 69,000 | 74,500 | ..... | ..... |
| 26 | | ..... | 55,500 | 59,500 | 64,000 | 69,500 | 75,000 | ..... | ..... |
| 27 | | ..... | 56,000 | 60,000 | 65,000 | 70,000 | 75,500 | ..... | ..... |
| 28 | | ..... | 57,000 | 60,500 | 65,500 | 71,000 | 76,500 | 82,000 | ..... |
| 29 | | ..... | 57,500 | 61,500 | 66,000 | 71,500 | 77,000 | 82,500 | ..... |
| 30 | | ..... | 58,500 | 62,000 | 66,500 | 72,000 | 77,500 | 83,000 | ..... |
| 31 | | ..... | 59,000 | 62,500 | 67,500 | 72,500 | 78,000 | 83,500 | ..... |
| 32 | | ..... | 60,000 | 63,500 | 68,000 | 73,000 | 78,500 | 84,500 | 90,000 |
| 33 | | ..... | ..... | 64,000 | 68,500 | 74,000 | 79,000 | 85,000 | 90,500 |
| 34 | | ..... | ..... | 64,500 | 69,000 | 74,500 | 80,000 | 85,500 | 91,000 |
| 35 | | ..... | ..... | 65,500 | 70,000 | 75,000 | 80,500 | 86,000 | 91,500 |
| 36 | | ..... | Exception | 66,000 | 70,500 | 75,500 | 81,000 | 86,500 | 92,000 |
| 37 | | ..... | (see page 9) | 66,500 | 71,000 | 76,000 | 81,500 | 87,000 | 93,000 |
| 38 | | ..... | ..... | 67,500 | 71,500 | 77,000 | 82,000 | 87,500 | 93,500 |
| 39 | | ..... | ..... | 68,000 | 72,000 | 77,500 | 82,500 | 88,500 | 94,000 |
| 40 | | ..... | ..... | 68,500 | 73,000 | 78,000 | 83,500 | 89,000 | 94,500 |
| 41 | | ..... | ..... | 69,500 | 73,500 | 78,500 | 84,000 | 89,500 | 95,000 |
| 42 | | ..... | ..... | 70,000 | 74,000 | 79,000 | 84,500 | 90,000 | 95,500 |
| 43 | | ..... | ..... | 70,500 | 75,000 | 80,000 | 85,000 | 90,500 | 96,000 |
| 44 | | ..... | ..... | 71,500 | 75,500 | 80,500 | 85,500 | 91,000 | 96,500 |
| 45 | | ..... | ..... | 72,000 | 76,000 | 81,000 | 86,000 | 91,500 | 97,500 |
| 46 | | ..... | ..... | 72,500 | 76,500 | 81,500 | 87,000 | 92,500 | 98,000 |
| 47 | | ..... | ..... | 73,500 | 77,500 | 82,000 | 87,500 | 93,000 | 98,500 |
| 48 | | ..... | ..... | 74,000 | 78,000 | 83,000 | 88,000 | 93,500 | 99,000 |
| 49 | | ..... | ..... | 74,500 | 78,500 | 83,500 | 88,500 | 94,000 | 99,500 |
| 50 | | ..... | ..... | 75,500 | 79,000 | 84,000 | 89,000 | 94,500 | 100,000 |
| 51 | | ..... | ..... | 76,000 | 80,000 | 84,500 | 89,500 | 95,000 | 100,500 |
| 52 | | ..... | ..... | 76,500 | 80,500 | 85,000 | 90,500 | 95,500 | 101,000 |
| 53 | | ..... | ..... | 77,500 | 81,000 | 86,000 | 91,000 | 96,500 | 101,500 |
| 54 | | ..... | ..... | 78,000 | 81,500 | 86,500 | 91,500 | 97,000 | 102,000 |
| 55 | | ..... | ..... | 78,500 | 82,500 | 87,000 | 92,000 | 97,500 | 102,500 |
| 56 | | ..... | Interstate Gross | 79,500 | 83,000 | 87,500 | 92,500 | 98,000 | 103,000 |
| 57 | | ..... | Weight Limit | 80,000 | 83,500 | 88,000 | 93,000 | 98,500 | 104,000 |
| 58 | | ..... | (see page 2) | ..... | 84,000 | 89,000 | 94,000 | 99,000 | 104,500 |
| 59 | | ..... | ..... | ..... | 85,000 | 89,500 | 94,500 | 99,500 | 105,000 |
| 60 | | ..... | ..... | ..... | 85,500 | 90,000 | 95,000 | 100,500 | 105,500 |

[1]The values in this table reflect FHWA's policy of rounding down when calculated weights fall exactly halfway between 500-pound increments. Because the Bridge Formula is designed to protect highway infrastructure, FHWA determined that this conservative policy is consistent with the statutory mandate.

Fn. 2 The Federal Highway Administration (FHWA) revises its guidance pamphlet *Bridge Formula Weights* (August 2006). Specifically, footnote 2 on page 6 of the guidance is superseded and replaced with the following: "Pursuant to 23 CFR 650.3 13, all bridges must be inspected, rated to safe load-carrying capacity, and if required, posted or restricted with respect to the maximum allowable weight."

# 2025 Chevrolet Low Cab Forward

## Commodity and Material Weights Approximate Weights of Commodities and Materials.

| Product | | Size of Container | Lbs. Per Cu. Ft. | No. of Lbs. / Per |
|---|---|---|---|---|
| Acetone | | — — — | 50 | 6.6 / gallon |
| Alcohol, | Commercial | — — — | 51 | 6.8 / gallon |
| | Proof spirits | — — — | 57 | 7.6 / gallon |
| Alfalfa seed | | bushel | — — | 60 / bushel |
| Aluminum, | Pure (cast) | — — — | 165 | 4,450 / cu. yard |
| Apples, | Fresh | basket-bushel | — — | 48 / bushel |
| | Western, box | 11.5" x 12" x 20" | — — | 50 / box |
| | New England, box | 11.25" x 14.5" x 17.5" | — — | 56 / box |
| | Standard barrel | 17" head, 28.5" stave | — — | 160 / barrel |
| | Dried | bushel | — — | 24 / bushel |
| Apricots, | Fresh | bushel | — — | 48 / bushel |
| | Western, box | 5.5" x 12" x 20" | — — | 23 / box |
| Artichokes, | Box | 10" x 11.5" x 22" | — — | 44 / box |
| Asbestos | | — — — | 153 | 4,130 / cu. yard |
| Asparagus, | crate, Loose | 11.5" high x 9.75" top | — — | 38 / crate |
| | Bunches | 11" bottom x 19.38" long | — — | 31 / crate |
| Avocados, | Box | 5.75" x 11.25" x 17.5" | — — | 16 / box |
| Bananas, | Single stem | bunch | — — | 45-65 / bunch |
| Barley | | bushel | — — | 48 / bushel |
| Barytes, | Mineral | — — — | 280 | 7,560 / cu. yard |
| Basalt, | Rock | — — — | 185 | 5,000 / cu. yard |
| Beans, dry, | Lima | bushel | — — | 56 / bushel |
| | White | bushel | — — | 60 / bushel |
| | Castor | bushel | — — | 46 / bushel |
| Beans, fresh, | Lima | bushel | — — | 39 / bushel |
| | String | bushel | — — | 36 / bushel |
| | | hamper, 5 peck | — — | 45 / hamper |

***Note: Beer cases vary as to size and shape. Suggested checking with local source.***

Figure 1

| Product | | Size of Container | Lbs. Per Cu. Ft. | No. of Lbs. / Per |
|---|---|---|---|---|
| Beef, | Slack barrel | 21" x 30" stave (200 lbs. net) | — — | 254 / barrel |
| Beer, | Wood barrel | .5 barrel (16 gal.) | — — | 205 / barrel |
| | Wood barrel | .25 barrel (8 gal.) | — — | 105 / barrel |
| | Steel barrel | .5 barrel (16 gal.) | — — | 190 / barrel |
| | Steel barrel | .25 barrel (8 gal.) | — — | 95 / barrel |
| | Dutchman | .13 barrel (4 gal.) | — — | 51 / barrel |
| Case carton,* | Regular bottles | 17.25" x 11.5" x 9.88" | — — | 45 / case |
| 24, 12 oz. | Steinie bottles | 18.38" x 12.13" x 7.38" | — — | 40 / case |
| | Tin cans | 16.13" x 11" x 5.13" | — — | 28 / case |
| Wooden case,* | Regular bottles | 21" x 13.5" x 10" | — — | 35 / case |
| 24, 12 oz. | Steinie bottles | 22" x 13.75" x 7.5" | — — | 46 / case |
| Beets | | bushel | — — | 50-60 / bushel |
| | Small crate | 9.75" x 13.75" x 24" | — — | 50 / crate |
| | Western crate | 14" x 19" x 24.5" | — — | 95 / crate |
| Berries, crate, | 24 pint | 9.75" x 9.97" x 20" | — — | 25 / crate |
| | 24 quart | 11.75" x 11.75" x 24" | — — | 48 / crate |
| | 32 quart | 15.5" x 11.75" x 24" | — — | 63 / crate |
| Bluegrass seed | | bushel | — — | 44 / bushel |
| Bluestone | | — — — | 120 | 3,240 / cu. yard |
| Bone | | — — — | 115 | 3,110 / cu. yard |
| Borax | | — — — | 110 | 2,970 / cu. yard |
| Bran | | bushel | — — | 20 / bushel |
| Brick, | Soft | 2.25" x 4" x 8.25" | — — | 4,320 / thousand |
| | Common | 2.25" x 4" x 8.25" | — — | 5,400 / thousand |
| | Hard | 2.25" x 4.25" x 8.5" | — — | 6,480 / thousand |
| | Pressed | 2.38" x 4" x 8.38" | — — | 7,500 / thousand |
| | Paving | 2.25" x 4" x 8.5" | — — | 6,750 / thousand |
| | Paving block | 3.5" x 4" x 8.5" | — — | 8,750 / thousand |
| | Fire | 2.5" x 4.5" x 9" | — — | 7,000 / thousand |

Figure 2

# 2025 Chevrolet Low Cab Forward



| Product | | Size of Container | Lbs. Per Cu. Ft. | No. of Lbs. / Per |
|---|---|---|---|---|
| Broccoli, | Bushel crate | 12.75" x 12.75" x 17" | — — | 30 / bushel |
| Brussels sprouts, | Crate | 7.75" x 10.5" x 21.38" | — — | 26 / crate |
| Buckwheat | | bushel | — — | 49 / bushel |
| Butter, tub, | Small | 15" dia. x 5.75" | — — | 25 / tub |
| Standard | | 15" dia. x 15" | — — | 70 / tub |
| Butter, case, | 30 – 1-lb. bricks | 10.75" x 8.75" x 10.5" | — — | 32 / case |
| | 9-lb. pail | pail | — — | 10 / pail |
| Cabbage | | bushel | — — | 38 / bushel |
| | Hamper | 1.5 bushel | — — | 58 / hamper |
| | Crate | 12.75" x 18.5" x 19" | — — | 60 / crate |
| | Western crate | 14" x 19" x 24.5" | — — | 85 / crate |
| | Barrel crate | 12.75" x 18.75" x 37.38" | — — | 110 / crate |
| Calf, | Live (average) | per head | — — | 140-160 / head |
| Cantaloupe, crate, | Pony | 11.75" x 11.75" x 23.5" | — — | 58 / crate |
| | Standard | 12.75" x 12.75" x 23.5" | — — | 68 / crate |
| | Jumbo | 13.75" x 13.75" x 23.5" | — — | 78 / crate |
| | Pony flat | 4.75" x 12.75" x 23.5" | — — | 26 / crate |
| | Standard flat | 5.25" x 14.25" x 23.5" | — — | 28 / crate |
| | Jumbo flat | 5.75" x 15.25" x 23.5" | — — | 32 / crate |
| | Honeydew (Casaba) | 6.38" x 15.13" x 23.5" | — — | 35 / crate |
| Carbolic acid | | — — — | 60 | 8.0 / gallon |
| Carrots, | Topped | bushel | — — | 55 / bushel |
| | With tops | bushel | — — | 40 / bushel |
| | Crate | 11.75" x 14.13" x 24" | — — | 60 / crate |
| Castor oil | | — — — | 61 | 8.1 / gallon |
| Cauliflower | | bushel | — — | 30 / bushel |
| | Crate | 9.38" x 19" x 24" | — — | 50 / crate |
| Cedar* | (lumber) | — — — | 30 | 2,500 / M. Bd. ft. |
| Celery, | Standard crate | 11.63" x 22" x 22.63" | — — | 70 / crate |
| | Half crate | 10.75" x 13" x 20.38" | — — | 35 / crate |
| | Northern crate | 16.5" x 21.25" x 22" | — — | 85 / crate |

*Kiln dried lumber averages 10% to 15% lighter, and green lumber 40% to 50% heavier, than air dried.

Figure 3

| Product | | Size of Container | Lbs. Per Cu. Ft. | No. of Lbs. / Per |
|---|---|---|---|---|
| Cement, | Block | 8" x 8" x 16" | — — | 42 / each |
| | Block | 8" x 12" x 16" | — — | 58 / each |
| | Portland | sack | — — | 94 / sack |
| | Portland | barrel (4 sacks per) | — — | 376 / barrel |
| Chalk | | — — — | 137 | 3,700 / cu. yard |
| Charcoal, | Oak | — — — | 33 | 890 / cu. yard |
| | Pine | — — — | 23 | 620 / cu. yard |
| Cheese, | Small box | 15" dia. x 5.25" | — — | 25 / box |
| | Medium box | 15" dia. x 7.5" | — — | 35 / box |
| | Large box | 15" dia. x 15" | — — | 70 / box |
| Cherries, | Unstemmed | bushel | — — | 56 / bushel |
| | Stemmed | bushel | — — | 64 / bushel |
| | Lug box | 5.63" x 11.88" x 19.75" | — — | 17 / box |
| Chestnut* | (lumber) | — — — | 37 | 3,080 / M. Bd. ft. |
| Chestnuts | | bushel | — — | 50 / bushel |
| Chickens, | Live, broilers (20 avg.) | standard crate | — — | 58 / crate |
| | Fowl (12 avg.) | standard crate | — — | 78 / crate |
| | Standard crate, | empty 24" x 35" x 13" | — — | 18 / crate |
| Cinder blocks | | 8" x 8" x 16" | — — | 35 / each |
| | | 8" x 12" x 16" | — — | 45 / each |
| Cinders | | — — — | 50 | 1,350 / cu. yard |
| Clay, | Dry lumps | — — — | 85 | 2,300 / cu. yard |
| | Wet lumps | — — — | 110 | 2,970 / cu. yard |
| | Wet packed | — — — | 135 | 3,650 / cu. yard |
| | Fire | — — — | 125 | 3,375 / cu. yard |
| Cork | | — — — | 15 | 405 / cu. yard |
| Corn, | Ear | bushel | — — | 35 / bushel |
| | Shelled | bushel | — — | 56 / bushel |
| | Sweet corn (green) | bushel | — — | 43 / bushel |
| | Crate | 12.88" x 12.88" x 24" | — — | 60 / crate |
| Corn meal | | bushel | — — | 44 / bushel |

Figure 4

# 2025 Chevrolet Low Cab Forward



| Product | | Size of Container | Lbs. Per Cu. Ft. | No. of Lbs. / Per |
|---|---|---|---|---|
| Corn oil | | — — — | 58 | 7.8 / gallon |
| Corn syrup | | — — — | 86 | 11.5 / gallon |
| Cotton, | Gin bale | 30" x 48" x 54" | — — | 515 / bale |
| | Standard bale | 24" x 28" x 56" | — — | 515 / bale |
| | Comp. bale | 20" x 24" x 56" | — — | 515 / bale |
| Cotton seed | | bushel | — — | 32 / bushel |
| Cottonseed oil | | — — — | 58 | 7.8 / gallon |
| Cottonwood* | (lumber) | — — — | 37 | 3,080 / M. Bd. ft. |
| Cow, | Live-Feeder (average) | per head | — — | 600 / head |
| | Butcher (average) | per head | — — | 800 / head |
| | Butcher steer (average) | per head | — — | 1100 / head |
| Cranberries, | 1/4 barrel box | 9.5" x 11" x 14" | — — | 28 / box |
| | 1/2 barrel box | 12.25" x 14.75" x 22" | — — | 60 / box |
| Cream | | — — — | 64 | 8.5 / gallon |
| Creosote | | — — — | 68 | 9.2 / gallon |
| Crude oil | | — — — | 56 | 7.5 / gallon |
| Cucumbers | | bushel | — — | 55 / bushel |
| | Crate | 9.75" x 13.75" x 24" | — — | 75 / crate |
| | Case | 5" x 13.25" x 19" | — — | 26 / case |
| Earth, | Loose, dry loam | — — — | 76 | 2,050 / cu. yard |
| | Packed | — — — | 95 | 2,565 / cu. yard |
| | Wet | — — — | 125 | 3,375 / cu. yard |
| Eggplant, | Hamper | bushel | — — | 40 / bushel |
| | Crate | 14" x 11.75" x 24" | — — | 54 / crate |
| Eggs, | 30 dozen crate | 12" x 12" x 26" | — — | 55 / crate |
| Elm,* | Soft | — — — | 38 | 3,170 / M. Bd. ft. |
| | Rock | — — — | 45 | 3,750 / M. Bd. ft. |
| Fertilizer, | Commercial | burlap bag | — — | 100-200 / bag |
| Fir,* | Douglas | — — — | 32 | 2,670 / M. Bd. ft. |
| | Eastern | — — — | 25 | 2,080 / M. Bd. ft. |

*Kiln dried lumber averages 10% to 15% lighter, and green lumber 40% to 50% heavier, than air dried.

Figure 5

| Product | | Size of Container | Lbs. Per Cu. Ft. | No. of Lbs. / Per |
|---|---|---|---|---|
| Fish, fresh, | Barrel | 19" head, 29" stave | — — | 300 / barrel |
| | 1/2 Barrel | 18.5" head, 23.5" stave | — — | 160 / 1/2 barrel |
| Flour, | Barrel | 19.13" head, 30" stave | — — | 215 / barrel |
| Fuel oil, | Furnace grade | — — — | 56 | 7.5 / gallon |
| | Diesel engine | — — — | 52 | 7.0 / gallon |
| Furniture, | Household | — — — | 7 | 1,915 / cu. yard |
| Garbage, | Dry, paper wrapped | — — — | 15-30 | 405-810 / cu. yard |
| | Wet | — — — | 50 | 1,240 / cu. yard |
| Gasoline | | — — — | 45 | 6.0 / gallon |
| Glass, | Common window | — — — | — — | 162 / cu. foot |
| | Plate or crown | — — — | — — | 161 / cu. foot |
| | 1/4" plate | — — — | — — | 3.3 / sq. foot |
| Glue | | — — — | 80 | 2,160 / cu. yard |
| Glycerine | | — — — | 79 | 10.5 / gallon |
| Grapefruit, | Western box | 11.5" x 11.5" x 24" | — — | 68 / box |
| | Southern box | 12.75" x 12.75" x 27" | — — | 90 / box |
| Grapes, | Basket | bushel | — — | 48 / box |
| | Lug box | 5.63" x 16.38" x 17.5" | — — | 30 / box |
| | Western keg | 15.5" dia. x 14" | — — | 45 / keg |
| | Basket | 12 quart | — — | 18 / basket |
| Gravel, | Dry | — — — | 95 | 2,565 / cu. yard |
| | Wet | — — — | 125 | 3,375 / cu. yard |
| Greens | | bushel | — — | 25 / bushel |
| Groceries, | Misc. assorted | — — — | 30 | 810 / cu. yard |
| Hay, | Bale | 26" x 30" x 46" | — — | 210 / bale |
| | Bale | 17" x 22" x 43" | — — | 115 / bale |
| | Bale | 14" x 16" x 43" | — — | 85 / bale |
| Hog, | Live (average) | per head | — — | 225-250 / head |
| Honey | | — — — | 90 | 12.0 / gallon |
| Horse, | Live (average) | per head | — — | 1,200-1,500 / head |

Figure 6

| Product | | Size of Container | Lbs. Per Cu. Ft. | No. of Lbs. / Per |
|---|---|---|---|---|
| Horseradish roots | | bushel | — — | 35 / bushel |
| Ice | | — — — | 57 | 1,540 / cu. yard |
| Ice (mfg.), | Block | 11" x 22" x 32" | — — | 250 / block |
| | Block | 14" x 14" x 40" | — — | 255 / block |
| | Block | 11" x 22" x 56" | — — | 440 / block |
| Ice Cream, | 2.5 gallon can, Full | 9" dia. x 11" | — — | 18 / can |
| | Empty | — — — | — — | 6 / can |
| | 5 gallon can, Full | 9" dia. x 21" | — — | 35 / can |
| | Empty | — — — | — — | 11 / can |
| Kale | | bushel | — — | 25 / bushel |
| Kerosene | | — — — | 50 | 6.6 / gallon |
| Lamb, | Live (average) | per head | — — | 75-85 / head |
| Lard, | Barrel | 18" head, 30" stave | — — | 425 / barrel |
| Lath, | Standard length 29" | Packed in bundles of 50<br>Average bundle, dia. 9" | — — | 25 / bundle |
| Leather, | Dry | — — — | 55 | 1,485 / cu. yard |
| | Wet | — — — | 65 | 1,755 / cu. yard |
| Lemons, | Western box | 10" x 13" x 25" | — — | 80 / box |
| | Southern box | 12.75" x 12.75" x 27" | — — | 90 / box |
| Lentils | | bushel | — — | 60 / bushel |
| Lettuce, | Hamper | bushel | — — | 25 / bushel |
| | Hamper | 1.5 bushel | — — | 38 / hamper |
| | Basket | 8.5" x 11.75" x 21.38" | — — | 17 / basket |
| | Crate | 18.75" x 17.5" x 24.5" | — — | 75 / crate |
| | 1/2 crate | 9.5" x 13.5" x 24.5" | — — | 40 / 1/2 crate |
| Lime, | Hydrated | bushel | — — | 30 / bushel |
| | Barrel (small) | 16.5" head, 27.5" stave | 62 | 210 / barrel |
| | Barrel (large) | | 62 | 320 / barrel |
| Limes, | Western box | 10" x 13" x 25" | — — | 80 / box |
| | Southern box | 12.75" x 12.75" x 27" | — — | 90 / box |

Figure 7

| Product | | Size of Container | Lbs. Per Cu. Ft. | No. of Lbs. / Per |
|---|---|---|---|---|
| Linseed oil | | — — — | 59 | 7.9 / gallon |
| Lubricating oil | | — — — | 52 | 7.0 / gallon |
| Malt, | Barley | bushel | — — | 28 / bushel |
| | Rye | bushel | — — | 32 / bushel |
| | Brewer's grain | bushel | — — | 40 / bushel |
| Maple syrup | | gallon | 82 | 11.0 / gallon |
| Maple,* | Hard (lumber) | — — — | 44 | 3,670 / M. Bd. ft. |
| | Soft | — — — | 34 | 2,830 / M. Bd. ft. |
| Meal-corn | | bushel | — — | 44 / bushel |
| Milk, | Bulk | — — — | 64 | 8.6 / gallon |
| | 5 gallon can | 10.25" dia. x 19" | — — | 62 / can |
| | 10 gallon can | 13" dia. x 23" | — — | 115 / can |
| | Crate, 20.5 pt. bottles | 8.5" x 12.75" x 16.75" | — — | 33 / crate |
| | 20 pt. bottles | 8.5" x 12.75" x 16.75" | — — | 54 / crate |
| Millet | | bushel | — — | 50 / bushel |
| Molasses | | — — — | 90 | 12.0 / gallon |
| | Barrel | 20.25" head, 34" stave | — — | 675 / barrel |
| Mortar, | Lime | — — — | 110 | 2,970 / cu. yard |
| Mud, | Flowing | — — — | 106 | 2,860 / cu. yard |
| | Packed | — — — | 125 | 3,375 / cu. yard |
| Muriatic acid, | 40% | — — — | 40 | 10.0 / gallon |
| Naptha, | Petroleum | — — — | 42 | 5.6 / gallon |
| Nitric acid, | 91% | — — — | 94 | 12.5 / gallon |
| Oak-red,* | Black | — — — | 42 | 3,500 / M. Bd. ft. |
| | White | — — — | 48 | 4,080 / M. Bd. ft. |
| Oats | | bushel | — — | 32 / bushel |
| Okra, | Hamper | 1/2 bushel | — — | 18 / hamper |
| | Hamper | bushel | — — | 34 / bushel |
| Oleomargarine, | (mfg.-tub) | 21" head, 34" stave | — — | 70 / tub |
| | Cases | — — — | — — | 15-65 / case |

Figure 8

# 2025 Chevrolet Low Cab Forward



| Product | | Size of Container | Lbs. Per Cu. Ft. | No. of Lbs. / Per |
|---|---|---|---|---|
| Olive oil | | — — — | 58 | 7.7 / gallon |
| Onions, dry, | Basket | bushel | — — | 55 / bushel |
| | Bag | 17" x 32" | — — | 50 / bag |
| | Crate | 20.5" x 11.5" x 10.5" | — — | 58 / crate |
| | Green (with tops) | bushel | — — | 32 / bushel |
| Oranges, | Western box | 11.5" x 11.5" x 24" | — — | 80 / box |
| | Southern box | 12.75" x 12.75" x 27" | — — | 90 / box |
| | Bushel box | 10.75" x 10.75" x 23.5" | — — | 65 / box |
| Oysters (shucked or meats) | | | | |
| | Crate with 5.1 gal. cans | 18" x 12" x 24" | (11.5 lbs. per gal.) | 67 / crate |
| | With shells (bags) | bushel | — — | 75 / bushel |
| Paint, | Lead and oil | — — — | 127 | 17 / gallon |
| Paper, | Average solid | — — — | 58 | 1,565 / cu. yard |
| | Newspaper rolls | 34.25" x 35" dia. | — — | 500 / roll |
| | | 51.5" x 35" dia. | — — | 1,000 / roll |
| | | 64.25" x 35" dia. | — — | 1,300 / roll |
| Paraffin | | — — — | 56 | 1,510 / cu. yard |
| Parsley, | Bushel crate | 12.75" x 12.75" x 17" | — — | 30 / crate |
| Parsnips | | bushel | — — | 50 / bushel |
| Peaches, | Basket | bushel | — — | 48 / bushel |
| | 1/2 bushel | — — — | — — | 25 / basket |
| | Crate | 10.5" x 11.25" x 24" | — — | 50 / crate |
| | Western box | 5.5" x 12.25" x 19.75" | — — | 22 / box |
| Peanuts, | Unshelled | bushel | — — | 22 / bushel |
| | Bag | — — — | — — | 100 / bag |
| Peanut oil | | — — — | 57 | 7.6 / gallon |
| Pears, | Basket | bushel | — — | 50 / bushel |
| | Western box | 9.63" x 12.13" x 19.75" | — — | 51 / box |
| Peas, | Dry | bushel | — — | 60 / bushel |
| | Fresh hamper | bushel | — — | 35 / hamper |
| | Hamper | 40 quarts | — — | 45 / hamper |

*Kiln dried lumber averages 10% to 15% lighter, and green lumber 40% to 50% heavier, than air dried.

Figure 9

| Product | | Size of Container | Lbs. Per Cu. Ft. | No. of Lbs. / Per |
|---|---|---|---|---|
| Pecans, | Large bag | — — — | — — | 100 / bag |
| | Small bag | — — — | — — | 50 / bag |
| Peppers, | Basket | bushel | — — | 25 / basket |
| | Crate | 14.13" x 11.75" x 24" | — — | 45 / crate |
| Petroleum | | — — — | 56 | 7.5 / gallon |
| Phosphate rock | | — — — | 200 | 5,400 / cu. yard |
| Pine,* | Long leaf | — — — | 44 | 3,670 / M. Bd. ft. |
| | North Carolina | — — — | 36 | 3,000 / M. Bd. ft. |
| | Oregon | — — — | 32 | 2,670 / M. Bd. ft. |
| | Red | — — — | 30 | 2,500 / M. Bd. ft. |
| | White | — — — | 26 | 2,170 / M. Bd. ft. |
| | Yellow, long leaf | — — — | 44 | 3,670 / M. Bd. ft. |
| | Short leaf | — — — | 38 | 3,170 / M. Bd. ft. |
| Pineapples, | Crate | 11" x 12.5" x 36" | — — | 85 / crate |
| Pitch | | — — — | 70 | 1,900 / cu. yard |
| Plums, | Basket | bushel | — — | 56 / bushel |
| | Western box | 5.63" x 16.38" x 17.5" | — — | 25 / box |
| Pomegranates, | Box | 6.5" x 12" x 24.63" | — — | 30 / box |
| Popcorn, | Ear | bushel | — — | 70 / bushel |
| | Shelled | bushel | — — | 56 / bushel |
| Poplar* | | — — — | 27 | 2,250 / M. Bd. ft. |
| Porcelain | | — — — | 150 | 4,050 / cu. yard |
| Pork (dressed), | Barrel (200 lbs. net) | 18" head, 29" stave | — — | 240 / barrel |
| Potatoes, | Sweet | bushel | — — | 55 / bushel |
| | White or Irish | bushel | — — | 60 / bushel |
| | Bag | 1.67 bushel | — — | 102 / bag |
| | Barrel | 17.13" head, 28.5" stave | — — | 185 / barrel |
| Prunes, | Box | 5.63" x 16.38" x 19.75" | — — | 25 / box |
| | Box | 5.63" x 11.88" x 19.75" | — — | 22 / box |
| Quinces | | bushel | — — | 50 / bushel |

Figure 10

# 2025 Chevrolet Low Cab Forward



| Product | | Size of Container | Lbs. Per Cu. Ft. | No. of Lbs. / Per |
|---|---|---|---|---|
| Radishes, | Basket | bushel | — — | 34 / bushel |
| | Crate | 9.75" x 13.75" x 24" | — — | 40 / crate |
| Redwood* | | — — — | 30 | 2,500 / M. Bd. ft. |
| Resin | | — — — | 68 | 1,835 / cu. yard |
| Rhubarb (pie plant) | | bushel | — — | 50 / bushel |
| | Box | 5.25" x 11.5" x 22" | — — | 24 / box |
| Rice, | | Unhulled bushel | — — | 43 / bushel |
| Rock, | Crushed (average) | — — — | 100 | 2,700 / cu. yard |
| Romaine, | Crate | 13.88" x 18.88" x 24.5" | — — | 64 / crate |
| | Crate | 12.25" x 13" x 15.25" | — — | 27 / crate |
| Rubber goods | | — — — | 94 | 2,540 / cu. yard |
| Rutabagas | | bushel | — — | 56 / bushel |
| Rye | | bushel | — — | 56 / bushel |
| Salt, rock, | Solid | — — — | 136 | 3,670 / cu. yard |
| | Coarse | — — — | 45 | 1,215 / cu. yard |
| | Fine | — — — | 50 | 1,350 / cu. yard |
| | Barrel (average) | — — — | — — | 280 / barrel |
| Sand, fine, | Dry | — — — | 110 | 2,970 / cu. yard |
| | Wet | — — — | 125 | 3,375 / cu. yard |
| Sand, coarse, | Dry | — — — | 95 | 2,565 / cu. yard |
| | Wet | — — — | 120 | 3,240 / cu. yard |
| Sand, | Mixed | — — — | 115 | 3,100 / cu. yard |
| Sandstone, | Solid | — — — | 147 | 3,970 / cu. yard |
| | Crushed | — — — | 86 | 2,325 / cu. yard |
| Shale, | Solid | — — — | 172 | 4,645 / cu. yard |
| | Crushed | — — — | 92 | 2,485 / cu. yard |
| Sheep, | Live (average) | per head | — — | 125-150 / head |
| Shingles, | Bundle | Pkg. in bndls. of 200-250<br>Size (avg.) 24" x 20" x 10" | — — | 50 / bundle |
| Snow, | Moist-packed | — — — | 50 | 1,350 / cu. yard |

*Kiln dried lumber averages 10% to 15% lighter, and green lumber 40% to 50% heavier, than air dried.

Figure 11

| Product | | Size of Container | Lbs. Per Cu. Ft. | No. of Lbs. / Per |
|---|---|---|---|---|
| Soft drinks, | Half depth bottle box<br>24-6 to 8 oz. bottles | 12.25" x 18.75" x 8.5" | — — | 39 / box |
| | Full depth bottle box<br>12-24 to 32 oz. bottles | 13.38" x 18.5" x 12.25" | — — | 60 / box |
| Sorghum syrup | | — — — | 86 | 11.5 / gallon |
| Soybeans | | bushel | — — | 60 / bushel |
| Soybean oil | | — — — | 58 | 7.7 / gallon |
| Spinach, | Hamper | bushel | — — | 20 / bushel |
| | Basket | bushel | — — | 27 / bushel |
| Spruce* | | — — — | 28 | 2,330 / M. Bd. ft. |
| Squash | | bushel | — — | 46 / bushel |
| Starch | | — — — | 96 | 2,590 / cu. yard |
| Stone, | Crushed, (average) | — — — | 100 | 2,700 / cu. yard |
| | Rip-rap | — — — | 65 | 1,755 / cu. yard |
| Straw, | Bale | 17" x 22" x 42" | — — | 110 / bale |
| | Bale | 26" x 30" x 46" | — — | 180 / bale |
| Street sweepings | | — — — | 32 | 865 / cu. yard |
| Sugar | | — — — | 100 | 2,700 / cu. yard |
| Sugar, | Bag | (100 lbs. net) | — — | 101 / bag |
| | Barrel (22 lbs. empty) | 19.13" head, 30" stave | — — | 345 / barrel |
| | Case | 24 – 5-lb. cartons | — — | 135 / case |
| | Case | 60 – 2-lb. cartons | — — | 135 / case |
| Sugar cane syrup | | — — — | 85 | 11.3 / gallon |
| Sulphur | | — — — | 125 | 3,375 / cu. yard |
| Sulfuric acid, 87% | | — — — | 112 | 15 / gallon |
| Sweet corn, | Basket | bushel | — — | 45 / bushel |
| | Crate | 13" x 13" x 24" | — — | 60 / crate |
| Sycamore* | | — — — | 37 | 3,080 / M. Bd. ft. |
| Tallow | | — — — | 60 | 1,620 / cu. yard |

Figure 12

| Product | | Size of Container | Lbs. Per Cu. Ft. | No. of Lbs. / Per |
|---|---|---|---|---|
| Tanks, Acetylene, | 102 cu. foot | empty | — — | 70 / tank |
| | | filled | — — | 75 / tank |
| | 310 cu. foot | empty | — — | 200 / tank |
| | | filled | — — | 220 / tank |
| Tanks, Oxygen, | 150 cu. foot | empty | — — | 80 / tank |
| | | filled | — — | 92 / tank |
| | 300 cu. foot | empty | — — | 133 / tank |
| | | filled | — — | 153 / tank |
| Tar | | — — — | 65 | 1755 / cu. yard |
| Tile, | Solid | — — — | 115 | 3,100 / cu. yard |
| | Partition (construction) | — — — | 40 | 1,080 / cu. yard |
| Tomatoes, | Basket | bushel | — — | 55 / bushel |
| | Lug box | 7.25" x 14" x 17.5" | — — | 35 / box |
| | Crate | 10.5" x 11.25" x 24" | — — | 48 / crate |
| | Basket | 8.5" x 8.75" x 20" | — — | 18 / basket |
| | Basket (paper) | 4.25" x 8.5" x 16.25" | — — | 9 / basket |
| | Basket (wood) | 5.5" x 7.25" x 16.5" | — — | 10 / basket |
| Turpentine | | — — — | 54 | 7.2 / gallon |
| Turnips, | Basket | bushel | — — | 54 / bushel |
| Vetch seed | | bushel | — — | 60 / bushel |
| Vinegar | | — — — | 64 | 8.5 / gallon |
| Walnuts, | Bulk | bushel | — — | 50 / bushel |
| | Bag | 2 bushel | — — | 100 / bag |
| Water, | Fresh | — — — | 63 | 8.4 / gallon |
| Wheat, | Bulk | bushel | — — | 60 / bushel |
| | Bag | 1.5 bushel | — — | 90 / bag |
| Wool, | Pressed | — — — | 82 | 2,215 / cu. yard |

*Kiln dried lumber averages 10% to 15% lighter, and green lumber 40% to 50% heavier, than air dried.

Figure 13

# 2025 Chevrolet Low Cab Forward



## Chassis Specifications

| Model | 3500 HG GAS | 4500 HG GAS |
|---|---|---|
| GVWR / GCWR | 12,000 lbs. / 18,000 lbs. | 14,500 lbs./ 20,500 lbs. |
| WB | 109 in., 132.5 in, 150 in., 176 in. | |
| Engine | GMPT L8T (Gen V), 8-cylinder, V Block 4-cycle, OHV, Direct Fuel Injection, Oil Jet Piston Cooling | |
| Model/Displacement | GMPT-V8/400 CID (6.6 liters) | |
| Horsepower | 350 HP @ 4500 RPM | |
| Torque | 425 lb.-ft. @ 3800 RPM | |
| Equipment | Direct injection technology, mass air flow meter, powertrain interface module (PIM), onboard diagnostics, oxygen sensors, catalytic convertor, map sensor, with external oil cooler, engine cruise control, and rear engine cover. | |
| Transmission | 8L90 Hydra-Matic 8-speed automatic w/lock-up converter and overdrive. PTO not available. | |
| Steering | Integral power steering 18.8-20.9:1 ratio. Tilt and telescoping steering column. | |
| Front Axle | Reverse Elliot “I”-Beam rated at 6,830 lbs. | |
| Front Suspension | Semi-elliptical steel alloy tapered leaf springs with stabilizer bar and shock absorbers. | |
| Front GAWR | 4,860 lbs. | 6,630 lbs. |
| Rear Axle | Full floating single speed with hypoid gearing rated at 14,550 lbs. | |
| Rear GAWR | 8,840 lbs. | 11,020 lbs. |
| Rear Suspension | Semi-elliptical steel alloy multi-leaf springs and shock absorbers. | |
| Wheels | 16 x 6.0 6-hole disc wheels, painted white. | 19.5 x 6.0 6-hole disc wheels, painted white. |
| Tires | 215/85R-16E (10 ply) LRR (Low Rolling Resistance) tubeless steel belted radials, all season, front and rear. | 225/70R-19.5F/G (12/14 pr) LRR (Low Rolling Resistance) tubeless steel belted radials, all season, front and rear. |
| Brakes | Dual circuit vacuum assisted hydraulic service brakes with EBD (Electronic Brake Distribution) system for load proportioning of the brake system front and rear disc brake. The parking brake is a mechanical, cable actuated, internal expanding drum type, transmission mounted. 4 channel anti-lock brake system. | |
| Fuel Tank | 38.6 gal. rectangular stainless steel fuel tank. Mounted between the frame rails with electric type fuel pump (mounted in tank) and fuel tank zone module (mounted on rearward crossmember). Through the rail fuel fill. | |
| Frame | Ladder type channel section straight frame rail 33.5 in wide through the total length of the frame.Yield strength 44,000 psi section modulus 7.20 cubic in, RBM 316,800 lb-in per rail. | |
| Cab | All steel, low cab forward, BBC 70.9 in, 45˚ mechanical tilt with torsion assist. | |
| Cab Equipment | TRICOT breathable cloth covered high back driver’s seat with two occupant passenger seat. Dual cab mounted exterior mirrors with integral convex mirror. Tilt and telescoping steering column. Power windows and door locks, floor mats, tinted glass. AM/FM/CD Radio with Aux input/USB port and Bluetooth. Air conditioning, a rear body dome lamp switch, and a cab latch switch with an indicator and buzzer are standard. Bi-LED Head Lamps and Signature Light. | |
| Electrical | 12 volt, negative ground, 750 CCA maintenance free battery located on frame, 170 Amp alternator with integral regulator. | |
| Options | see page 10 for options | |

NOTE: These selected specifications are subject to change without notice

# 2025 Chevrolet Low Cab Forward



## Chassis Specifications

| Model | 3500 HG GAS CREW | 4500 HG GAS CREW |
|---|---|---|
| GVWR / GCWR | 12,000 lbs. / 18,000 lbs. | 14,500 lbs./ 20,500 lbs. |
| WB | 150 in., 176 in. | |
| Engine | GMPT L8T (Gen V), 8-cylinder, V Block 4-cycle, OHV, Direct Fuel Injection, Oil Jet Piston Cooling | |
| Model/Displacement | GMPT-V8/400 CID (6.6 liters) | |
| Horsepower | 350 HP @ 4500 RPM | |
| Torque | 425 lb.-ft. @ 3800 RPM | |
| Equipment | Direct injection technology, mass air flow meter, powertrain interface module (PIM), onboard diagnostics, oxygen sensors, catalytic convertor, map sensor, with external oil cooler, engine cruise control, and rear engine cover. | |
| Transmission | 8L90 Hydra-Matic 8-speed automatic w/lock-up converter and overdrive. PTO not available. | |
| Steering | Integral power steering 18.8-20.9:1 ratio. Tilt and telescoping steering column. | |
| Front Axle | Reverse Elliot “I”-Beam rated at 6,830 lbs. | |
| Front Suspension | Semi-elliptical steel alloy tapered leaf springs with stabilizer bar and shock absorbers. | |
| Front GAWR | 4,860 lbs. | 6,630 lbs. |
| Rear Axle | Full floating single speed with hypoid gearing rated at 14,550 lbs. | |
| Rear GAWR | 8,840 lbs. | 11,020 lbs. |
| Rear Suspension | Semi-elliptical steel alloy multi-leaf springs and shock absorbers. | |
| Wheels | 16 x 6.0 6-hole disc wheels, painted white. | 19.5 x 6.0 6-hole disc wheels, painted white. |
| Tires | 215/85R-16E (10 ply) LRR (Low Rolling Resistance) tubeless steel belted radials, all season, front and rear. | 225/70R-19.5F/G (12/14 pr) LRR (Low Rolling Resistance) tubeless steel belted radials, all season, front and rear. |
| Brakes | Dual circuit vacuum assisted hydraulic service brakes with EBD (Electronic Brake Distribution) system for load proportioning of the brake system front and rear disc brake. The parking brake is a mechanical, cable actuated, internal expanding drum type, transmission mounted. 4 channel anti-lock brake system. | |
| Fuel Tank | 38.6 gal. rectangular stainless steel fuel tank. Mounted between the frame rails with electric type fuel pump (mounted in tank) and fuel tank zone module (mounted on rearward crossmember). Through the rail fuel fill. | |
| Frame | Ladder type channel section straight frame rail 33.5 in wide through the total length of the frame.Yield strength 44,000 psi section modulus 7.20 cubic in, RBM 316,800 lb-in per rail. | |
| Cab | All-steel, low cab forward, BBC 109.9 in., 7-passenger seating. | |
| Cab Equipment | TRICOT breathable cloth covered high back driver’s seat with two occupant passenger seat and four passenger rear bench seat. Dual cab mounted exterior mirrors with integral convex mirror. Tilt and telescoping steering column. Power windows and door locks, floor mats, and tinted glass. AM/FM/CD Radio with Aux input/USB port and Bluetooth. Air conditioning, a rear body dome lamp switch, and a cab latch switch with an indicator and buzzer are standard. Bi-LED Head Lamps and Signature Light. | |
| Electrical | 12 volt, negative ground, 750 CCA maintenance free battery located on frame, 170 Amp alternator with integral regulator. | |
| Options | see page 10 for options | |

**NOTE:** These selected specifications are subject to change without notice.

# 2025 Chevrolet Low Cab Forward



## Chassis Specifications

| Model | 5500 HG GAS | 5500 XG GAS |
|---|---|---|
| GVWR / GCWR | 17,950 lbs. / 23,950 lbs. | 19,500 lbs./ 25,500 lbs. |
| WB | 132.5 in, 150 in., 176 in. | |
| Engine | GMPT L8T (Gen V), 8-cylinder, V Block 4-cycle, OHV, Direct Fuel Injection, Oil Jet Piston Cooling | |
| Model/Displacement | GMPT-V8/400 CID (6.6 liters) | |
| HP | 350 HP @ 4500 RPM | |
| Torque | 425 lb.-ft. @ 3800 RPM | |
| Equipment | Direct injection technology, mass air flow meter, powertrain interface module (PIM), onboard diagnostics, oxygen sensors, catalytic convertor, map sensor, with external oil cooler, engine cruise control, and rear engine cover. | |
| Transmission | Allison 1000 RDS 6-speed automatic transmission. **PTO not available.** | |
| Steering | Integral power steering 18.8-20.9:1 ratio. Tilt and telescoping steering column. | |
| Front Axle | Reverse Elliot "I"-Beam rated at 6,830 lbs. | Reverse Elliot "I"-Beam rated at 7,275 lbs. |
| Front Suspension | Semi-elliptical steel alloy tapered leaf springs with stabilizer bar and shock absorbers. | |
| Front GAWR | 6,830 lbs. | 7,275 lbs. |
| Rear Axle | Full-floating single speed with hypoid gearing rated at 14,550 lbs. | |
| Rear GAWR | 13,660 lbs. | 14,460 lbs. |
| Rear Suspension | Semi-elliptical steel alloy multi-leaf springs and shock absorbers. | |
| Wheels | 19.5 x 6.0 6-hole disc wheels, painted white. | |
| Tires | 225/70R-19.5G (14 pr) LRR (Low Rolling Resistance) tubeless steel belted radials, all season, front and rear. | |
| Brakes | Dual circuit power assisted hydraulic 4-channel anti-lock service brake system with EBD (Electronic Brake Distribution) for load proportioning of the front and rear disc brakes. The parking brake is a mechanical, cable actuated, internal expanding drum type, transmission mounted. | |
| Fuel Tank | 38.6 gal. rectangular stainless steel fuel tank. Mounted between the frame rails with electric type fuel pump (mounted in tank). Through the rail fuel fill. | |
| Frame | Ladder type channel section straight frame rail 33.5 in wide through the total length of the frame.Yield strength 44,000 psi section modulus 7.20 cubic in, RBM 316,800 lb-in per rail. | |
| Cab | All steel, low cab forward, BBC 70.9 in, 45˚ mechanical tilt with torsion assist. | |
| Cab Equipment | TRICOT breathable cloth covered high back driver's seat with two occupant passenger seat. Dual cab mounted exterior mirrors with integral convex mirror. Tilt and telescoping steering column. Power windows and door locks, floor mats, tinted glass. AM/FM/CD Radio with Aux input/USB port and Bluetooth. Air conditioning, a rear body dome lamp switch, and a cab latch switch with an indicator and buzzer are standard. | |
| Electrical | 12-volt, negative ground, maintenance free battery located on frame, 750 CCA, 145-amp alternator with integral regulator. | |
| Options | see page 10 for options | |

NOTE: These selected specifications are subject to change without notice

# 2025 Chevrolet Low Cab Forward



## Chassis Specifications

| Model | 5500 HG GAS CREW | 5500 XG GAS CREW |
|---|---|---|
| GVWR / GCWR | 17,950 lbs. / 23,950 lbs. | 19,500 lbs./ 25,500 lbs. |
| WB | 150 in., 176 in. | |
| Engine | GMPT L8T (Gen V), 8-cylinder, V Block 4-cycle, OHV, Direct Fuel Injection, Oil Jet Piston Cooling | |
| Model/Displacement | GMPT-V8/400 CID (6.6 liters) | |
| HP | 350 HP @ 4500 RPM | |
| Torque | 425 lb.-ft. @ 3800 RPM | |
| Equipment | Direct injection technology, mass air flow meter, powertrain interface module (PIM), onboard diagnostics, oxygen sensors, catalytic convertor, map sensor, with external oil cooler, engine cruise control, and rear engine cover. | |
| Transmission | Allison 1000 RDS 6-speed automatic transmission. **PTO not available.** | |
| Steering | Integral power steering 18.8-20.9:1 ratio. Tilt and telescoping steering column. | |
| Front Axle | Reverse Elliot “I”-Beam rated at 6,830 lbs. | Reverse Elliot “I”-Beam rated at 7,275 lbs. |
| Front Suspension | Semi-elliptical steel alloy tapered leaf springs with stabilizer bar and shock absorbers. | |
| Front GAWR | 6,830 lbs. | 7,275 lbs. |
| Rear Axle | Full-floating single speed with hypoid gearing rated at 14,550 lbs. | |
| Rear GAWR | 13,660 lbs. | 14,460 lbs. |
| Rear Suspension | Semi-elliptical steel alloy multi-leaf springs and shock absorbers. | |
| Wheels | 19.5 x 6.0 6-hole disc wheels, painted white. | |
| Tires | 225/70R-19.5G (14 pr) LRR (Low Rolling Resistance) tubeless steel belted radials, all season, front and rear. | |
| Brakes | Dual circuit power assisted hydraulic 4-channel anti-lock service brake system with EBD (Electronic Brake Distribution) for load proportioning of the front and rear disc brakes. The parking brake is a mechanical, cable actuated, internal expanding drum type, transmission mounted. | |
| Fuel Tank | 38.6 gal. rectangular stainless steel fuel tank. Mounted between the frame rails with electric type fuel pump (mounted in tank). Through the rail fuel fill. | |
| Frame | Ladder type channel section straight frame rail 33.5 in wide through the total length of the frame.Yield strength 44,000 psi section modulus 7.20 cubic in, RBM 316,800 lb-in per rail. | |
| Cab | All-steel, low cab forward, BBC 109.9 in., 7-passenger seating. | |
| Cab Equipment | TRICOT breathable cloth covered high back driver’s seat with two occupant passenger seat and four passenger rear bench seat. Dual cab mounted exterior mirrors with integral convex mirror. Tilt and telescoping steering column. Power windows and door locks, floor mats, and tinted glass. AM/FM/CD Radio with Aux input/USB port and Bluetooth. Rear body dome lamp switch and air conditioning are standard. | |
| Electrical | 12-volt, negative ground, maintenance free battery located on frame, 750 CCA, 145-amp alternator with integral regulator. | |
| Options | see page 10 for options | |

NOTE: These selected specifications are subject to change without notice

# 2025 Chevrolet Low Cab Forward

## Vehicle Weights, Dimensions and Ratings – 3500 / 4500 HG

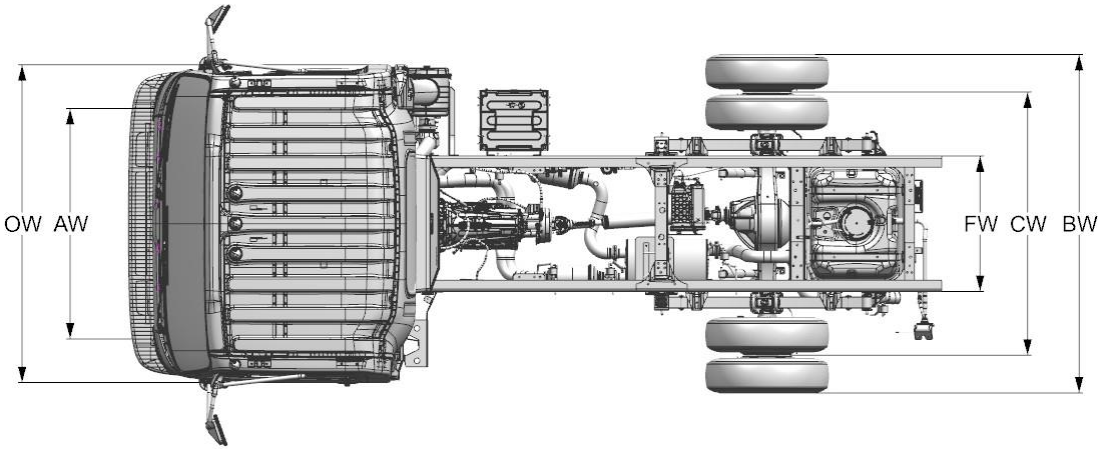



Figure 1

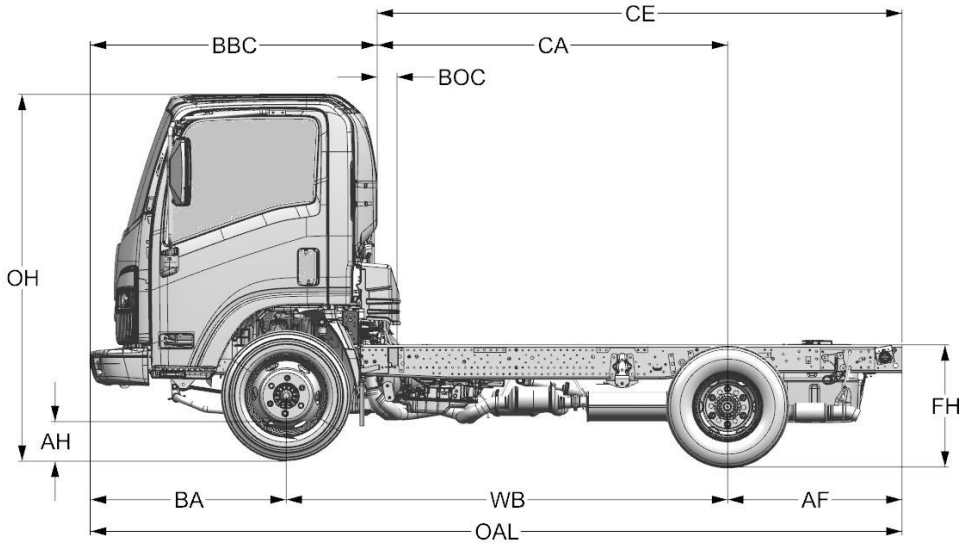



Figure 2

| CHASSIS DIMENSIONS (in.) | | | | |
|---|---|---|---|---|
| WB | CA[1] | CE[2] | AF | OAL |
| 109 | 86.5 | 129.6 | 43.1 | 200.5 |
| 132.5 | 110.0 | 153.1 | 43.1 | 224.0 |
| 150 | 127.5 | 170.6 | 43.1 | 241.5 |
| 176 | 153.5 | 196.6 | 43.1 | 267.5 |

| DIMENSION CONSTANTS (in.) | |
|---|---|
| AW = Front axle track | 65.6 |
| BA = Front bumper to centerline of axle | 48.4 |
| BBC = Bumper to back of cab | 70.9 |
| BOC = Back of cab clearance | 7.7 |
| BW = Overall width across rear axle | 83.3 |
| CW = Rear axle track | 65 |
| FW = Frame width | 33.5 |
| OW = Overall width across cab (without mirrors) | 81.3 |

| VARIABLE DIMENSIONS BY GVWR (in.) | 12,000 lb. | 14,500 lb. |
|---|---|---|
| AH = Ground to bottom of axle | 7.5 | 8.3 |
| FH = Frame height (unladen) at E.O.F.[3] | 31.8 | 33 |
| OH = Overall height (without clearance lights) | 90 | 90.9 |

Notes:

[1] Effective CA is CA less BOC.

[2] Effective CE is CE less BOC.

[3] Measured at the end of the frame from the top of the frame to the ground at curb weight.

# 2025 Chevrolet Low Cab Forward

## Vehicle Weights, Dimensions and Ratings – 3500 HG / 4500 HG CREW

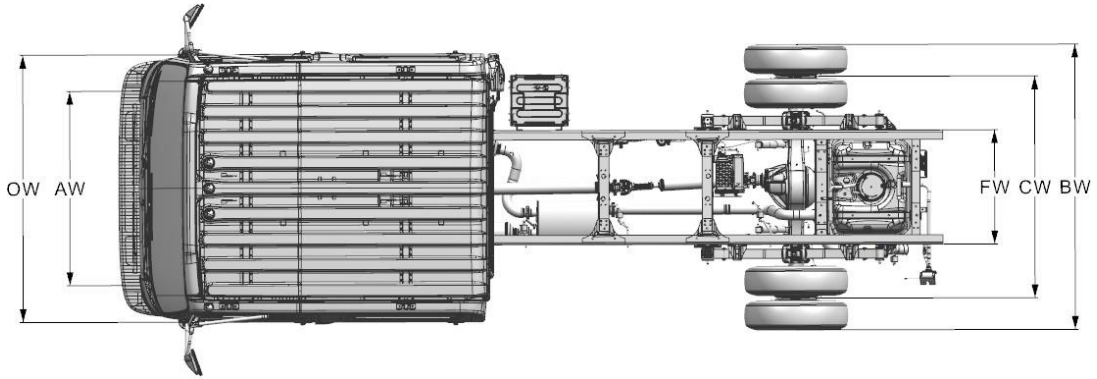



Figure 3

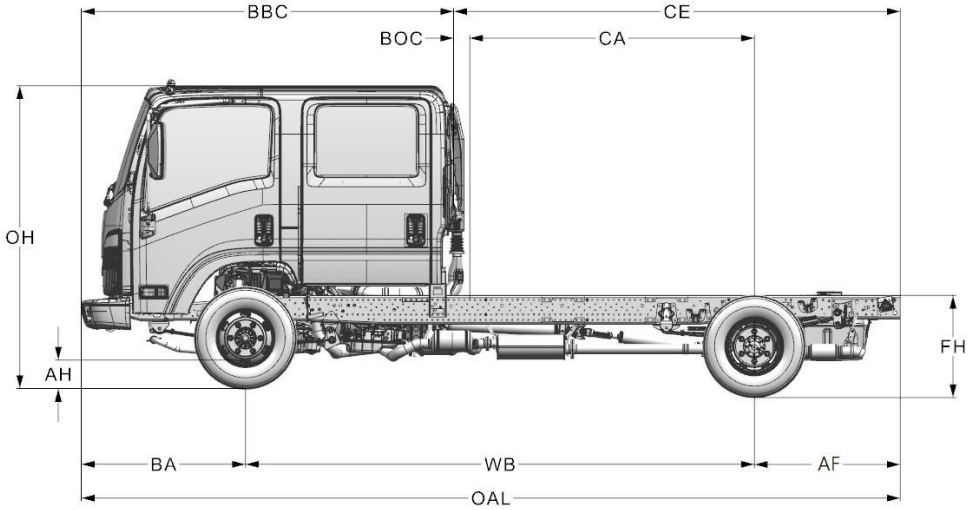



Figure 4

| CHASSIS DIMENSIONS (in.) | | | | |
|---|---|---|---|---|
| WB | CA[1] | CE[2] | AF | OAL |
| 150 | 88.5 | 131.6 | 43.1 | 241.5 |
| 176 | 114.5 | 157.6 | 43.1 | 267.5 |
| DIMENSION CONSTANTS (in.) | | | | |
| AW = Front axle track | | | | 65.6 |
| BA = Front bumper to centerline of axle | | | | 48.4 |
| BBC = Bumper to back of cab | | | | 109.9 |
| BOC = Back of cab clearance | | | | 5 |
| BW = Overall width across rear axle | | | | 83.3 |
| CW = Rear axle track | | | | 65 |
| FW = Frame width | | | | 33.5 |
| OW = Overall width across cab (without mirrors) | | | | 81.3 |
| VARIABLE DIMENSIONS BY GVWR (in.) | | | 12,000 lb. | 14,500 lb. |
| AH = Ground to bottom of axle | | | 7.5 | 8.3 |
| FH = Frame height (unladen) at E.O.F.[3] | | | 31.8 | 33 |
| OH = Overall height (without clearance lights) | | | 90 | 91.1 |

Notes:

[1] Effective CA is CA less BOC.

[2] Effective CE is CE less BOC.

[3] Measured at the end of the frame from the top of the frame to the ground at curb weight.

# 2025 Chevrolet Low Cab Forward

## Vehicle Weights, Dimensions and Ratings – 5500 HG / 5500 XG

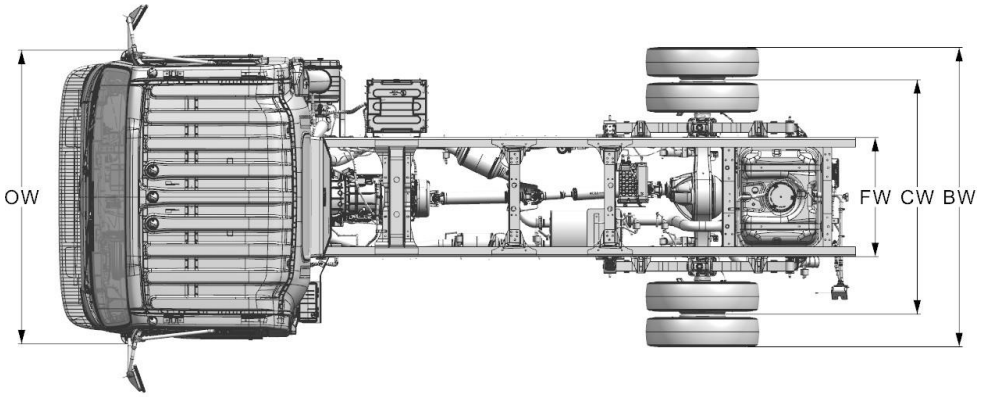



Figure 5

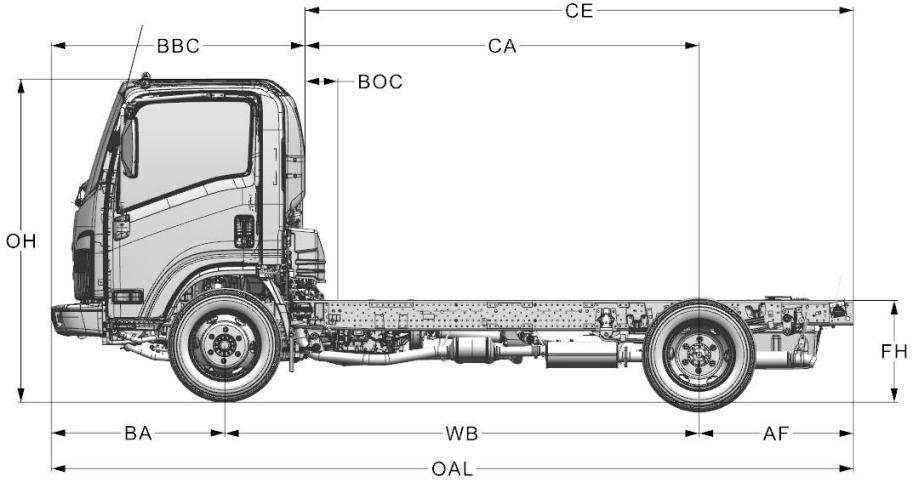



Figure 6

| CHASSIS DIMENSIONS (in.) | | | | |
|---|---|---|---|---|
| WB | CA[1] | CE[2] | AF | OAL |
| 132.5 | 110.0 | 153.1 | 43.1 | 224.0 |
| 150 | 127.5 | 170.6 | 43.1 | 241.5 |
| 176 | 153.5 | 196.6 | 43.1 | 267.5 |
| DIMENSION CONSTANTS (in.) | | | | |
| AW = Front axle track | | | | 65.6 |
| BA = Front bumper to centerline of axle | | | | 48.3 |
| BBC = Bumper to back of cab | | | | 70.9 |
| BOC = Back of cab clearance | | | | 7.7 |
| BW = Overall width across rear axle | | | | 83.3 |
| CW = Rear axle track | | | | 65 |
| FW = Frame width | | | | 33.5 |
| OW = Overall width across cab (without mirrors) | | | | 81.3 |
| VARIABLE DIMENSIONS BY GVWR (in.) | | | 17,950 lb. | 19,500 lb. |
| AH = Ground to bottom of axle | | | 7.5 | 7.5 |
| FH = Frame height (unladen) at E.O.F.[3] | | | 33 | 33 |
| OH = Overall height (without clearance lights) | | | 92.4 | 92.4 |

Notes:
[1] Effective CA is CA less BOC.
[2] Effective CE is CE less BOC.
[3] Measured at the end of the frame from the top of the frame to the ground at curb weight.

# 2025 Chevrolet Low Cab Forward



## Vehicle Weights, Dimensions and Ratings – 5500 HG / 5500 XG CREW

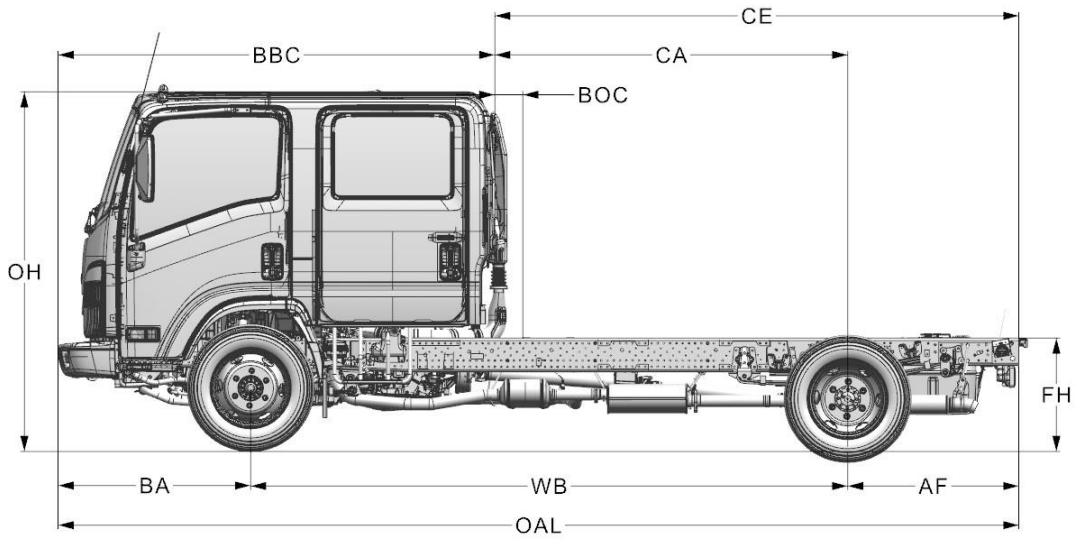



Figure 7

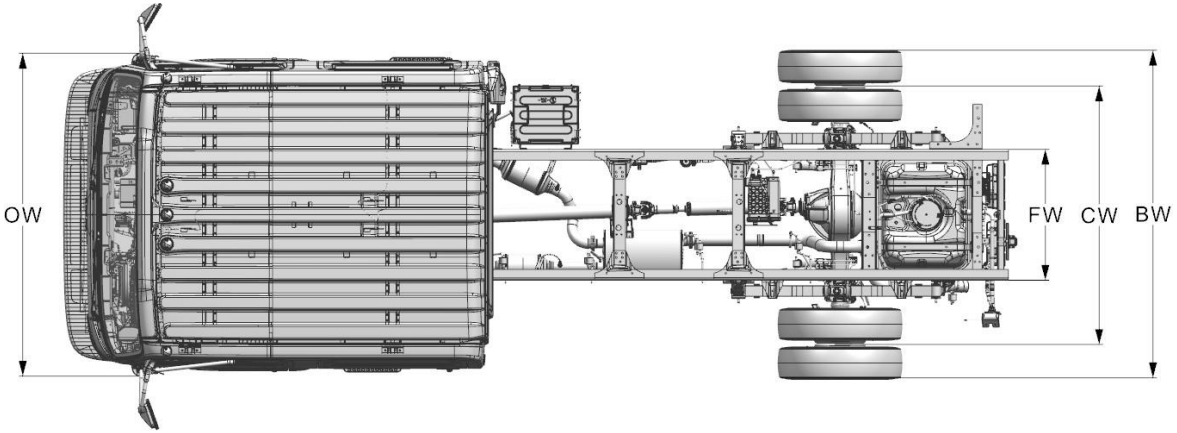



Figure 8

| CHASSIS DIMENSIONS (in.) | | | | |
|---|---|---|---|---|
| WB | CA[1] | CE[2] | AF | OAL |
| 150 | 88.5 | 131.6 | 43.1 | 241.5 |
| 176 | 114.5 | 157.6 | 43.1 | 267.5 |
| DIMENSION CONSTANTS (in.) | | | | |
| AW = Front axle track | | | | 65.6 |
| BA = Front bumper to centerline of axle | | | | 48.3 |
| BBC = Bumper to back of cab | | | | 109.9 |
| BOC = Back of cab clearance | | | | 5 |
| BW = Overall width across rear axle | | | | 83.3 |
| CW = Rear axle track | | | | 65 |
| FW = Frame width | | | | 33.5 |
| OW = Overall width across cab (without mirrors) | | | | 81.3 |
| VARIABLE DIMENSIONS BY GVWR (in.) | | | 17,950 lb. | 19,500 lb. |
| AH = Ground to bottom of axle | | | 7.5 | 7.5 |
| FH = Frame height (unladen) at E.O.F.[3] | | | 33 | 33 |
| OH = Overall height (without clearance lights) | | | 92.4 | 92.4 |

Notes:
[1] Effective CA is CA less BOC.
[2] Effective CE is CE less BOC.
[3] Measured at the end of the frame from the top of the frame to the ground at curb weight. C

# 2025 Chevrolet Low Cab Forward

## Vehicle Weights, Dimensions and Ratings

| Chassis Curb Weights and Payloads | | | | | | |
|---|---|---|---|---|---|---|
| **3500 HG GAS STANDARD CAB - 12,000 lb. GVWR:** | | | | | | |
| Model | WB | Unit | Front | Rear | Total | Payload |
| 1C1 | 109 | lbs. | 3309 | 1845 | 5154 | 6846 |
| 1C2 | 132.5 | lbs. | 3360 | 1896 | 5256 | 6744 |
| 1C3 | 150 | lbs. | 3380 | 1905 | 5285 | 6715 |
| 1C4 | 176 | lbs. | 3408 | 1925 | 5333 | 6667 |
| **4500 HG GAS STANDARD CAB - 14,500 lb. GVWR:** | | | | | | |
| Model | WB | Unit | Front | Rear | Total | Payload |
| 1F1 | 109 | lbs. | 3439 | 2075 | 5514 | 8986 |
| 1F2 | 132.5 | lbs. | 3488 | 2105 | 5593 | 8907 |
| 1F3 | 150 | lbs. | 3519 | 2114 | 5633 | 8867 |
| 1F4 | 176 | lbs. | 3549 | 2125 | 5674 | 8826 |

Figure 9

| CHASSIS CURB WEIGHTS AND PAYLOADS | | | | | | |
|---|---|---|---|---|---|---|
| **5500 HG GAS STANDARD CAB - 17,950 lb. GVWR:** | | | | | | |
| Model | WB | Unit | Front | Rear | Total | Payload |
| 1R2 | 132.5 | lbs. | 3663 | 2223 | 5886 | 12064 |
| 1R3 | 150 | lbs. | 3713 | 2216 | 5929 | 12021 |
| 1R4 | 176 | lbs. | 3753 | 2230 | 5983 | 11967 |
| **5500 XG GAS STANDARD CAB - 19,500 lb. GVWR:** | | | | | | |
| Model | WB | Unit | Front | Rear | Total | Payload |
| 1U2 | 132.5 | lbs. | 3666 | 2223 | 5889 | 13611 |
| 1U3 | 150 | lbs. | 3716 | 2216 | 5932 | 13568 |
| 1U4 | 176 | lbs. | 3756 | 2230 | 5986 | 13514 |

Figure 10

| Chassis Curb Weights and Payloads | | | | | | |
|---|---|---|---|---|---|---|
| **3500 HG GAS CREW CAB - 12,000 lb. GVWR:** | | | | | | |
| Model | WB | Unit | Front | Rear | Total | Payload |
| 1D3 | 150 | lbs. | 3759 | 2075 | 5834 | 6166 |
| 1D4 | 176 | lbs. | 3810 | 2075 | 5885 | 6115 |
| **4500 HG GAS CREW CAB - 14,500 lb. GVWR:** | | | | | | |
| Model | WB | Unit | Front | Rear | Total | Payload |
| 1G3 | 150 | lbs. | 3898 | 2284 | 6182 | 8318 |
| 1G4 | 176 | lbs. | 3948 | 2275 | 6223 | 8277 |

Figure 11

| CHASSIS CURB WEIGHTS AND PAYLOADS | | | | | | |
|---|---|---|---|---|---|---|
| **5500 HG GAS CREW CAB - 17,950 lb. GVWR:** | | | | | | |
| Model | WB | Unit | Front | Rear | Total | Payload |
| 1S3 | 150 | lbs. | 4073 | 2406 | 6479 | 11471 |
| 1S4 | 176 | lbs. | 4143 | 2400 | 6543 | 11407 |
| **5500 XG GAS CREW CAB - 19,500 lb. GVWR:** | | | | | | |
| Model | WB | Unit | Front | Rear | Total | Payload |
| 1V3 | 150 | lbs. | 4076 | 2406 | 6482 | 13018 |
| 1V4 | 176 | lbs. | 4146 | 2400 | 6546 | 12954 |

Figure 12

Notes:

Chassis curb weight reflects standard equipment and fuel, but no driver or payload. Maximum Payload Weight is the allowed maximum for equipment, body, payload and driver and is calculated by subtracting chassis curb weight from the GVWR.

# 2025 Chevrolet Low Cab Forward

## Vehicle Weight Limits and Option Weights

| VEHICLE WEIGHT RATINGS | | | | |
|---|---|---|---|---|
| Description | 3500 HG Capacity (lb.) | 4500 HD Capacity (lb.) | 5500 HG Capacity (lb.) | 5500 XD Capacity (lb.) |
| GVWR Designed Maximum | 12,000 | 14,500 | 17,950 | 19,500 |
| GCWR Combined Maximum | 18,000 | 20,500 | 23,950 | 25,500 |
| GAWR - Front | 4,860 | 6,630 | 6,830 | 7,275 |
| GAWR - Rear | 8,840 | 11,020 | 13,660 | 14,460 |

### Option Weights

| RPO[1] | Option Description | Front / Rear (lb) |
|---|---|---|
| I0Z | Spartan Modification Center ship thru code | 0 / 0 |
| I6I | AGM batteries (825 CCA x 1) | 6 / 3 |
| IF4 | Air deflector roof mounted (not available in crew cab) | 64 / 0 |
| I1V | Audio system with 7" diagonal color touch screen | 5 / 1 |
| I2V | Audio system with 7" diagonal color touch screen with backup camera (camera shipped loose) | 5 / 2 |
| UZF | Back up alarm | 0 / 2 |
| I8T | Chrome grille | 1 / 0 |
| IY4 | Delete standard radio | -3 / 0 |
| I4W | Engine block heater with receptacle (115V 400W) | 3 / 0 |
| IF6 | Fire extinguisher and triangle kit | 19 / 0 |
| I4V | Forward Collision and Lane Departure Warning (Mobileye) | 2 / 0 |
| I4Z | Front panel film | 1 / 0 |
| I0W | Heated dual remote control mirrors (17" head) | 4 / 0 |
| IS0 | Heated mirrors | 1 / 0 |
| I8L | High visibility seat belt (orange color, driver and RH passenger seat only) | 0 / 0 |
| I7L | High visibility seat belt (orange color, driver seat only) | 0 / 0 |
| I4K | Keyless entry system | 3 / 0 |
| I6L | LED lighting package (converts all exterior and interior chassis lighting to LED bulbs) | 0 / 0 |
| IU2 | Mirror bracket for 102" wide body | 1 / 0 |
| IV9 | Seat covers crew cab | 12 / 0 |
| IV8 | Seat covers for standard cab seats | 6 / 0 |
| I1M | Seat covers standard cab with suspension seat | 6 / 0 |
| I3Z | Spare keys (2 additional, 4 keys in total) | 0 / 0 |
| I3G | Speed limited to 65 mph (max cruise speed 60 mph) | 0 / 0 |
| I6T | Suspension driver's seat (standard cab only) | 18 / 0 |
| I2M | Delete Cruise Control Switch | 0 / 0 |
| SEO[1] | Option Description | Front / Rear (lb) |
| 04 | Standard model specifications with power windows, power door locks, and air conditioning | Standard chassis weight includes these features |
| 14 | In rail fuel tank with power windows, power door locks, air conditioning and Limited Slip Differential | 0 / 15 |

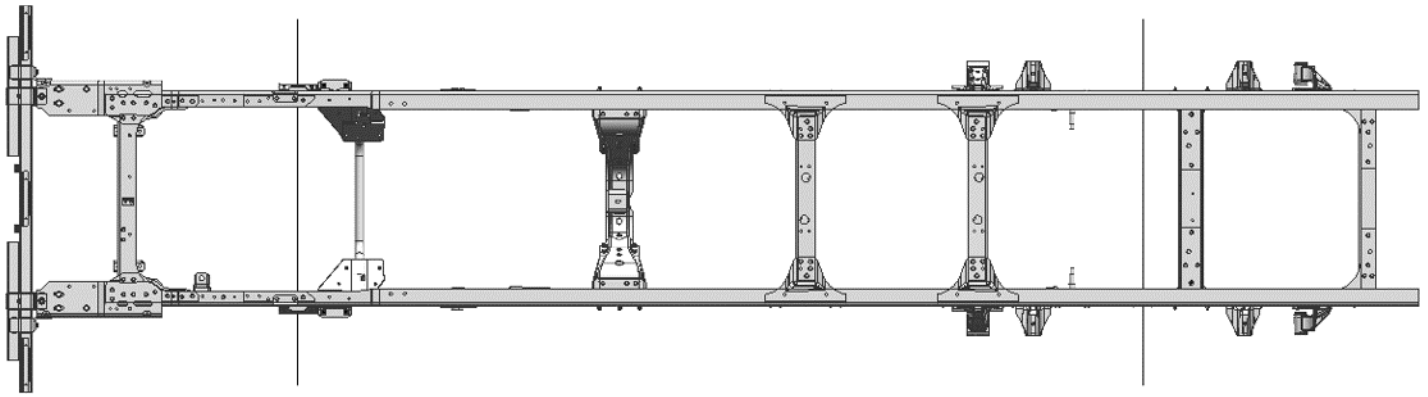
NOTES:

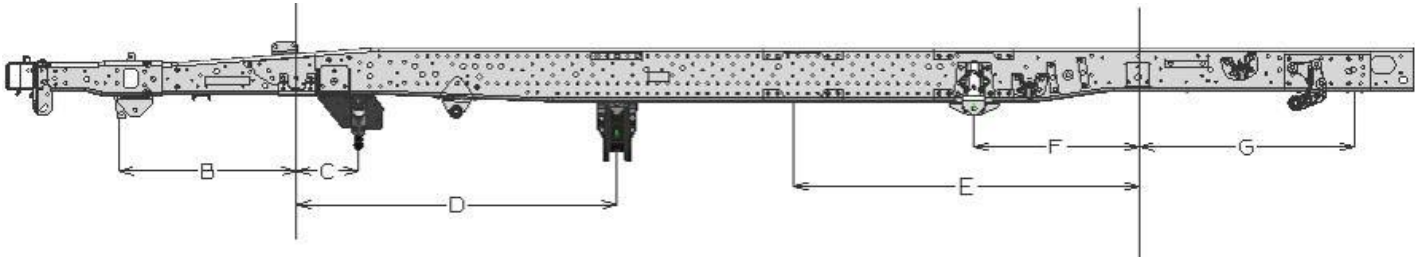
[1] RPO is Regular Production Option that is stocked in Port inventory.
LSO is Limited Stock Option that is stocked in Port inventory but should be checked for availability and delivery time.
SEO is Special Equipment Option and requires 90-120 day lead time for delivery.

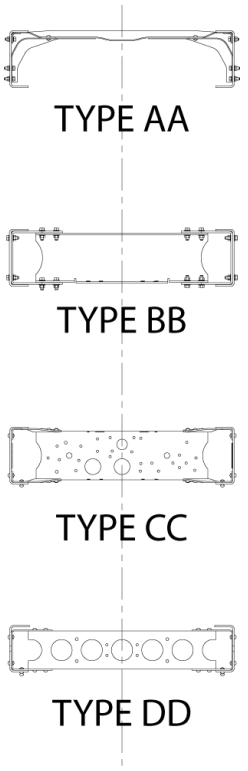
# 2025 Chevrolet Low Cab Forward



## Frame and Crossmember Specifications - STD CAB




**3500 HG / 4500 HG**

| WHEELBASE | FRAME THICKNESS | CROSSMEMBER TYPE/LOCATION | | | | | |
|---|---|---|---|---|---|---|---|
| | | B | C | D | E | F | G |
| 109 | 0.24 | 28 | 9.75 | AA 50.4 | - | CC 26.0 | DD 33.8 |
| 132.5 | 0.24 | 28 | 9.75 | AA 50.4 | BB 54.4 | CC 26.0 | DD 33.8 |
| 150 | 0.24 | 28 | 9.75 | AA 50.4 | BB 57.9 | CC 26.0 | DD 33.8 |
| 176 | 0.24 | 28 | 9.75 | AA 50.4 | BB 74.5 | CC 26.0 | DD 33.8 |

**5500 HG / 5500 XD**

| WHEELBASE | FRAME THICKNESS | CROSSMEMBER TYPE/LOCATION | | | | | |
|---|---|---|---|---|---|---|---|
| | | B | C | D | E | F | G |
| 132.5 | 0.24 | 27.55 | 9.9 | AA 36.67 | BB 57.68 | CC 25.98 | DD 33.62 |
| 150 | 0.24 | 27.55 | 9.9 | AA 36.67 | BB 58.07 | CC 25.98 | DD 33.62 |
| 176 | 0.24 | 27.55 | 9.9 | AA 36.67 | BB 74.61 | CC 25.98 | DD 33.62 |

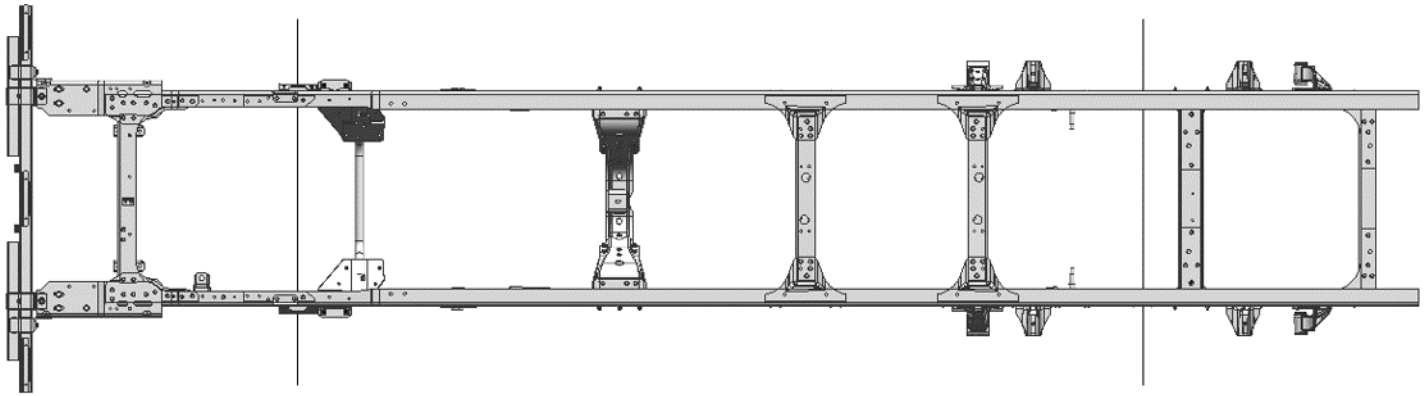
Dimensions in inches

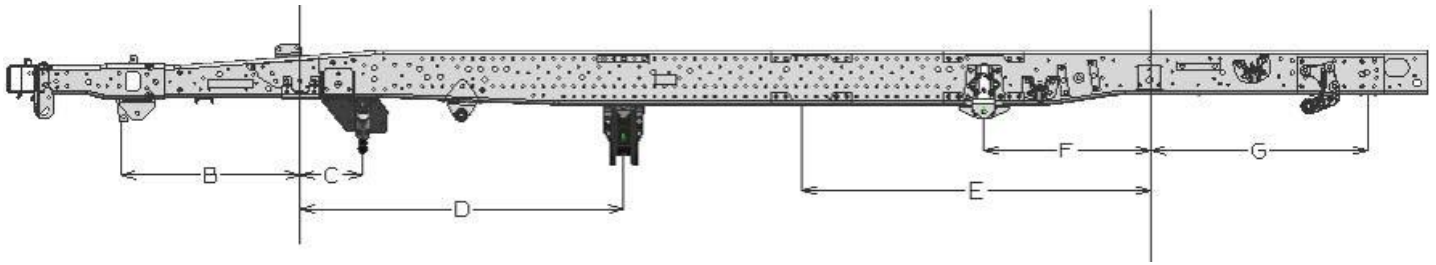
Figure 13

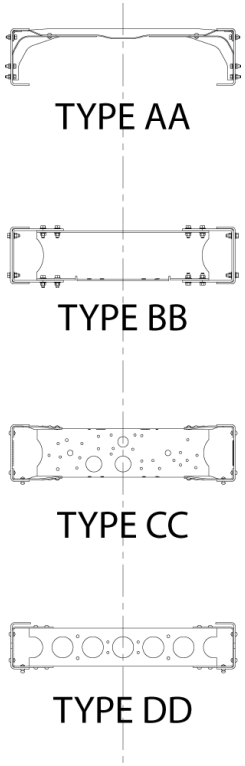
# 2025 Chevrolet Low Cab Forward



## Frame and Crossmember Specifications - CREW CAB




**3500 HG / 4500 HG**

| WHEELBASE | FRAME THICKNESS | CROSSMEMBER TYPE/LOCATION | | | | | |
|---|---|---|---|---|---|---|---|
| | | B | C | D | E | F | G |
| 150 | 0.24 | 28 | 9.75 | AA 50.4 | BB 57.9 | CC 26.0 | DD 33.8 |
| 176 | 0.24 | 28 | 9.75 | AA 50.4 | BB 74.5 | CC 26.0 | DD 33.8 |

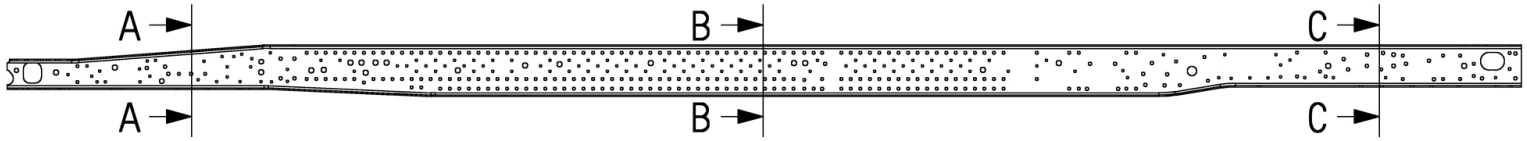
**5500 HG / 5500 XD**

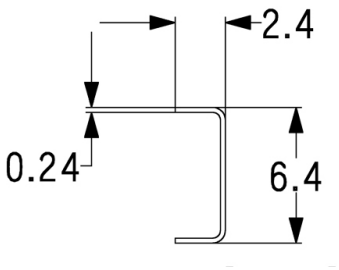
| WHEELBASE | FRAME THICKNESS | CROSSMEMBER TYPE/LOCATION | | | | | |
|---|---|---|---|---|---|---|---|
| | | B | C | D | E | F | G |
| 150 | 0.24 | 27.55 | 9.9 | AA 36.67 | BB 58.07 | CC 25.98 | DD 33.62 |
| 176 | 0.24 | 27.55 | 9.9 | AA 36.67 | BB 74.61 | CC 25.98 | DD 33.62 |

Figure 14

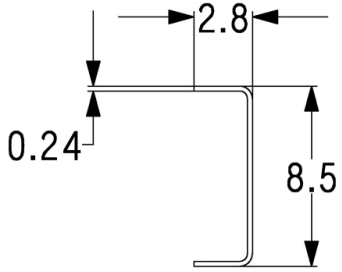
Dimensions in inches

## Frame Chart

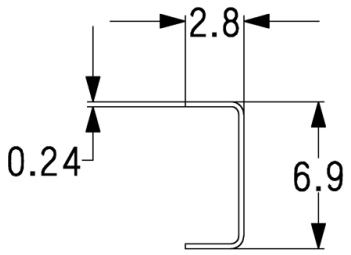



SECTION A-A




SECTION B-B




SECTION C-C

| Wheelbase | Frame FL | Frame Thickness |
|---|---|---|
| 109.0 | 182.5 | 0.24 |
| 132.5 | 206.1 | 0.24 |
| 150.0 | 223.8 | 0.24 |
| 176.0 | 249.8 | 0.24 |

Figure 15

Dimensions in inches

# 2025 Chevrolet Low Cab Forward



## 3500 HG / 4500 HG Standard Cab Dimension - Auxiliary Views

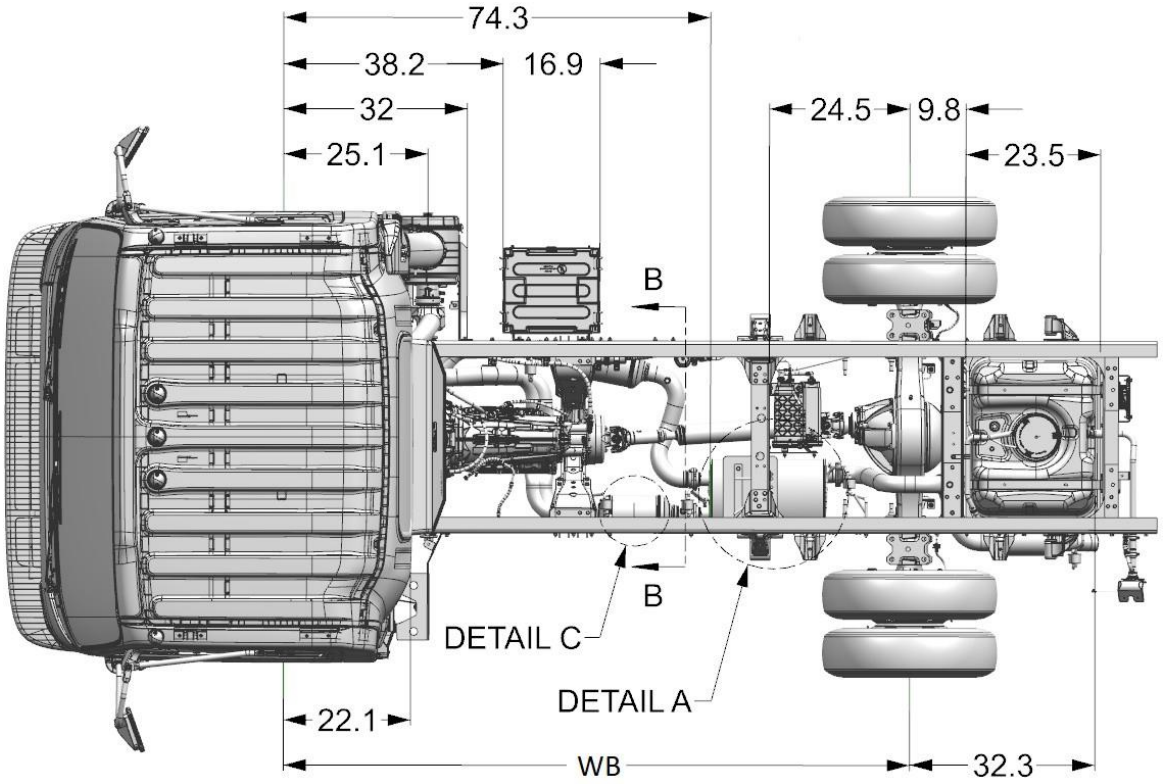



Figure 16

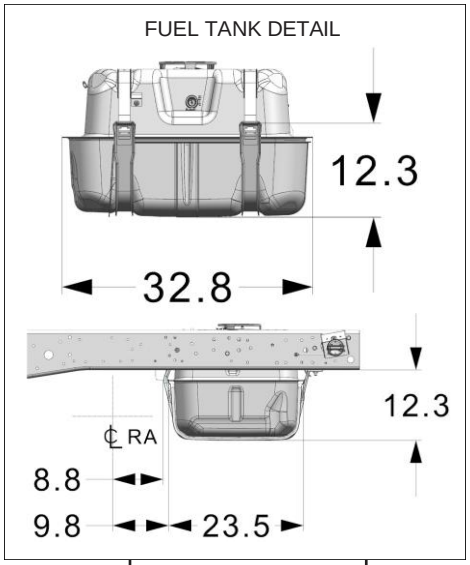



Figure 17

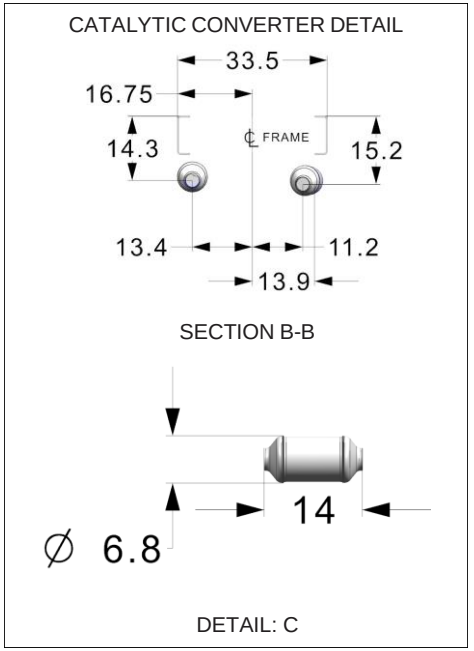



Figure 19

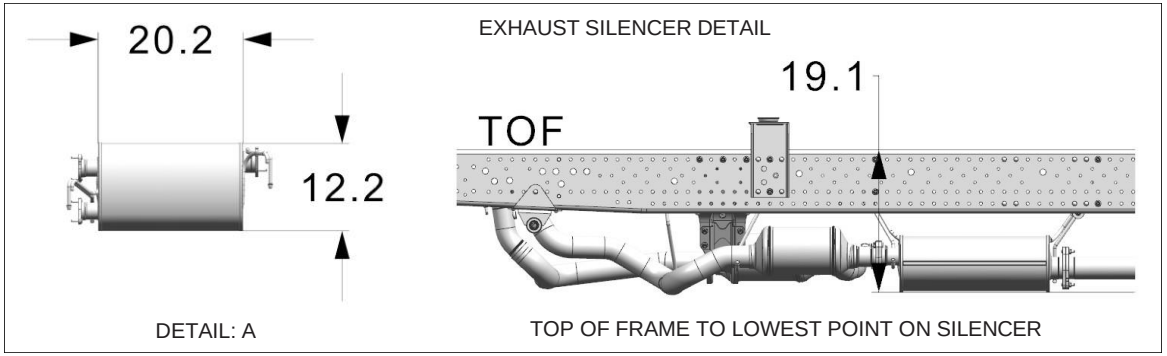



Figure 18

Dimensions in inches

# 2025 Chevrolet Low Cab Forward

## 5500 HG / 5500 XG Standard Cab Dimension - Auxiliary Views

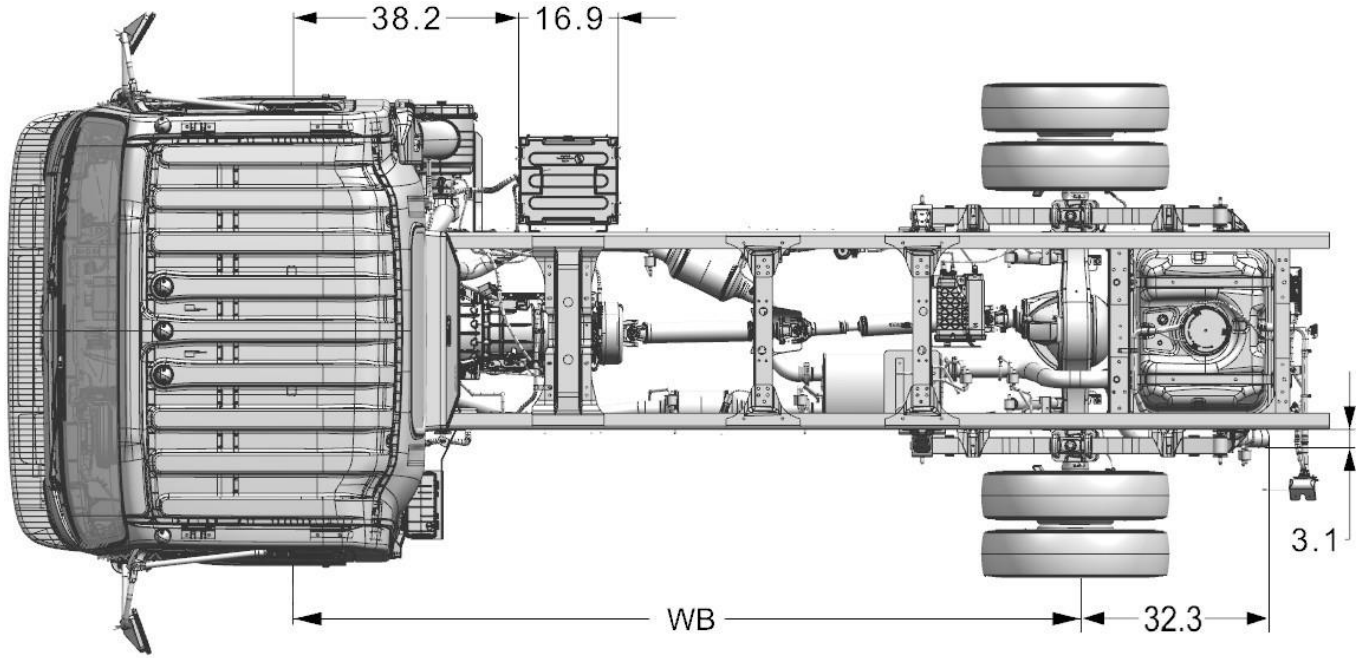



Figure 20

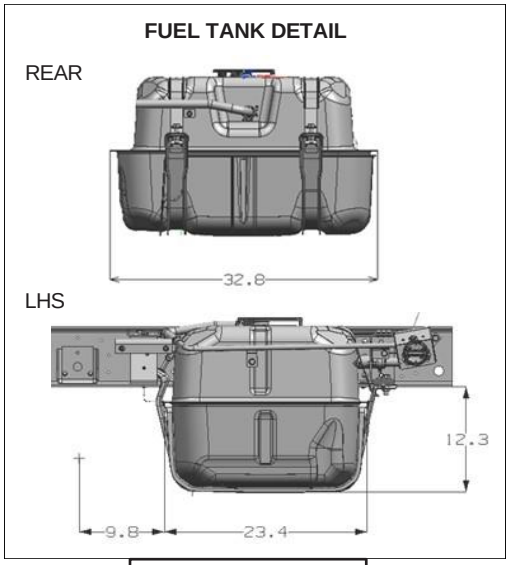



Figure 21

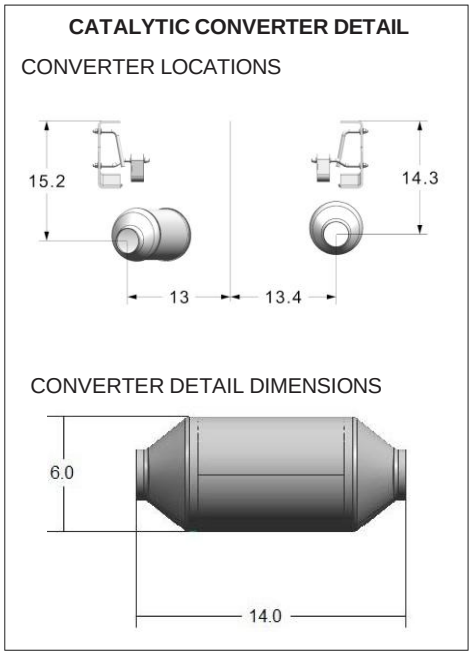



Figure 23

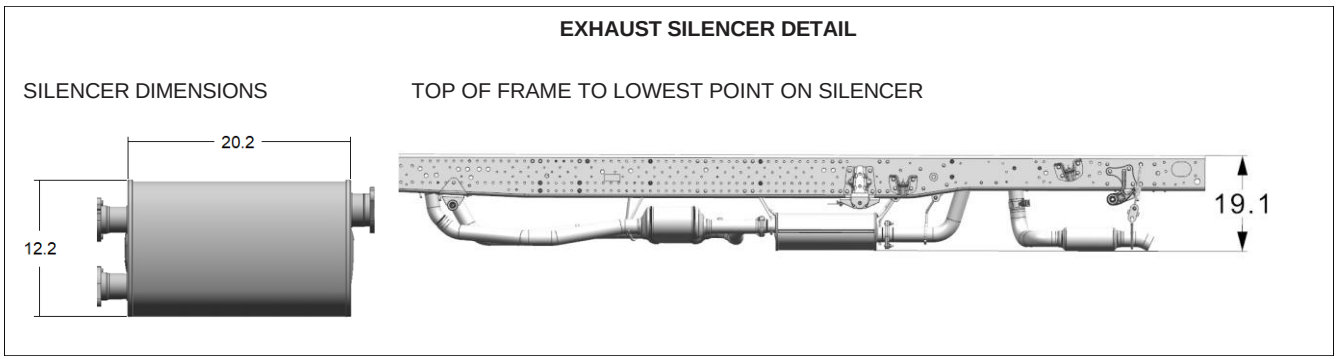



Figure 22

Dimensions in inches

# 2025 Chevrolet Low Cab Forward



## 3500 HG / 4500 HG Crew Cab Dimension - Auxiliary Views

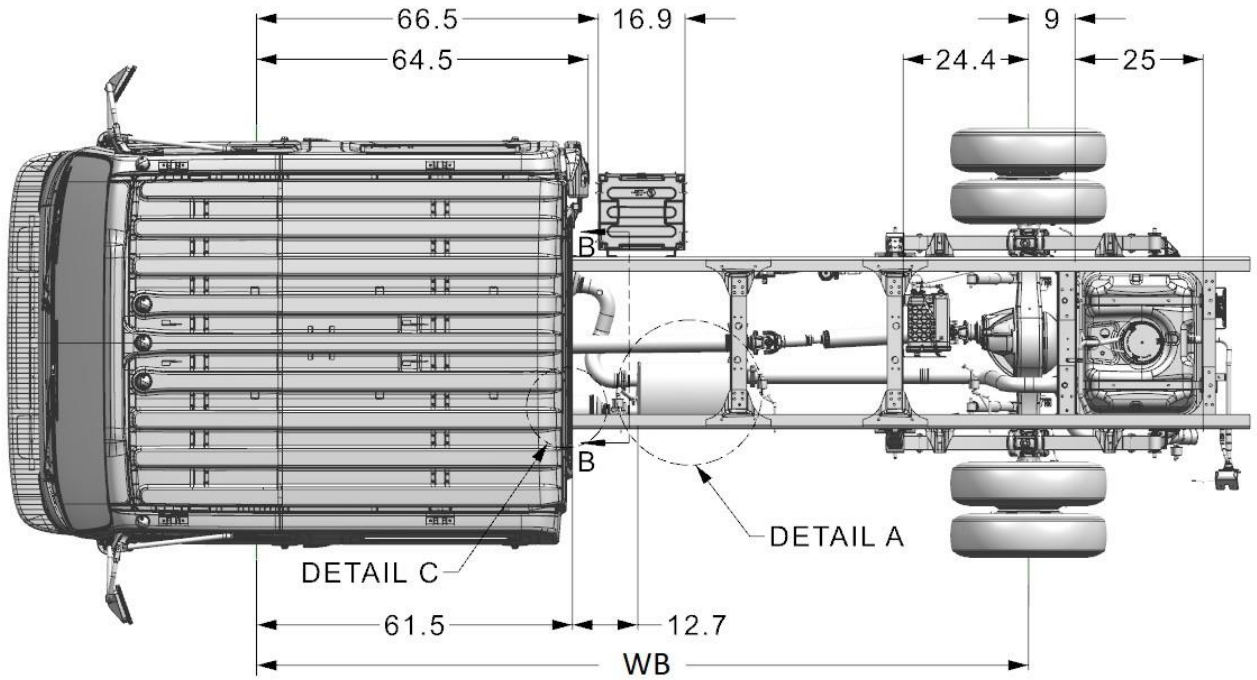



Figure 24

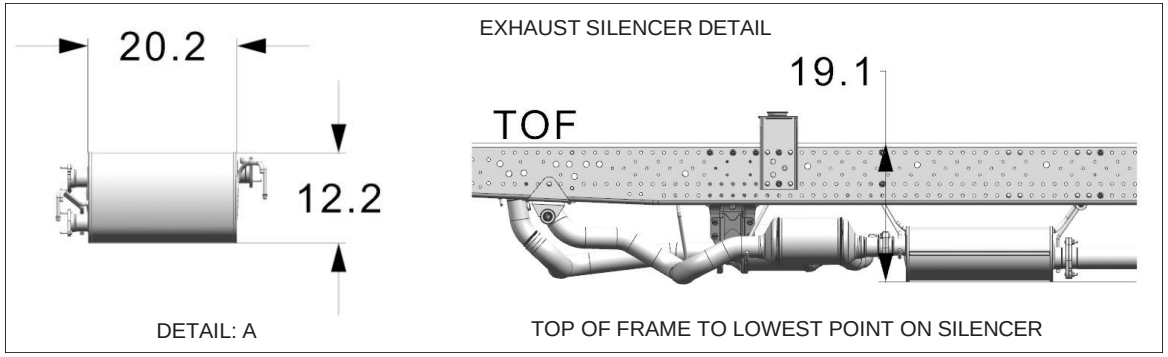



Figure 26

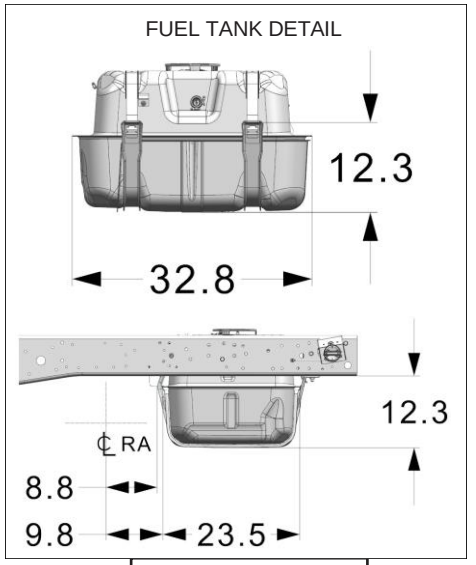



Figure 25

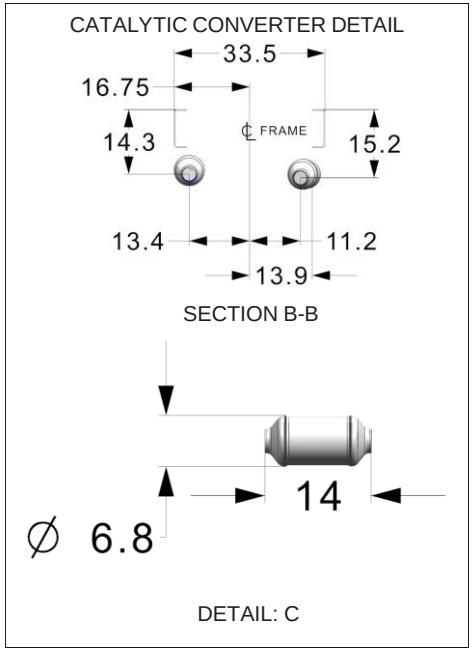



Figure 27

Dimensions in inches

# 2025 Chevrolet Low Cab Forward



## 5500 HG / 5500 XG Crew Cab Dimension - Auxiliary Views

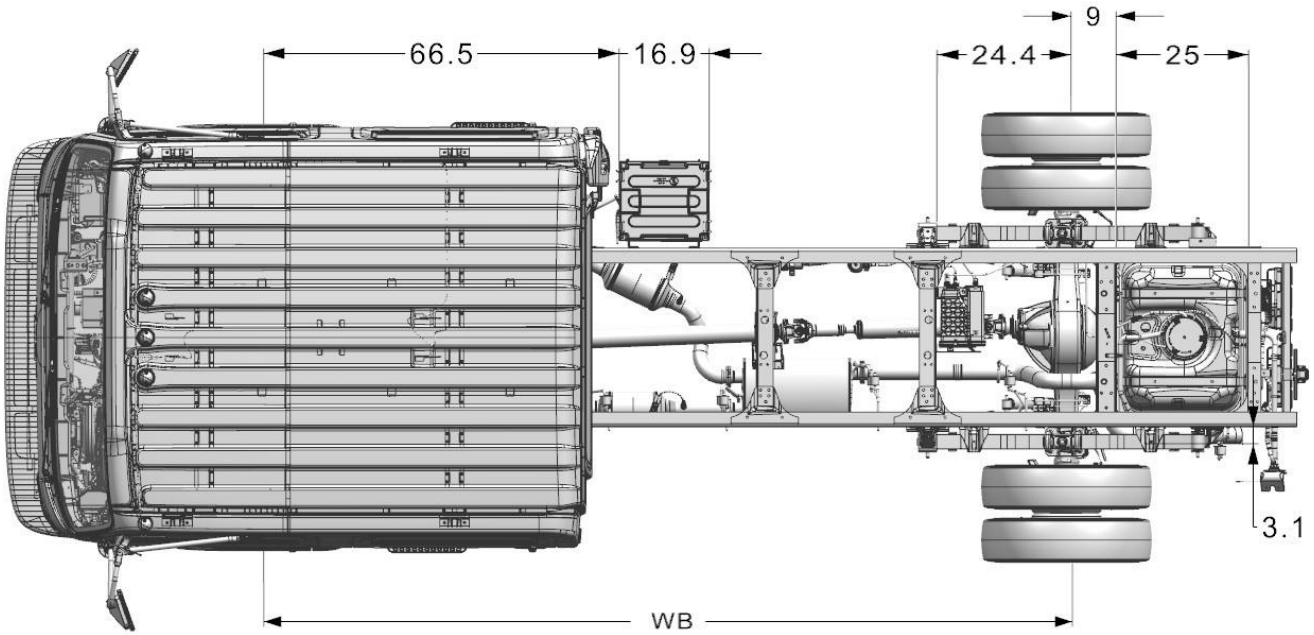
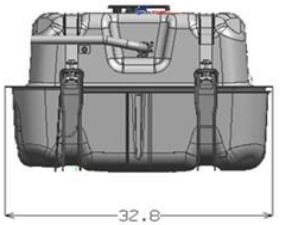



Figure 28

**FUEL TANK DETAIL**

REAR




LHS

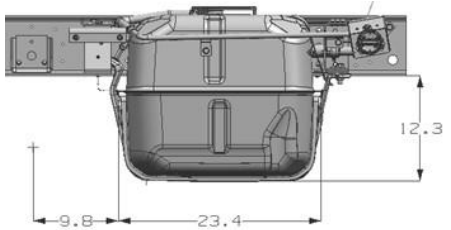
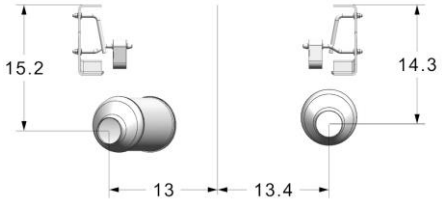



Figure 29

**CATALYTIC CONVERTER DETAIL**

CONVERTER LOCATIONS




CONVERTER DETAIL DIMENSIONS

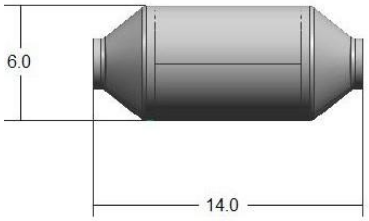
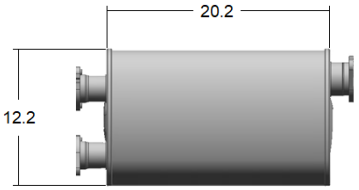



Figure 31

**EXHAUST SILENCER DETAIL**

SILENCER DIMENSIONS




TOP OF FRAME TO LOWEST POINT ON SILENCER

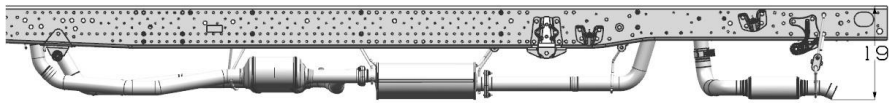



Figure 30

Dimensions in inches

## Cab Tilt Illustration

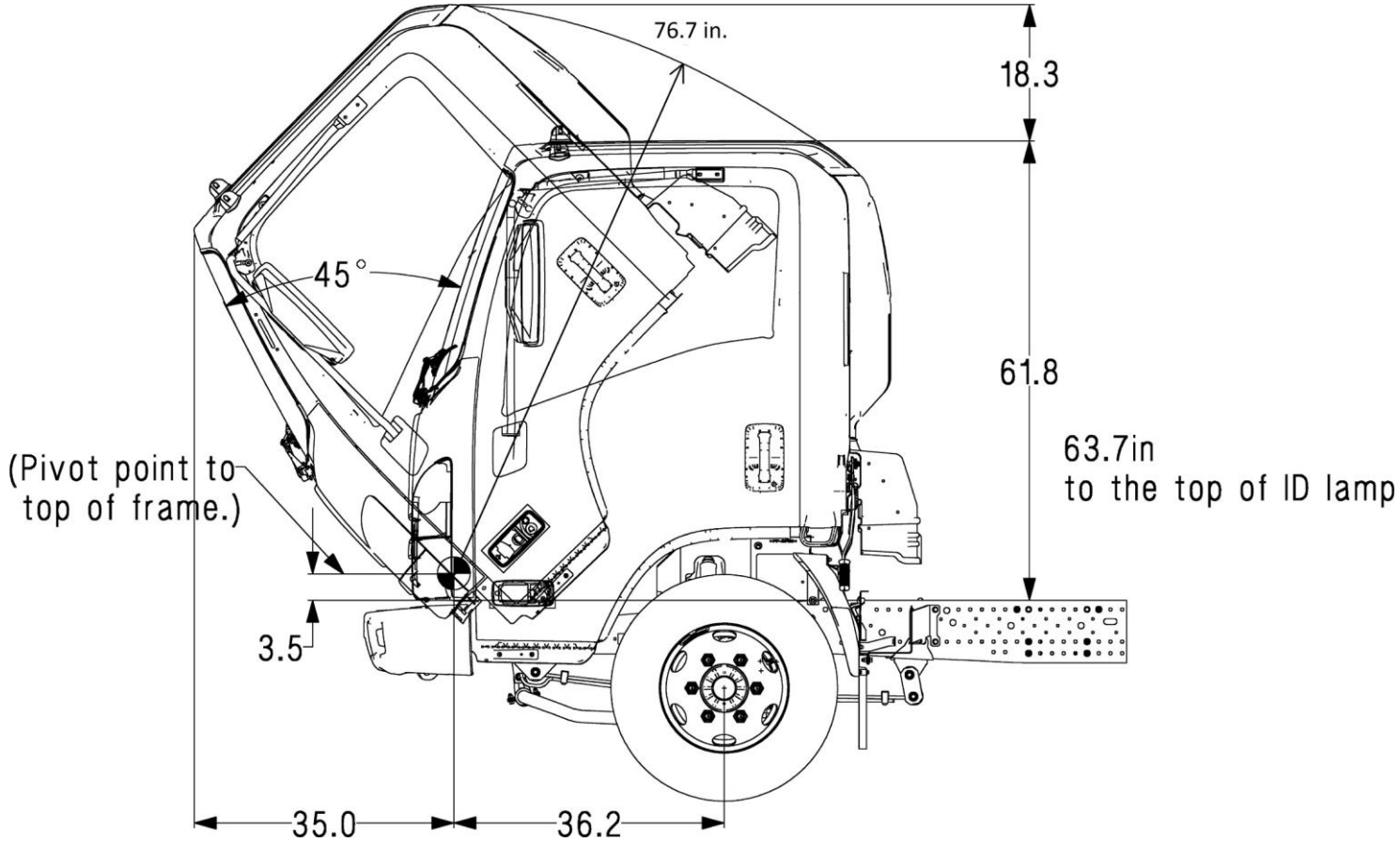



Figure 32

Dimensions in inches

# 2025 Chevrolet Low Cab Forward

## Center of Gravity

| Horizontal and Vertical Center of Gravity of Chassis | | | |
|---|---|---|---|
| GVWR | Wheelbase (in) | Vertical CG - **V** (in) | Horizontal CG - **H** (in) |
| 12,000 lbs. | 109 | 23.8 | 39.9 |
| | 132.5 | 23.7 | 48.3 |
| | 150 | 23.6 | 54.4 |
| | 176 | 23.6 | 63.7 |
| 14,500 lbs. | 109 | 23.8 | 41.3 |
| | 132.5 | 23.7 | 49.9 |
| | 150 | 23.7 | 56.2 |
| | 176 | 23.6 | 64.3 |
| 17,950 lbs. | 132.5 | 24.9 | 48.6 |
| | 150 | 25.0 | 54.7 |
| | 176 | 24.9 | 63.4 |
| 19,500 lbs. | 132.5 | 24.9 | 50.3 |
| | 150 | 25.1 | 56.6 |
| | 176 | 25.0 | 65.0 |

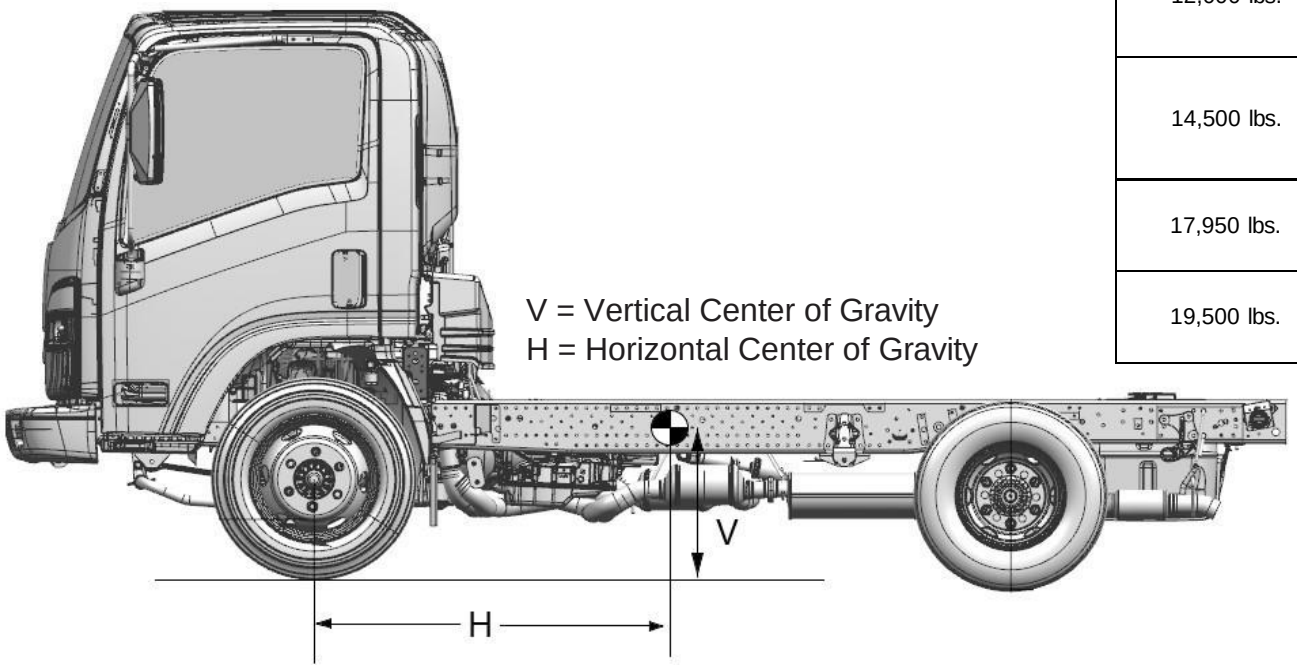



Figure 33

The maximum vertical center of gravity must not be exceeded at maximum GVWR and rated front and rear GAWR. The center of gravity maximum is 63" (1600mm) above ground. The horizontal center of gravity must be located between the front and rear axles.

**NOTE:** The Final Manufacturer must ensure that the combined vertical center of gravity of the chassis, body, and available payload at full GVW does not exceed the maximum vertical center of gravity outlined in the Incomplete Vehicle Document and the Body Builders Manual.

The maximum dimensions for a body installed on the LCF chassis are 102 inches wide (outside[1]) by 91 inches high (inside). If approval is needed for larger body applications, please contact GM Upfitter.

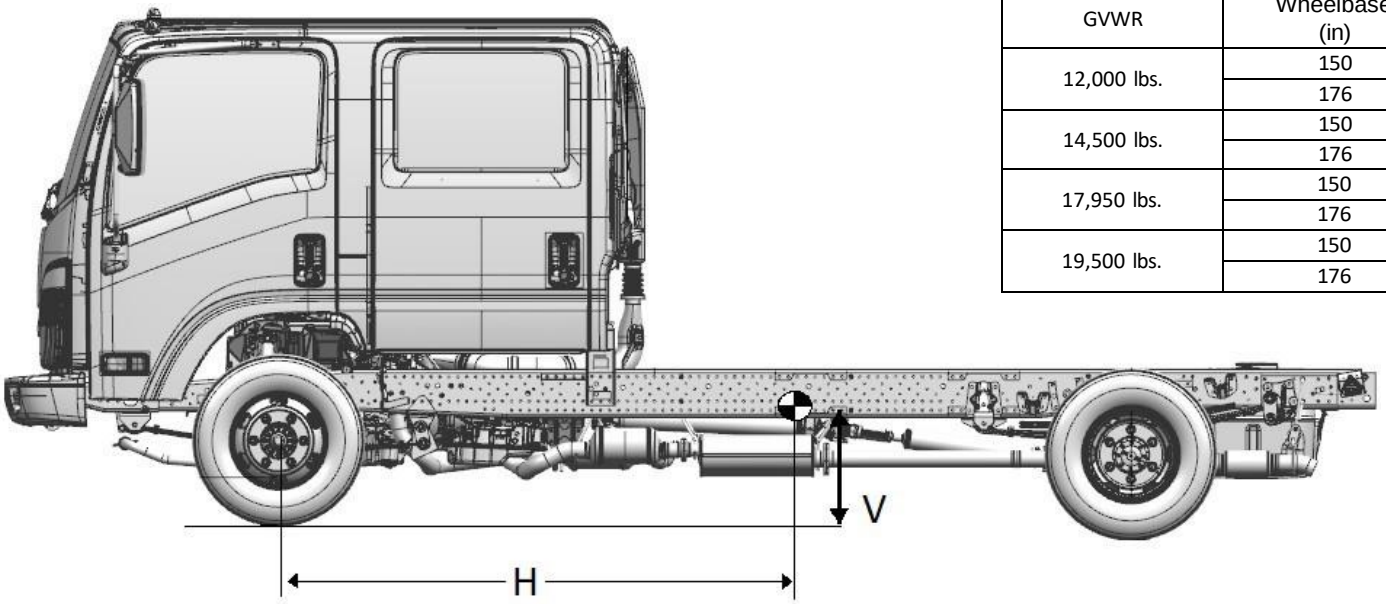
[1] With 102 inches wide mirror brackets installed in place of standard mirror brackets.

Dimensions in inches

# 2025 Chevrolet Low Cab Forward

## Center of Gravity

| Horizontal and Vertical Center of Gravity of Chassis | | | |
|---|---|---|---|
| GVWR | Wheelbase (in) | Vertical CG - **V** (in) | Horizontal CG - **H** (in) |
| 12,000 lbs. | 150 | 25.9 | 53.6 |
| | 176 | 28.8 | 62.4 |
| 14,500 lbs. | 150 | 26.9 | 55.3 |
| | 176 | 26.9 | 64.3 |
| 17,950 lbs. | 150 | 27.9 | 55.1 |
| | 176 | 28.0 | 63.2 |
| 19,500 lbs. | 150 | 28.0 | 55.7 |
| | 176 | 28.1 | 63.9 |




V = Vertical Center of Gravity
H = Horizontal Center of Gravity

Figure 34

The maximum vertical center of gravity must not be exceeded at maximum GVWR and rated front and rear GAWR. The center of gravity maximum is 63" (1600mm) above ground. The horizontal center of gravity must be located between the front and rear axles.

**NOTE:** The Final Manufacturer must ensure that the combined vertical center of gravity of the chassis, body, and available payload at full GVW does not exceed the maximum vertical center of gravity outlined in the Incomplete Vehicle Document and the Body Builders Manual.

The maximum dimensions for a body installed on the LCF chassis are 102 inches wide (outside[1]) by 91 inches high (inside). If approval is needed for larger body applications, please contact GM Upfitter.

[1] With 102 inches wide mirror brackets installed in place of standard mirror brackets.

Dimensions in inches

# Front Axle Chart

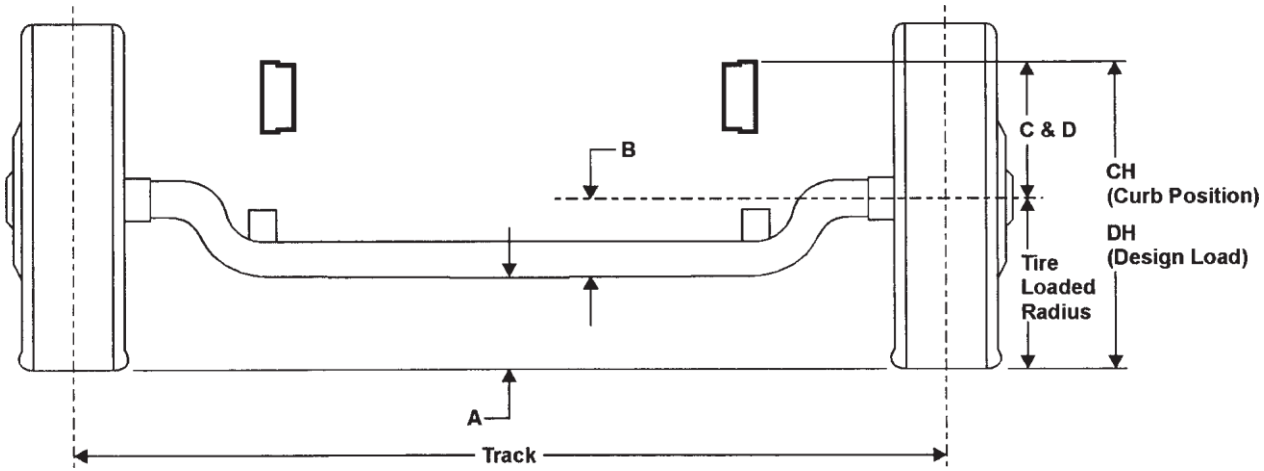



Figure 35

Formulas for calculating height dimensions:

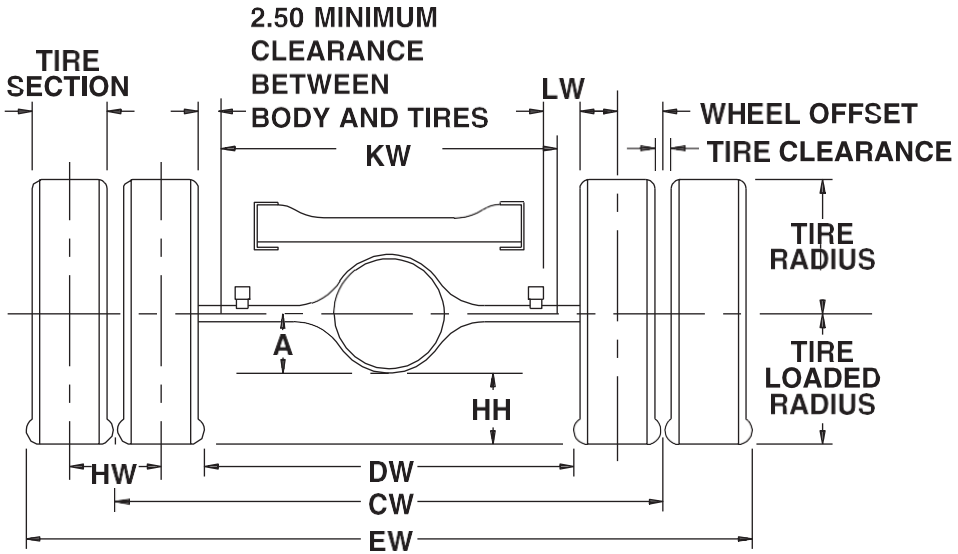
A = Tire Loaded Radius – B
C = Centerline of Axle to Top of Frame Rail at Curb Position
D = Centerline of Axle to Top of Frame Rail at Design Load
CH = C + Tire Unloaded Radius
DH = D + Tire Loaded Radius

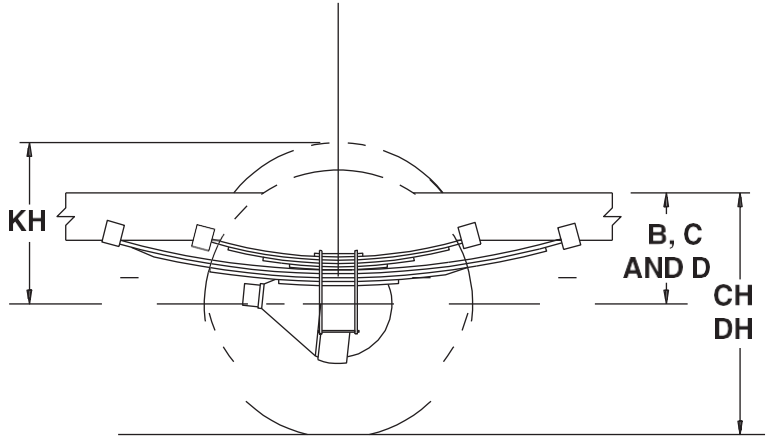
| Tire | GVWR | GAWR | A | B | C | D | CH | DH | Track | Tire Radius | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | | Unloaded | Loaded |
| 215/85R 16-E | 12,000 lbs. | 4,860 lbs. | 7.5 | 6.6 | 12.9 | 12.2 | 27.5 | 26.3 | 65.5 | 14.6 | 14.1 |
| 225/70R 19.5-F | 14,500 lbs. | 6,630 lbs. | 8.3 | 6.6 | 13 | 11.5 | 29 | 26.4 | 65.5 | 16 | 14.93 |
| 225/70R 19.5G | 17,950 lbs. | 6,830 lbs. | 8.5 | 6.5 | 12.6 | 11.7 | 27.6 | 26.7 | 66.2 | 16.1 | 15.0 |
| 225/70R 19.5G | 19,500 lbs. | 7,275 lbs. | 8.5 | 6.5 | 12.6 | 11.9 | 27.6 | 26.9 | 66.2 | 16 | 14.9 |

Figure 36

Dimensions in inches

## Rear Axle Chart



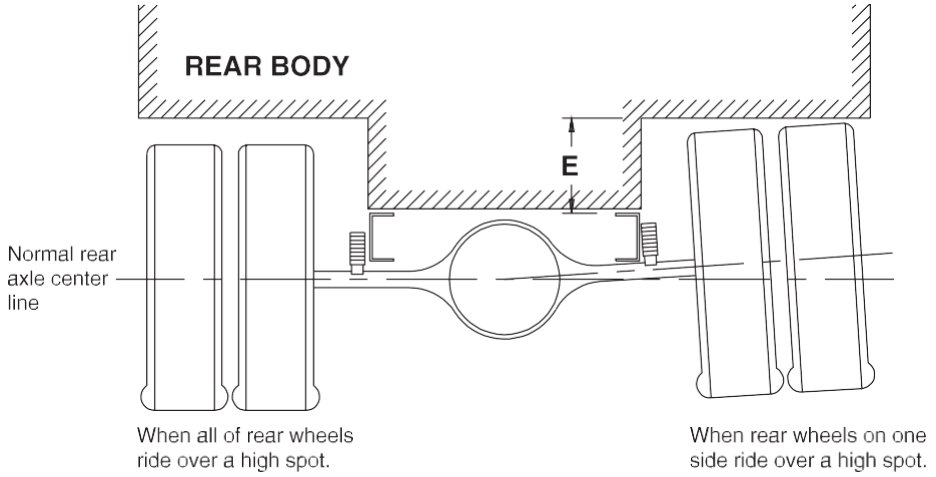




Figure 37

# 2025 Chevrolet Low Cab Forward



| Definitions | | | |
|---|---|---|---|
| A | Centerline of axle to bottom of axle bowl. | DW | Minimum distance between the inner surfaces of the rear tires. |
| B | Centerline of axle to top of frame rail at metal-to-metal position. | | |
| C | Centerline of axle to top of frame rail at curb position. | EW | Maximum Rear Width:<br>Overall width of the vehicle measured at the outermost surface of the rear tires. |
| D | Centerline of axle to top of frame rail at design load. | HH | Rear Tire Clearance:<br>Minimum clearance between the rear axle and the ground-line. |
| E | Rear Tire Clearance: Minimum clearance required for tires and chain measured from the top of the frame at the vertical centerline of the rear axle, when rear wheels on one side ride over a high spot. | HW | Dual Tire Spacing:<br>Distance between the centerlines of the tires in a set of dual tires. |
| CH | Rear Frame Height:<br>Vertical distance between the normal top of frame rail and the ground-line through the centerline of the rear axle at curb position. | KH | Tire Bounce Clearance:<br>Minimum distance required for tire bounce as measured from the centerline of the rear axle and the top of the rear tire when one wheel rides over a high spot. |
| DH | Rear Frame Height:<br>Vertical distance between the normal top of frame rail and the ground-line through the centerline of the rear axle at design load. | CW | Track Dual Rear Wheel Vehicles:<br>Distance between the centerlines of the dual wheels measured at the ground-line. |
| | Tire Section, Tire Radius, Tire Loaded Radius, Tire Clearance | | See Tire Chart for Values |

| Formulas for Calculating Rear Width and Height Dimensions | | | |
|---|---|---|---|
| CW | = Track | HH | = Tire loaded radius – A |
| CH | = Tire loaded radius + C | JH | = KH – B |
| DH | = Tire loaded radius + D | KH | = Tire radius + 3.00 inches |
| DW | = Track + 2 tire sections – tire clearance | KW | = DW – 5.00 inches |
| EW | = Track + 2 tire sections + tire clearance | LW | = 1.00-inch minimum clearance between tires and springs |

**NOTE:** Track and overall width may vary with optional equipment.

Figure 38

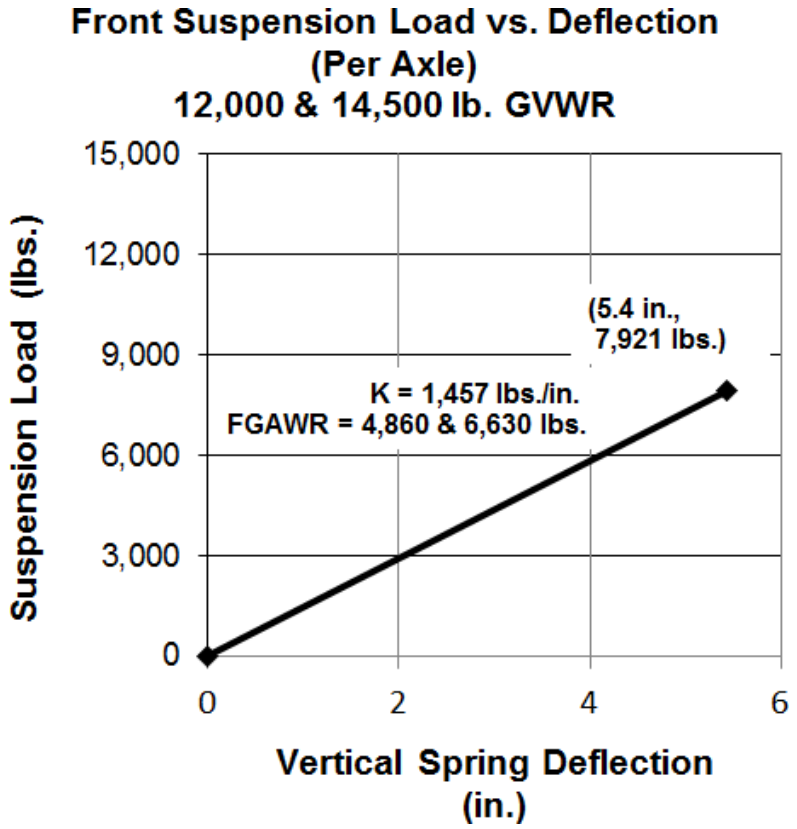
| Tire | GAWR | Track CW | A | B | C | D | E |
|---|---|---|---|---|---|---|---|
| 215/85R 16-E | 8,840 lbs. | 65.0 | 6.5 | 9.3 | 15.4 | 13.0 | 7.8 |
| 225/70R 19.5-F | 11,020 lbs. | 65.0 | 7.7 | 9.3 | 15.6 | 13.4 | 8.4 |
| 225/70R 19.5G | 13,660 lbs. | 65.9 | 7.6 | 9.3 | 15.3 | 14.1 | 8.4 [1] |
| 225/70R 19.5G | 14,460 lbs. | 65.9 | 7.6 | 9.3 | 15.3 | 13.9 | 8.4 [1] |

[1] - Previous Model. Update Coming Soon

Figure 39

Dimensions in inches

## Suspension Deflection Charts – 3500 HG / 4500 HG Gas



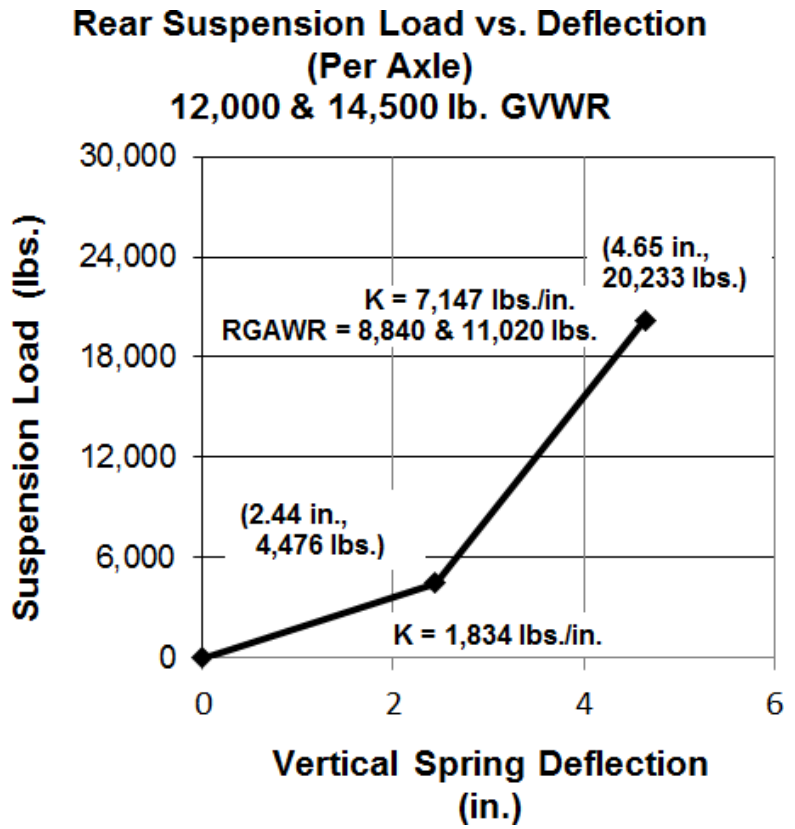




Figure 40

# 2025 Chevrolet Low Cab Forward

## Suspension Deflection Charts – 5500 HG Gas

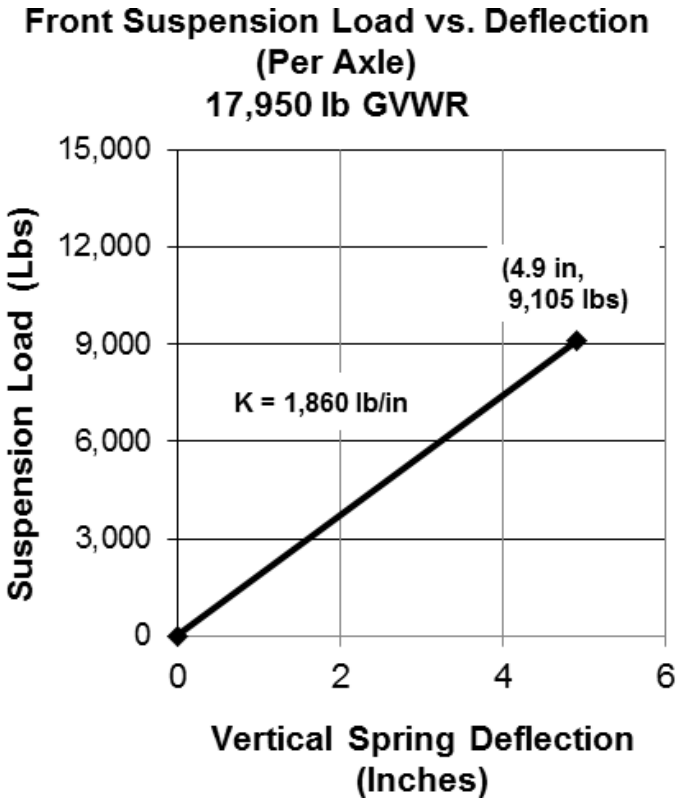



Figure 41

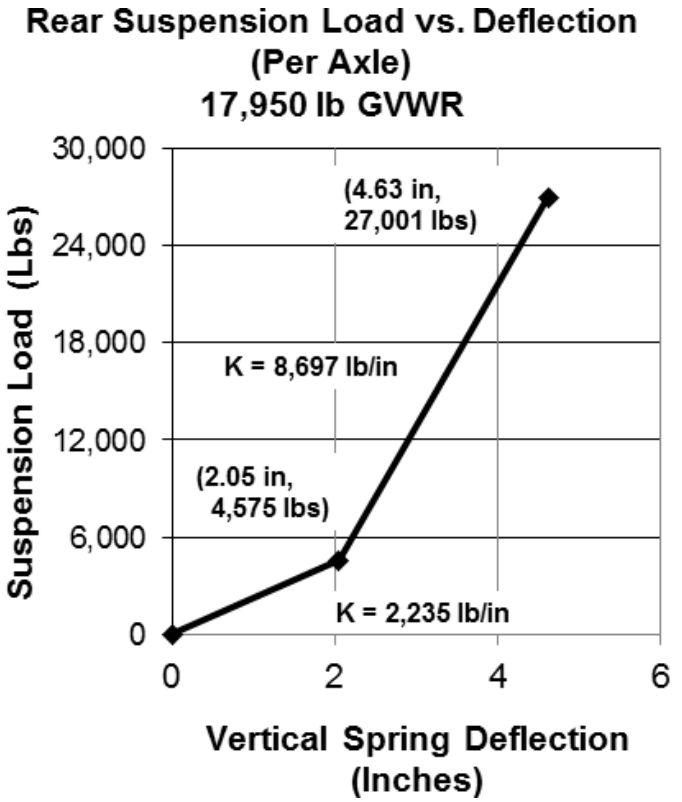



Figure 42

## Suspension Deflection Charts – 5500 XG Gas

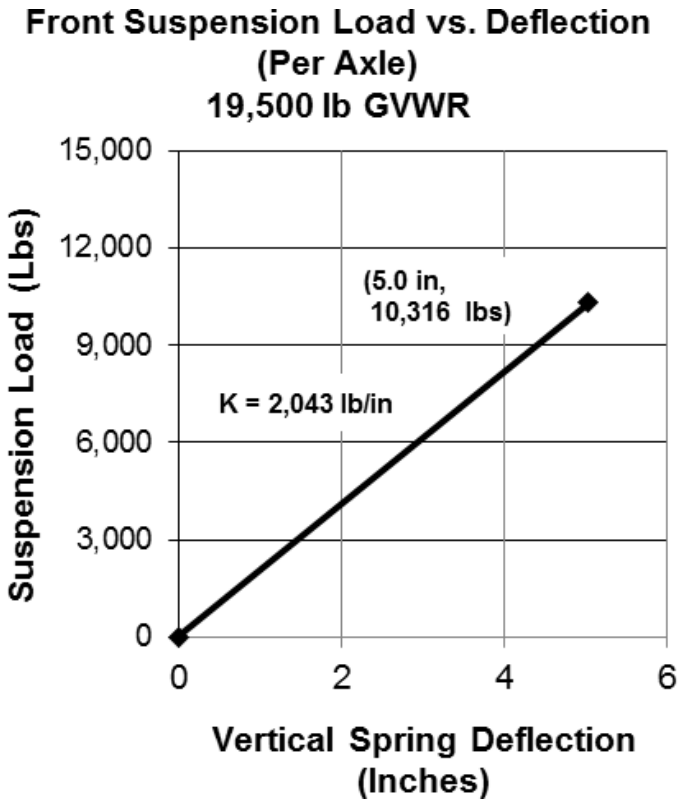



Figure 43

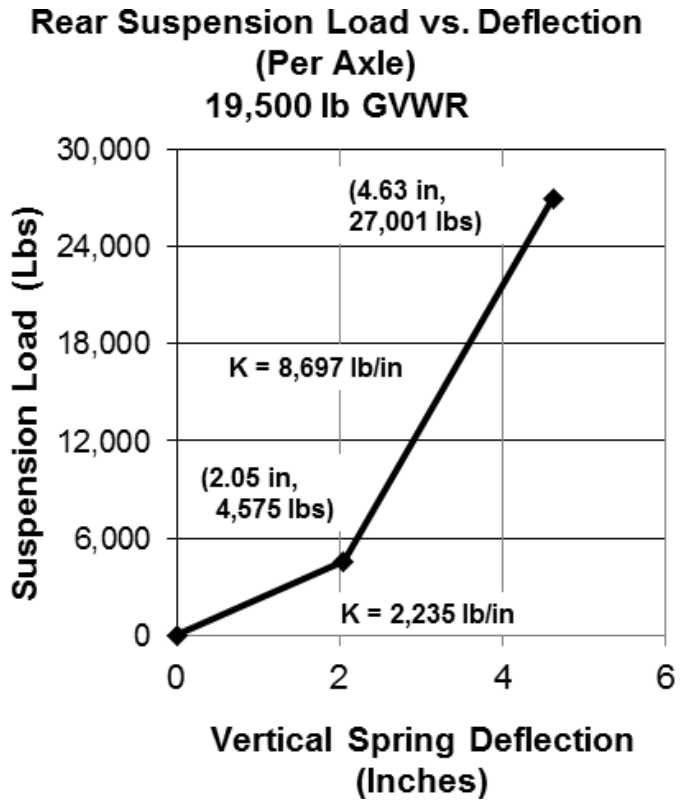



Figure 44

# 2025 Chevrolet Low Cab Forward

## Tire and Disc Wheel Chart

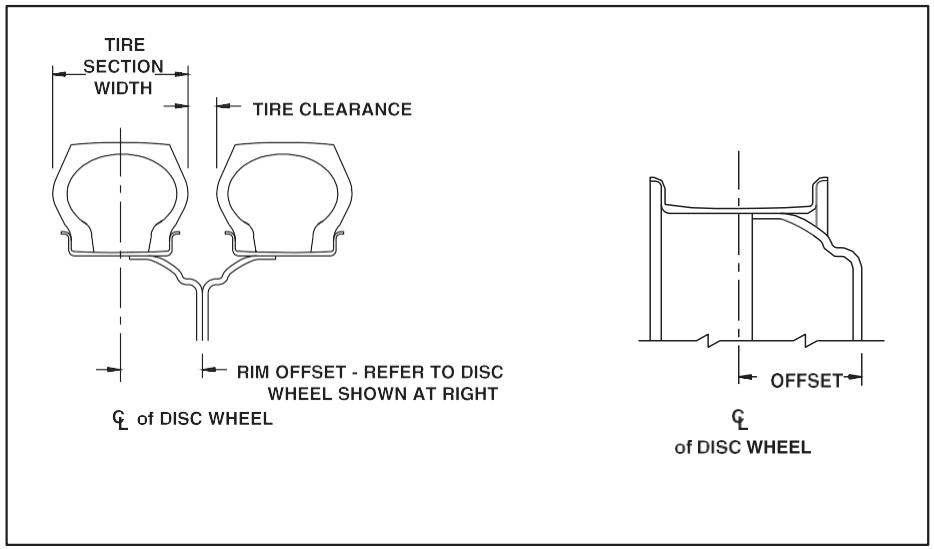
***Tire***

| Model | GVWR (lb.) | Manufacturer / Model | Tire Size | Cold Inflation Pressure (psi) | Max Load Per Tire (lb.) | | Max Tire Load Limits | | Tire Radius (in.) | | Loaded Tire Section Width | Tire Clearance (in.) | Design Rim Width (in) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | Single Tire | Dual Tire | Front | Rear | Loaded | Unloaded | | | |
| 3500 HG | 12,000 | Yokohama TY213B | 215/85R 16-E | 70 | 2430 | 2210 | 4860 | 8840 | 14.1 | 14.6 | 8.5 | 1.5 | 6.0 |
| 4500 HG | 14,500 | Goodyear G467 | 225/70R 19.5-G | 85 | 3315 | 3115 | 6630 | 12460 | 14.9 | 16 | 9 | 1.1 | 6.0 |
| | | Goodyear Fuel Max | | | | | | | 15 | 16.1 | 9.6 | 1.1 | 6.0 |
| 5500 HG | 17,950 | Yokohama TY213B Dunlop ENASAVE SP688A | 225/70R 19.5-G | 95 | 3640 | 3415 | 7280 | 13660 | 15 | 16.1 | 9.6 | 1.1 | 6.0 |
| 5500 XG | 19,500 | | | 105 | 3845 | 3615 | 7690 | 14460 | 14.9 | 16 | 9 | 1 | 6.0 |

***Disc Wheel***

| GVWR (lb) | Wheel Size (in) | Bolt Holes | Bolt Circle Diameter (in) | Ft./Rr. Nut Size* (in) | Ft./Rr. Stud Size (in) | Nut Torque Specs. | Inner Circle (in) | Outside Offset (in) | Disc Thickness (in) | Rim Type | Manufacturer Material |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 12,000 | 16 X 6 K | 6 JIS | 8.75 | 1.61 (41mm) BUD HEX | 0.83 (21mm) | 325 ft-lb. (440 N-m) | 6.46 | 5.0 | 0.35 | 5° DC | Topy Steel |
| 14,500 | 19.5 X 6 RW | 6 JIS | 8.75 | 1.61 (41mm) BUD HEX | 0.83 (21mm) | 325 ft-lb. (440 N-m) | 6.46 | 5.0 | 0.37 | 15° DC | Accuride Steel |
| 17,950 | 19.5 X 6 RW | 6 JIS | 8.75 | 1.61 (41mm) BUD HEX | 0.83 (21mm) | 325 ft-lb. (440 N-m) | 6.46 | 5.0 | 0.37 | 15° DC | Accuride Steel |
| 19,500 | | | | | | | | | | | |

*O.D. Wrench Size

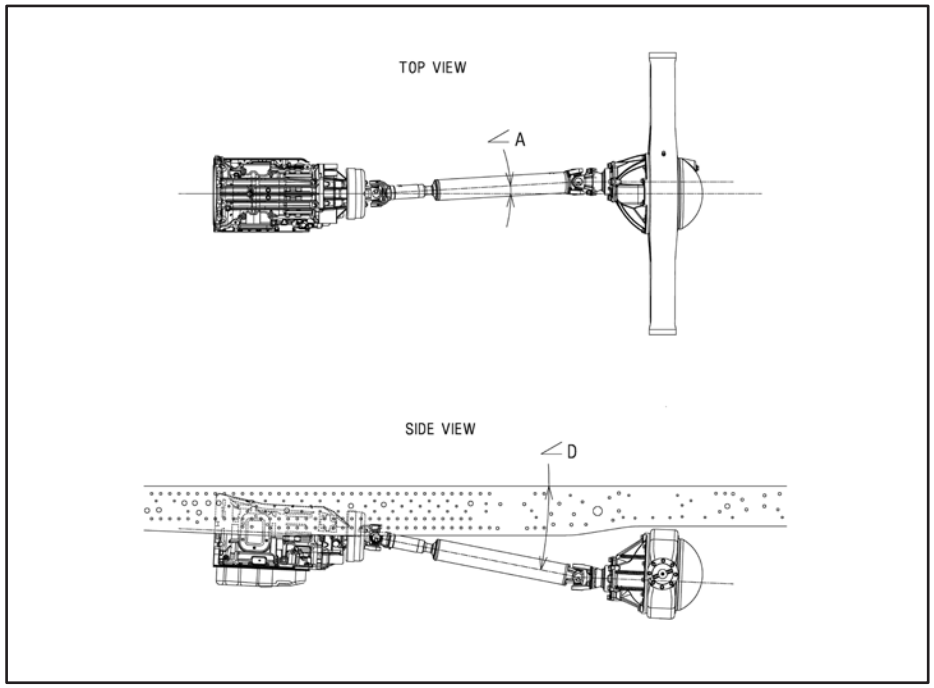


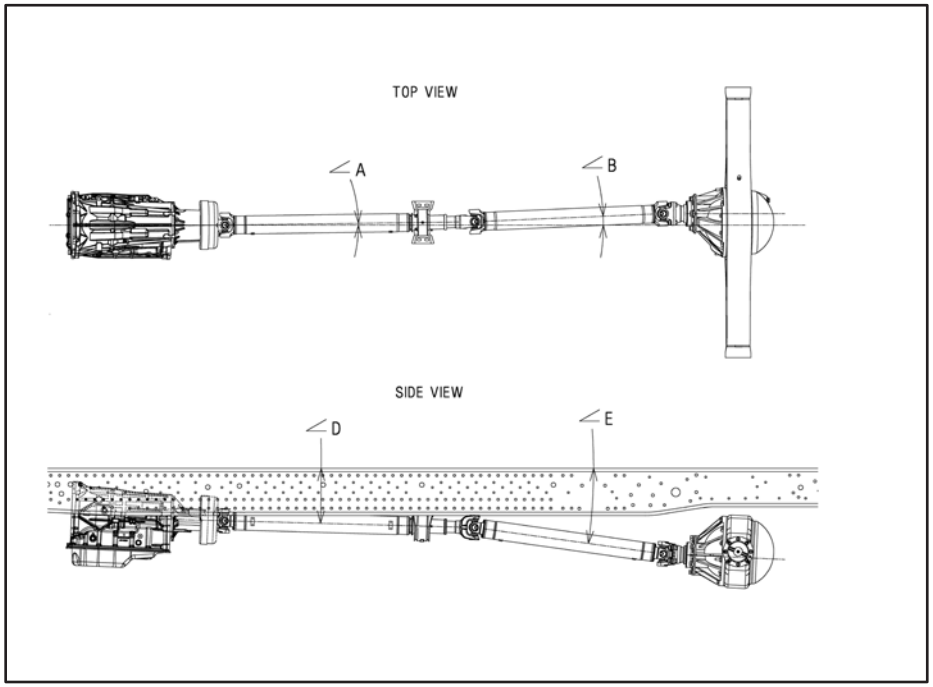

Dimensions in inches

Figure 45

# 2025 Chevrolet Low Cab Forward

## Propeller Shaft – 3500 HG / 4500 HG




| Wheelbase (in.) | Top View | | Side View | | | |
|---|---|---|---|---|---|---|
| | ∠A | ∠B | ∠D | ∠E | Trans | Rear Axle |
| 109 | 3.2º | - | 9.1º | - | 2.5º | 2.5º |
| 132.5 | 1.5º | 2.3º | 3.0º | 7.7º | 2.5º | 2.5º |
| 150 | 0.8º | 2.5º | 1.5º | 8.0º | 2.5º | 2.5º |
| 176 | 0.6º | 1.7º | 2.0º | 4.5º | 2.5º | 2.5º |

Figure 46

**NOTE:** 1. Angles provided in table are relative to the frame angle. Please take this into consideration for service measurements.
2. Driveline angles are based on the chassis curb weight which includes standard equipment, fuel but no driver, body or payload.

# 2025 Chevrolet Low Cab Forward

## Propeller Shaft – 3500 HG / 4500 HG

| Wheelbase | 109 | 132.5 | 150 | 176 |
|---|---|---|---|---|
| No. of Shafts | 1 | 2 | 2 | 2 |
| Trans. Type | A/T | A/T | A/T | A/T |
| Shaft #1 O.D. (Inches) | 3.25 | | | |
| Thickness (Inches) | 0.0906 | | | |
| L (Inches) | 35.51 | 21.73 | 35.91 | 46.54 |
| Type | A | B | B | B |
| Shaft #2 O.D. (Inches) | 3.25 | | | |
| Thickness (Inches) | 0.0906 | | | |
| L (Inches) | N/A | 31.38 | 34.92 | 50.08 |
| Type | N/A | C | C | C |

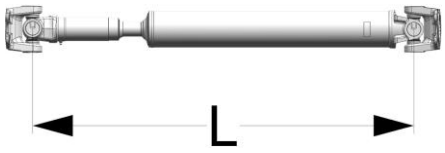
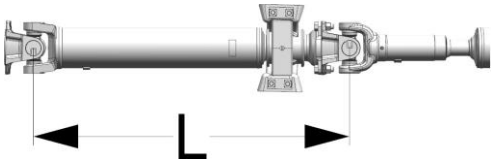
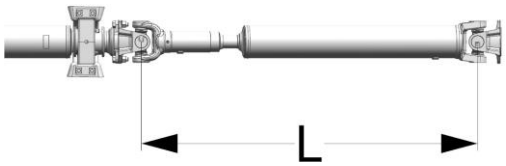
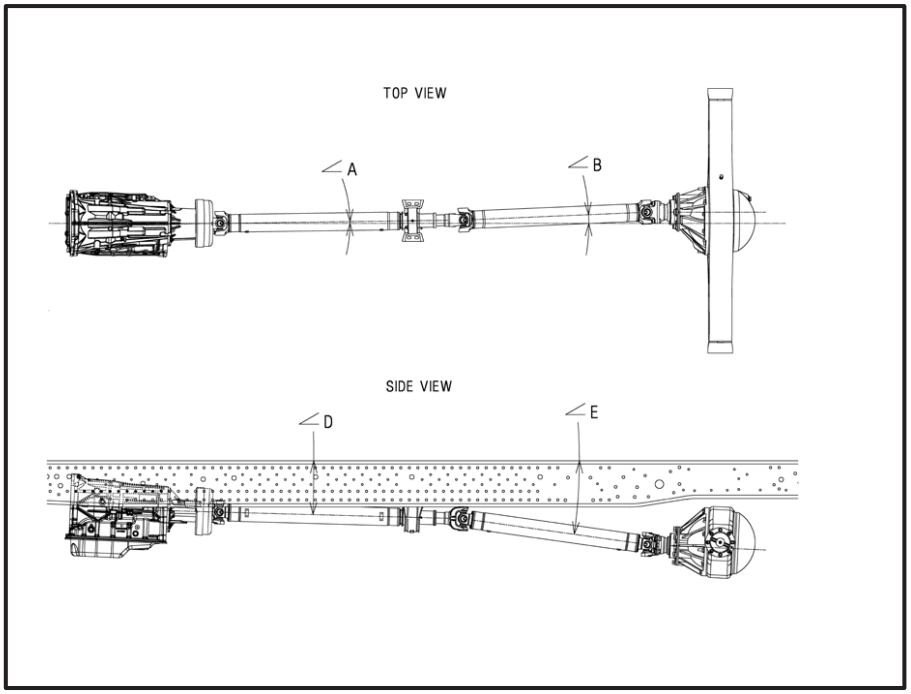
| Type | Description | Illustration |
|---|---|---|
| Type **A** | 1st shaft in 1-piece driveline |  |
| Type **B** | 1st shaft in 2-piece driveline |  |
| Type **C** | 2nd shaft in 2-piece driveline |  |

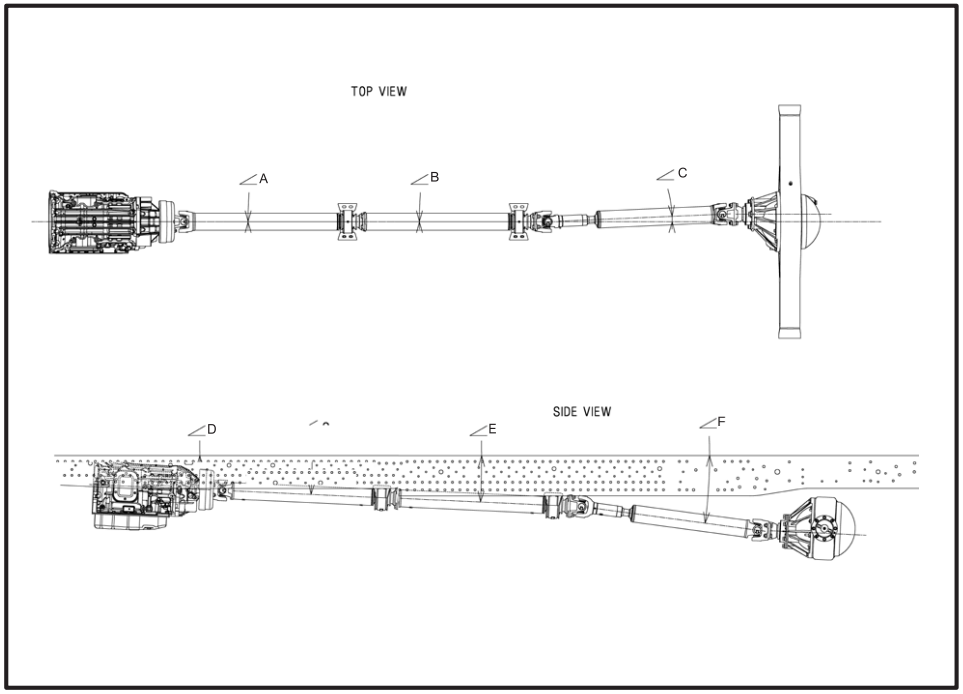
Figure 47

Dimensions in inches

# 2025 Chevrolet Low Cab Forward

## Propeller Shafts – 5500 HG / 5500 XG




| Wheelbase | Top View (degrees) | | | Side View (degrees) | | | | |
|---|---|---|---|---|---|---|---|---|
| (in.) | ∠A | ∠B | ∠C | ∠D | ∠E | ∠F | Trans | Rear Axle |
| 132.5 | 1.5 | 3.0 | - | 3.7 | 7.5 | - | 2.5 | 2.5 |
| 150 | 0.8 | 3.1 | - | 2.8 | 6.6 | - | 2.5 | 2.5 |
| 176 | 0.6 | 2.2 | - | 2.0 | 4.8 | - | 2.5 | 2.5 |

Figure 48

**NOTE:** 1. Angles provided in table are relative to the frame angle. Please take this into consideration for service measurements.
2. Driveline angles are based on the chassis curb weight which includes standard equipment, fuel but no driver, body or payload.

# 2025 Chevrolet Low Cab Forward

## Propeller Shaft – 5500 HG / 5500 XG

| 5500 HG & 5500 XG GAS STANDARD CAB | | | |
|---|---|---|---|
| Wheelbase | 132.5 | 150 | 176 |
| No. of Shafts | 2 | 2 | 2 |
| Shaft #1 O.D. | 3.54 | 3.54 | 3.54 |
| Thickness | 0.126 | 0.126 | 0.126 |
| Length | 23.90 | 41.02 | 51.85 |
| Type | D | D | D |
| Shaft #2 O.D. | 3.54 | 3.54 | 3.54 |
| Thickness | 0.126 | 0.126 | 0.126 |
| Length | 36.01 | 36.54 | 51.60 |
| Type | A | A | A |

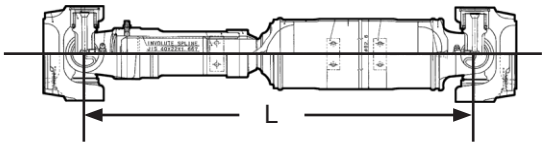
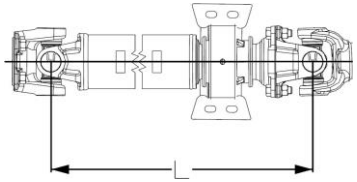
| Type | Description | Illustration |
|---|---|---|
| Type **A** | 2nd shaft in 2 piece driveline. |  |
| Type **D** | 1st shaft in 2 piece driveline. |  |

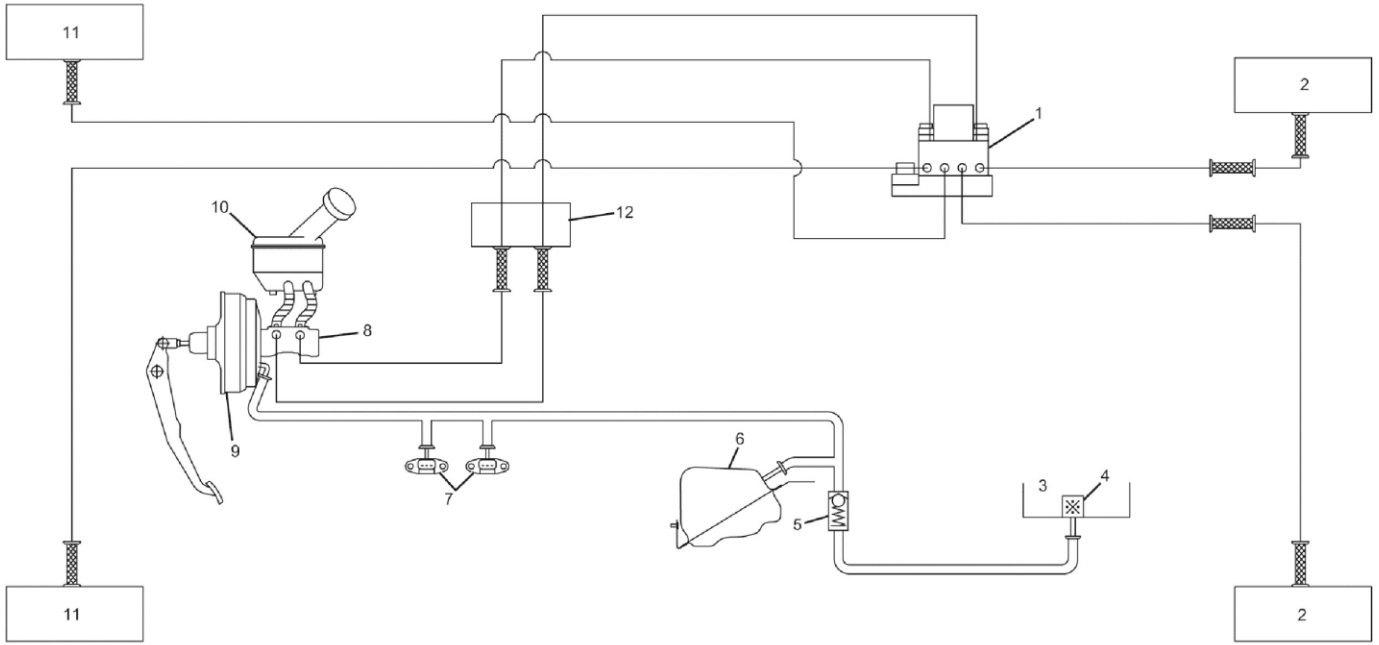
Figure 49

Dimensions in inches

# Brake System Diagram – 3500 HG / 4500 HG

***Vacuum Over Hydraulic***

***Please refer to Introduction Section of book for antilock system cautions and wheelbase modification requirements.***




**Legend**

(1) Electronic Hydraulic Control Unit (EHCU)
(2) Rear Brake
(3) Vacuum Pump
(4) Check Valve
(5) Check Valve (One-way Valve)
(6) Vacuum Tank
(7) Vacuum Sensor
(8) Vacuum Booster (Servo Unit)
(9) Master Cylinder
(10) Brake Fluid Reservoir
(11) Front Brake
(12) 4-way Connector

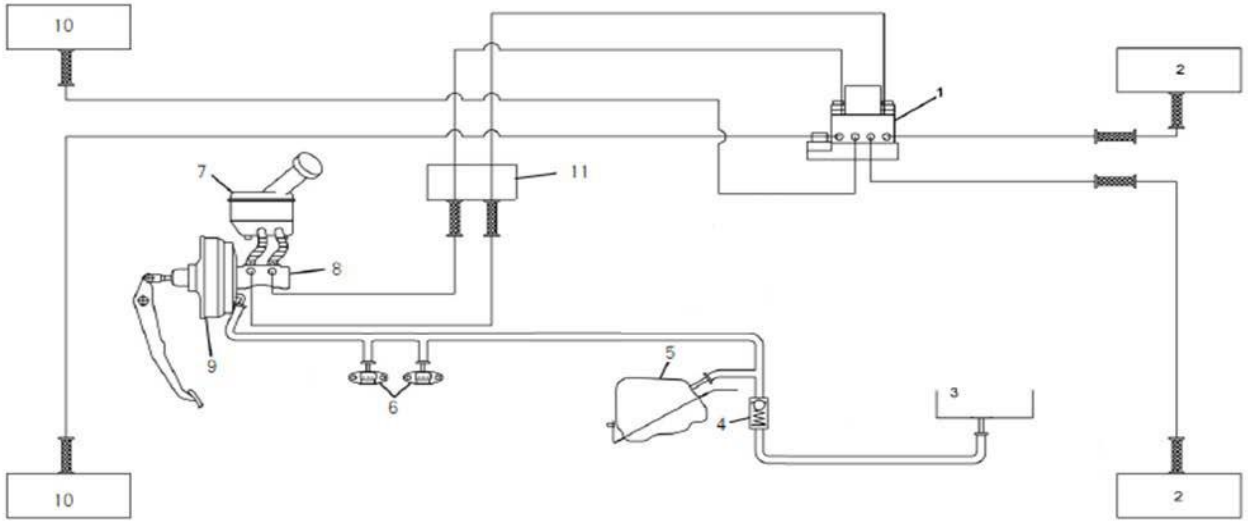
Figure 50

## Brake System Diagram – 5500 HG / 5500 XG

***Vacuum Plus Power Assist***

***Please refer to Introduction Section of book for antilock system cautions and wheelbase modification requirements.***

| Legend | |
|---|---|
| 1 | EHCU |
| 2 | Rear brake |
| 3 | Vacuum pump |
| 4 | Check valve |
| 5 | Vacuum tank |
| 6 | Vacuum sensor |
| 7 | Brake fluid tank |
| 8 | Master cylinder |
| 9 | Vacuum brake booster (servo unit) |
| 10 | Front brake |
| 11 | 4-way connector |



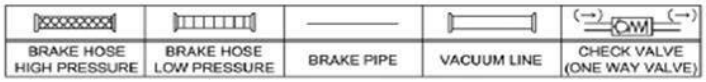
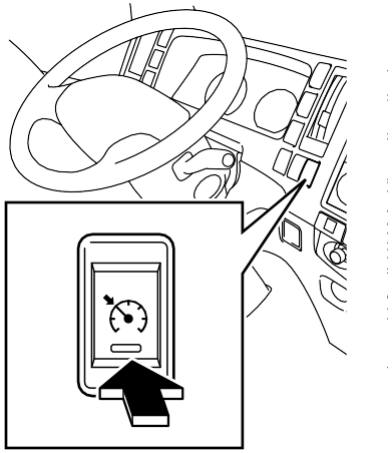




Figure 51

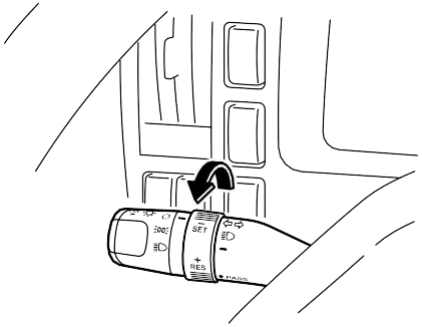
# High Idle Mode

Use high idle mode to increase engine idle speed to 1,200 r/min when the vehicle is stationary.

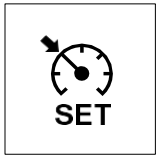
**Cruise control main switch**



**Cruise control set switch**



**Cruise set indicator light**




### Activating High Idle Mode

Follow the below procedure to activate the high idle mode.

1. Set the parking brake.
2. Set the selector lever in "P" (Park) or "N" (Neutral) position.
3. Do not depress the brake pedal.
4. Press the cruise control main switch to set it to "ON". At this time, the operation indicating light will turn to green.
5. Turn and hold the cruise control set switch in the "SET" position. After approximately 3 seconds the cruise control set indicator light will begin to flash slowly and the engine idle will increase to 1,200 r/min.

# 2025 Chevrolet Low Cab Forward

## L8T 6.6L FRONT END ACCESSORY DRIVE

The L8T engine's Front End Accessory Drive (FEAD) can mount a range of equipment:

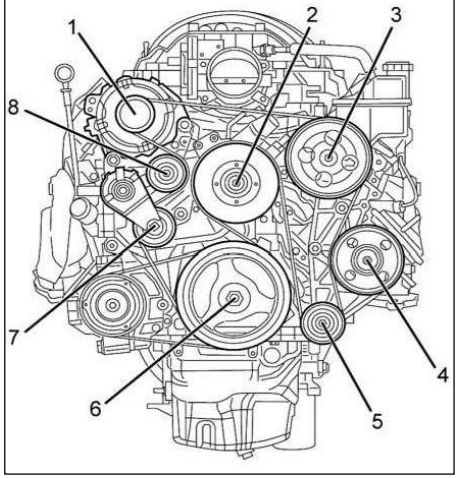
- Additional compressors for an engine driven refrigeration unit or auxiliary HVAC system.
- Clutch pumps for hydraulicly powered equipment.
- Additional alternator for electrical equipment.

FEAD output for GM L8T 6.6L Gasoline Engine

- 13 hp @ 900 rpm
- 17 hp @ 1200 rpm
- 21 hp @ 1500+ rpm

❖Accompanying aftermarket bracket(s) and a new belt routing design are required for most situations.

L8T FEAD Belt Factory Components




**Legend**
(1) Generator
(2) Water Pump
(3) Power Steering Pump
(4) Vacuum Pump
(5) Idler Pulley (Lower)
(6) Crankshaft Pulley
(7) Tensioner Pulley
(8) Idler Pulley (Upper)

# 2025 Chevrolet Low Cab Forward



## Chassis Specifications

| Model | 4500 HD |
|---|---|
| GVWR / GCWR | 14,500 lbs./ 20,500 lbs. |
| WB | 109 in., 132.5 in, 150 in., 176 in. |
| Engine | Isuzu 4-cylinder, in-line 4-cycle, turbocharged, intercooled, direct injection diesel. |
| Model/Displacement | 4HK1-TC/317 CID (5.19 liters) |
| HP (Gross) | 215 HP @ 2500 RPM |
| Torque (Gross) | 452 lb/ft torque @ 1850 RPM |
| Equipment | Dry element air cleaner with vertical intake; 2 rows 564 sq.in. radiator; 7 blade 20.1 in diameter fan with viscous drive. Cold weather starting device and an oil cooler. Engine oil level check. Engine warning system with audible warning for low oil pressure, high coolant temperature, and low coolant level. Engine cruise control function. Rear engine cover. Engine cruise control. Electronic Stability Control (ESC) with Anti-Slip Regulation (ASR) and Adaptive Cruise Control (ACC). |
| Transmission | Aisin A465id 6 speed automatic transmission with fifth and sixth gear overdrive with lock up in 2nd, 3rd, 4th, 5th and 6th. PTO capability with automatic torque converter lockup in stationary PTO mode. |
| Steering | Integral power steering 18.8-20.9:1 ratio. Tilt and telescoping steering column. |
| Front Axle | Reverse Elliot “I”-Beam rated at 6,830 lbs. |
| Front Suspension | Semi-elliptical steel alloy tapered leaf springs with stabilizer bar and shock absorbers. |
| Front GAWR | 5,360 lbs. |
| Rear Axle | Full-floating single speed with hypoid gearing rated at 11,020 lbs. |
| Rear Suspension | Semi-elliptical steel alloy multi-leaf springs and shock absorbers. |
| Rear GAWR | 9,880 lbs. |
| Wheels | 16 x 6.0-K 6-hole disc wheels, painted white. |
| Tires | 215/85R-16E (10 pr) LRR (Low Rolling Resistance) tubeless steel belted radials, all season front and rear. |
| Brakes | Dual circuit vacuum assisted hydraulic service brakes with EBD (Electronic Brake Distribution) system for load proportioning of the brake system front and rear disc brake. The parking brake is a mechanical, cable actuated, internal expanding drum type, transmission mounted. The exhaust brake is standard and is vacuum operated. Four-channel antilock brake system. |
| Fuel Tank | 30-gallon rectangular stainless steel fuel tank. Mounted between the frame rails with electric type fuel pump (mounted in tank). Through the rail fuel fill. Fuel water separator with indicator light on instrument cluster. |
| Frame | Ladder type channel section straight frame rail 33.5 in wide through the total length of the frame.Yield strength 44,000 psi section modulus 7.20 cubic in, RBM 316,800 lb-in per rail. |
| Cab | All steel low cab forward, BBC 65.9 in, 45-degree mechanical tilt with torsion assist |
| Cab Equipment | Gray and blue cross-pattern TRICOT breathable cloth covered high back driver’s seat with two occupant passenger seat. Dual cab mounted exterior mirrors with integral convex mirror. Tilt and telescoping steering column. Power windows and door locks, floor mats, tinted glass. AM/FM/CD Radio with Aux input/USB port and Bluetooth. Air conditioning, a rear body dome lamp switch, and a cab latch switch with an indicator and buzzer are standard. Bi-LED Head Lamps and Signature Light |
| Electrical | 12 Volt, negative ground, dual maintenance free batteries, 750 CCA each, 140 Amp alternator with integral regulator. |
| Options | see page 13 for options |

**NOTE:** These selected specifications are subject to change without notice.

# 2025 Chevrolet Low Cab Forward



## Chassis Specifications

| Model | 4500 HD CREW |
|---|---|
| GVWR / GCWR | 14,500 lbs./ 20,500 lbs. |
| WB | 150 in., 176 in. |
| Engine | Isuzu 4-cylinder, in-line 4-cycle, turbocharged, intercooled, direct injection diesel. |
| Model/Displacement | 4HK1-TC/317 CID (5.19 liters) |
| HP (Gross) | 215 HP @ 2500 RPM |
| Torque (Gross) | 452 lb/ft torque @ 1850 RPM |
| Equipment | Dry element air cleaner with vertical intake; 2 rows 564 sq.in. radiator; 7 blade 20.1 in diameter fan with viscous drive. Cold weather starting device and an oil cooler. Engine oil level check. Engine warning system with audible warning for low oil pressure, high coolant temperature, and low coolant level. Engine cruise control function. Rear engine cover. Engine cruise control. Electronic Stability Control (ESC) with Anti-Slip Regulation (ASR) and Adaptive Cruise Control (ACC). |
| Transmission | Aisin A465id 6 speed automatic transmission with fifth and sixth gear overdrive with lock up in 2nd, 3rd, 4th, 5th and 6th. PTO capability with automatic torque converter lockup in stationary PTO mode. |
| Steering | Integral power steering 18.8-20.9:1 ratio. Tilt and telescoping steering column. |
| Front Axle | Reverse Elliot “I”-Beam rated at 6,830 lbs. |
| Front Suspension | Semi-elliptical steel alloy tapered leaf springs with stabilizer bar and shock absorbers. |
| Front GAWR | 5,360 lbs. |
| Rear Axle | Full-floating single speed with hypoid gearing rated at 11,020 lbs. |
| Rear Suspension | Semi-elliptical steel alloy multi-leaf springs and shock absorbers. |
| Rear GAWR | 9,880 lbs. |
| Wheels | 16 x 6.0-K 6-hole disc wheels, painted white. |
| Tires | 215/85R-16E (10 pr) LRR (Low Rolling Resistance) tubeless steel belted radials, all season front and rear. |
| Brakes | Dual circuit vacuum assisted hydraulic service brakes with EBD (Electronic Brake Distribution) system for load proportioning of the brake system front and rear disc brake. The parking brake is a mechanical, cable actuated, internal expanding drum type, transmission mounted. The exhaust brake is standard and is vacuum operated. Four-channel antilock brake system. |
| Fuel Tank | 30-gallon rectangular stainless steel fuel tank. Mounted between the frame rails with electric type fuel pump (mounted in tank). Through the rail fuel fill. Fuel water separator with indicator light on instrument cluster. |
| Frame | Ladder type channel section straight frame rail 33.5 in wide through the total length of the frame. Yield strength 44,000 psi section modulus 11.89 cubic in, RBM 523,160 lb-in per rail. |
| Cab | All-steel, low cab forward, BBC 105.2 in., 7-passenger seating. |
| Cab Equipment | Gray and blue cross-pattern TRICOT breathable cloth covered high back driver’s seat with two occupant passenger seat. Dual cab mounted exterior mirrors with integral convex mirror. Tilt and telescoping steering column. Power windows and door locks, floor mats, tinted glass. AM/FM/CD Radio with Aux input/USB port and Bluetooth. Air conditioning, a rear body dome lamp switch, and a cab latch switch with an indicator and buzzer are standard. Bi-LED Head Lamps and Signature Light |
| Electrical | 12 Volt, negative ground, dual maintenance free batteries, 750 CCA each, 140 Amp alternator with integral regulator. |
| Options | see page 13 for options |

**NOTE:** These selected specifications are subject to change without notice.

# 2025 Chevrolet Low Cab Forward



## Chassis Specifications

| Model | 4500 XD |
|---|---|
| GVWR / GCWR | 16,000 lbs./ 22,000 lbs. |
| WB | 109 in., 132.5 in, 150 in., 176 in. |
| Engine | Isuzu 4-cylinder, in-line 4-cycle, turbocharged, intercooled, direct injection diesel. |
| Model/Displacement | 4HK1-TC/317 CID (5.19 liters) |
| HP (Gross) | 215 HP @ 2500 RPM |
| Torque (Gross) | 452 lb/ft torque @ 1850 RPM |
| Equipment | Dry element air cleaner with vertical intake; 2 rows 564 sq.in. radiator; 7 blade 20.1 in diameter fan with viscous drive. Cold weather starting device and an oil cooler. Engine oil level check. Engine warning system with audible warning for low oil pressure, high coolant temperature, and low coolant level. Engine cruise control function. Rear engine cover. Engine cruise control. Electronic Stability Control (ESC) with Anti-Slip Regulation (ASR) and Adaptive Cruise Control (ACC). |
| Transmission | Aisin A465id 6 speed automatic transmission with fifth and sixth gear overdrive with lock up in 2nd, 3rd, 4th, 5th and 6th. PTO capability with automatic torque converter lockup in stationary PTO mode. |
| Steering | Integral power steering 18.8-20.9:1 ratio. Tilt and telescoping steering column. |
| Front Axle | Reverse Elliot "I"-Beam rated at 6,830 lbs. |
| Front Suspension | Semi-elliptical steel alloy tapered leaf springs with stabilizer bar and shock absorbers. |
| Front GAWR | 6,630 lbs. |
| Rear Axle | Full-floating single speed with hypoid gearing rated at 11,020 lbs. |
| Rear Suspension | Semi-elliptical steel alloy multi-leaf springs and shock absorbers. |
| Rear GAWR | 11,020 lbs. |
| Wheels | 19.5 X 6.0-K 6-hole disc wheels, painted white |
| Tires | 225/70R-19.5 F (12 pr) LRR (Low Rolling Resistance) tubeless steel belted radials, all season, front and rear. |
| Brakes | Dual circuit vacuum assisted hydraulic service brakes with EBD (Electronic Brake Distribution) system for load proportioning of the brake system front and rear disc brake. The parking brake is a mechanical, cable actuated, internal expanding drum type, transmission mounted. The exhaust brake is standard and is vacuum operated. Four-channel antilock brake system. |
| Fuel Tank | 30-gallon rectangular stainless steel fuel tank. Mounted between the frame rails with electric type fuel pump (mounted in tank). Through the rail fuel fill. Fuel water separator with indicator light on instrument cluster. |
| Frame | Ladder type channel section straight frame rail 33.5 in wide through the total length of the frame.Yield strength 44,000 psi section modulus 7.20 cubic in, RBM 316,800 lb-in per rail. |
| Cab | All steel low cab forward, BBC 65.9 in, 45-degree mechanical tilt with torsion assist |
| Cab Equipment | Gray and blue cross-pattern TRICOT breathable cloth covered high back driver's seat with two occupant passenger seat. Dual cab mounted exterior mirrors with integral convex mirror. Tilt and telescoping steering column. Power windows and door locks, floor mats, tinted glass. AM/FM/CD Radio with Aux input/USB port and Bluetooth. Air conditioning, a rear body dome lamp switch, and a cab latch switch with an indicator and buzzer are standard. Bi-LED Head Lamps and Signature Light |
| Electrical | 12 Volt, negative ground, dual maintenance free batteries, 750 CCA each, 140 Amp alternator with integral regulator. |
| Options | see page 13 for options |

**NOTE:** These selected specifications are subject to change without notice.

# 2025 Chevrolet Low Cab Forward



## Chassis Specifications

| Model | 4500 XD CREW |
|---|---|
| GVWR / GCWR | 16,000 lbs./ 22,000 lbs. |
| WB | 150 in., 176 in. |
| Engine | Isuzu 4-cylinder, in-line 4-cycle, turbocharged, intercooled, direct injection diesel. |
| Model/Displacement | 4HK1-TC/317 CID (5.19 liters) |
| HP (Gross) | 215 HP @ 2500 RPM |
| Torque (Gross) | 452 lb/ft torque @ 1850 RPM |
| Equipment | Dry element air cleaner with vertical intake; 2 rows 564 sq.in. radiator; 7 blade 20.1 in diameter fan with viscous drive. Cold weather starting device and an oil cooler. Engine oil level check. Engine warning system with audible warning for low oil pressure, high coolant temperature, and low coolant level. Engine cruise control function. Rear engine cover. Engine cruise control. Electronic Stability Control (ESC) with Anti-Slip Regulation (ASR) and Adaptive Cruise Control (ACC). |
| Transmission | Aisin A465id 6 speed automatic transmission with fifth and sixth gear overdrive with lock up in 2nd, 3rd, 4th, 5th and 6th. PTO capability with automatic torque converter lockup in stationary PTO mode. |
| Steering | Integral power steering 18.8-20.9:1 ratio. Tilt and telescoping steering column. |
| Front Axle | Reverse Elliot “I”-Beam rated at 6,830 lbs. |
| Front Suspension | Semi-elliptical steel alloy tapered leaf springs with stabilizer bar and shock absorbers. |
| Front GAWR | 6,630 lbs. |
| Rear Axle | Full-floating single speed with hypoid gearing rated at 11,020 lbs. |
| Rear Suspension | Semi-elliptical steel alloy multi-leaf springs and shock absorbers. |
| Rear GAWR | 11,020 lbs. |
| Wheels | 19.5 x 6.0-K 6-hole disc wheels, painted white. |
| Tires | 225/70R-19.5F (12 ply) LRR (Low Rolling Resistance) tubeless steel belted radials, all-season, front and rear. |
| Brakes | Dual circuit vacuum assisted hydraulic service brakes with EBD (Electronic Brake Distribution) system for load proportioning of the brake system front and rear disc brake. The parking brake is a mechanical, cable actuated, internal expanding drum type, transmission mounted. The exhaust brake is standard and is vacuum operated. Four-channel antilock brake system. |
| Fuel Tank | 30-gallon rectangular stainless steel fuel tank. Mounted between the frame rails with electric type fuel pump (mounted in tank). Through the rail fuel fill. Fuel water separator with indicator light on instrument cluster. |
| Frame | Ladder type channel section straight frame rail 33.5 in wide through the total length of the frame.Yield strength 44,000 psi section modulus 11.89 cubic in, RBM 523,160 lb-in per rail. |
| Cab | All-steel, low cab forward, BBC 105.2 in., 7-passenger seating. |
| Cab Equipment | Gray and blue cross-pattern TRICOT breathable cloth covered high back driver’s seat with two occupant passenger seat. Dual cab mounted exterior mirrors with integral convex mirror. Tilt and telescoping steering column. Power windows and door locks, floor mats, tinted glass. AM/FM/CD Radio with Aux input/USB port and Bluetooth. Air conditioning, a rear body dome lamp switch, and a cab latch switch with an indicator and buzzer are standard. Bi-LED Head Lamps and Signature Light |
| Electrical | 12 Volt, negative ground, dual maintenance free batteries, 750 CCA each, 140 Amp alternator with integral regulator. |
| Options | see page 13 for options |

**NOTE:** These selected specifications are subject to change without notice.

# 2025 Chevrolet Low Cab Forward



## Chassis Specifications

| Model | 5500 XD DERATE |
|---|---|
| GVWR / GCWR | 17,950 lbs./ 23,950 lbs. |
| WB | 109 in., 132.5 in, 150 in., 176 in.. 200 in. |
| Engine | Isuzu 4-cylinder, in-line 4-cycle, turbocharged, intercooled, direct injection diesel. |
| Model/Displacement | 4HK1-TC/317 CID (5.19 liters) |
| HP (Gross) | 215 HP @ 2500 RPM |
| Torque (Gross) | 452 lb/ft torque @ 1850 RPM |
| Equipment | Dry element air cleaner with vertical intake; 2 rows 564 sq.in. radiator; 7 blade 20.1 in diameter fan with viscous drive. Cold weather starting device and an oil cooler. Engine oil level check. Engine warning system with audible warning for low oil pressure, high coolant temperature, and low coolant level. Engine cruise control function. Rear engine cover. Engine cruise control. Electronic Stability Control (ESC) with Anti-Slip Regulation (ASR) and Adaptive Cruise Control (ACC). |
| Transmission | Aisin A465id 6 speed automatic transmission with fifth and sixth gear overdrive with lock up in 2nd, 3rd, 4th, 5th and 6th. PTO capability with automatic torque converter lockup in stationary PTO mode. |
| Steering | Integral power steering 18.8-20.9:1 ratio. Tilt and telescoping steering column. |
| Front Axle | Reverse Elliot “I”-Beam rated at 7,275 lbs. |
| Front Suspension | Semi-elliptical steel alloy tapered leaf springs with stabilizer bar and shock absorbers. |
| Front GAWR | 6,630 lbs. |
| Rear Axle | Full floating single speed with hypoid gearing rated at 14,550 lbs. |
| Rear Suspension | Semi-elliptical steel alloy multi-leaf springs and shock absorbers. |
| Rear GAWR | 12,980 lbs. |
| Wheels | 19.5 X 6.0-K 6-hole disc wheels, painted white |
| Tires | 225/70R-19.5F (12 pr) LRR (Low Rolling Resistance) tubeless steel belted radials, all season, front and rear. |
| Brakes | Dual circuit vacuum assisted hydraulic service brakes with EBD (Electronic Brake Distribution) system for load proportioning of the brake system front and rear disc brake. The parking brake is a mechanical, cable actuated, internal expanding drum type, transmission mounted. The exhaust brake is standard and is vacuum operated. Four-channel antilock brake system. |
| Fuel Tank | 30-gallon rectangular stainless steel fuel tank. Mounted between the frame rails with electric type fuel pump (mounted in tank). Through the rail fuel fill. Fuel water separator with indicator light on instrument cluster. |
| Frame | Ladder type channel section straight frame rail 33.5 in wide through the total length of the frame.Yield strength 44,000 psi section modulus 7.20 cubic in, RBM 316,800 lb-in per rail. |
| Cab | All steel low cab forward, BBC 65.9 in, 45-degree mechanical tilt with torsion assist |
| Cab Equipment | Gray and blue cross-pattern TRICOT breathable cloth covered high back driver’s seat with two occupant passenger seat. Dual cab mounted exterior mirrors with integral convex mirror. Tilt and telescoping steering column. Power windows and door locks, floor mats, tinted glass. AM/FM/CD Radio with Aux input/USB port and Bluetooth. Air conditioning, a rear body dome lamp switch, and a cab latch switch with an indicator and buzzer are standard. Bi-LED Head Lamps and Signature Light |
| Electrical | 12 Volt, negative ground, dual maintenance free batteries, 750 CCA each, 140 Amp alternator with integral regulator. |
| Options | see page 13 for options |

**NOTE:** These selected specifications are subject to change without notice.

# 2025 Chevrolet Low Cab Forward



## Chassis Specifications

| Model | 5500 XD DERATE CREW |
|---|---|
| GVWR / GCWR | 17,950 lbs./ 23,950 lbs. |
| WB | 150 in., 176 in. |
| Engine | Isuzu 4-cylinder, in-line 4-cycle, turbocharged, intercooled, direct injection diesel. |
| Model/Displacement | 4HK1-TC/317 CID (5.19 liters) |
| HP (Gross) | 215 HP @ 2500 RPM |
| Torque (Gross) | 452 lb/ft torque @ 1850 RPM |
| Equipment | Dry element air cleaner with vertical intake; 2 rows 564 sq.in. radiator; 7 blade 20.1 in diameter fan with viscous drive. Cold weather starting device and an oil cooler. Engine oil level check. Engine warning system with audible warning for low oil pressure, high coolant temperature, and low coolant level. Engine cruise control function. Rear engine cover. Engine cruise control. Electronic Stability Control (ESC) with Anti-Slip Regulation (ASR) and Adaptive Cruise Control (ACC). |
| Transmission | Aisin A465id 6 speed automatic transmission with fifth and sixth gear overdrive with lock up in 2nd, 3rd, 4th, 5th and 6th. PTO capability with automatic torque converter lockup in stationary PTO mode. |
| Steering | Integral power steering 18.8-20.9:1 ratio. Tilt and telescoping steering column. |
| Front Axle | Reverse Elliot “I”-Beam rated at 7,275 lbs. |
| Front Suspension | Semi-elliptical steel alloy tapered leaf springs with stabilizer bar and shock absorbers. |
| Front GAWR | 6,630 lbs. |
| Rear Axle | Full-floating single speed with hypoid gearing rated at 14,550 lbs. |
| Rear Suspension | Semi-elliptical steel alloy multi-leaf springs and shock absorbers. |
| Rear GAWR | 12,980 lbs. |
| Wheels | 19.5 x 6.0-K 6-hole disc wheels, painted white. |
| Tires | 225/70R-19.5F (12 ply) LRR (Low Rolling Resistance) tubeless steel belted radials, all-season, front and rear. |
| Brakes | Dual circuit vacuum assisted hydraulic service brakes with EBD (Electronic Brake Distribution) system for load proportioning of the brake system front and rear disc brake. The parking brake is a mechanical, cable actuated, internal expanding drum type, transmission mounted. The exhaust brake is standard and is vacuum operated. Four-channel antilock brake system. |
| Fuel Tank | 30-gallon rectangular stainless steel fuel tank. Mounted between the frame rails with electric type fuel pump (mounted in tank). Through the rail fuel fill. Fuel water separator with indicator light on instrument cluster. |
| Frame | Ladder type channel section straight frame rail 33.5 in wide through the total length of the frame.Yield strength 44,000 psi section modulus 11.89 cubic in, RBM 523,160 lb-in per rail. |
| Cab | All-steel, low cab forward, BBC 105.2 in., 7-passenger seating. |
| Cab Equipment | Gray and blue cross-pattern TRICOT breathable cloth covered high back driver’s seat with two occupant passenger seat. Dual cab mounted exterior mirrors with integral convex mirror. Tilt and telescoping steering column. Power windows and door locks, floor mats, tinted glass. AM/FM/CD Radio with Aux input/USB port and Bluetooth. Air conditioning, a rear body dome lamp switch, and a cab latch switch with an indicator and buzzer are standard. Bi-LED Head Lamps and Signature Light |
| Electrical | 12 Volt, negative ground, dual maintenance free batteries, 750 CCA each, 140 Amp alternator with integral regulator. |
| Options | see page 13 for options |

**NOTE:** These selected specifications are subject to change without notice.

# 2025 Chevrolet Low Cab Forward



## Chassis Specifications

| Model | 5500 XD |
|---|---|
| GVWR / GCWR | 19,500 lbs./ 25,500 lbs. |
| WB | 109 in., 132.5 in, 150 in., 176 in.. 200 in., 212 in. |
| Engine | Isuzu 4-cylinder, in-line 4-cycle, turbocharged, intercooled, direct injection diesel. |
| Model/Displacement | 4HK1-TC/317 CID (5.19 liters) |
| HP (Gross) | 215 HP @ 2500 RPM |
| Torque (Gross) | 452 lb/ft torque @ 1850 RPM |
| Equipment | Dry element air cleaner with vertical intake; 2 rows 564 sq.in. radiator; 7 blade 20.1 in diameter fan with viscous drive. Cold weather starting device and an oil cooler. Engine oil level check. Engine warning system with audible warning for low oil pressure, high coolant temperature, and low coolant level. Engine cruise control function. Rear engine cover. Engine cruise control. Electronic Stability Control (ESC) with Anti-Slip Regulation (ASR) and Adaptive Cruise Control (ACC). |
| Transmission | Aisin A465id 6 speed automatic transmission with fifth and sixth gear overdrive with lock up in 2nd, 3rd, 4th, 5th and 6th. PTO capability with automatic torque converter lockup in stationary PTO mode. |
| Steering | Integral power steering 18.8-20.9:1 ratio. Tilt and telescoping steering column. |
| Front Axle | Reverse Elliot “I”-Beam rated at 7,275 lbs. |
| Front Suspension | Semi-elliptical steel alloy tapered leaf springs with stabilizer bar and shock absorbers. |
| Front GAWR | 7,275 lbs. |
| Rear Axle | Full floating single speed with hypoid gearing rated at 14,550 lbs. |
| Rear Suspension | Semi-elliptical steel alloy multi-leaf springs and shock absorbers. |
| Rear GAWR | 13,660 lbs. |
| Wheels | 19.5 X 6.0-K 6-hole disc wheels, painted white |
| Tires | 225/70R-19.5F (12 pr) LRR (Low Rolling Resistance) tubeless steel belted radials, all season, front and rear. |
| Brakes | Dual circuit vacuum assisted hydraulic service brakes with EBD (Electronic Brake Distribution) system for load proportioning of the brake system front and rear disc brake. The parking brake is a mechanical, cable actuated, internal expanding drum type, transmission mounted. The exhaust brake is standard and is vacuum operated. Four-channel antilock brake system. |
| Fuel Tank | 30-gallon rectangular stainless steel fuel tank. Mounted between the frame rails with electric type fuel pump (mounted in tank). Through the rail fuel fill. Fuel water separator with indicator light on instrument cluster. |
| Frame | Ladder type channel section straight frame rail 33.5 in wide through the total length of the frame.Yield strength 44,000 psi section modulus 7.20 cubic in, RBM 316,800 lb-in per rail. |
| Cab | All steel low cab forward, BBC 65.9 in, 45-degree mechanical tilt with torsion assist |
| Cab Equipment | Gray and blue cross-pattern TRICOT breathable cloth covered high back driver’s seat with two occupant passenger seat. Dual cab mounted exterior mirrors with integral convex mirror. Tilt and telescoping steering column. Power windows and door locks, floor mats, tinted glass. AM/FM/CD Radio with Aux input/USB port and Bluetooth. Air conditioning, a rear body dome lamp switch, and a cab latch switch with an indicator and buzzer are standard. Bi-LED Head Lamps and Signature Light |
| Electrical | 12 Volt, negative ground, dual maintenance free batteries, 750 CCA each, 140 Amp alternator with integral regulator. |
| Options | see page 13 for options |

NOTE: These selected specifications are subject to change without notice.

# 2025 Chevrolet Low Cab Forward



## Chassis Specifications

| Model | 5500 XD CREW |
|---|---|
| GVWR / GCWR | 19,500 lbs./ 25,500 lbs. |
| WB | 150 in., 176 in. |
| Engine | Isuzu 4-cylinder, in-line 4-cycle, turbocharged, intercooled, direct injection diesel. |
| Model/Displacement | 4HK1-TC/317 CID (5.19 liters) |
| HP (Gross) | 215 HP @ 2500 RPM |
| Torque (Gross) | 452 lb/ft torque @ 1850 RPM |
| Equipment | Dry element air cleaner with vertical intake; 2 rows 564 sq.in. radiator; 7 blade 20.1 in diameter fan with viscous drive. Cold weather starting device and an oil cooler. Engine oil level check. Engine warning system with audible warning for low oil pressure, high coolant temperature, and low coolant level. Engine cruise control function. Rear engine cover. Engine cruise control. Electronic Stability Control (ESC) with Anti-Slip Regulation (ASR) and Adaptive Cruise Control (ACC). |
| Transmission | Aisin A465id 6 speed automatic transmission with fifth and sixth gear overdrive with lock up in 2nd, 3rd, 4th, 5th and 6th. PTO capability with automatic torque converter lockup in stationary PTO mode. |
| Steering | Integral power steering 18.8-20.9:1 ratio. Tilt and telescoping steering column. |
| Front Axle | Reverse Elliot “I”-Beam rated at 7,275 lbs. |
| Front Suspension | Semi-elliptical steel alloy tapered leaf springs with stabilizer bar and shock absorbers. |
| Front GAWR | 7,275 lbs. |
| Rear Axle | Full-floating single speed with hypoid gearing rated at 14,550 lbs. |
| Rear Suspension | Semi-elliptical steel alloy multi-leaf springs and shock absorbers. |
| Rear GAWR | 13,660 lbs. |
| Wheels | 19.5 x 6.0-K 6-hole disc wheels, painted white. |
| Tires | 225/70R-19.5F (12 ply) LRR (Low Rolling Resistance) tubeless steel belted radials, all-season, front and rear. |
| Brakes | Dual circuit vacuum assisted hydraulic service brakes with EBD (Electronic Brake Distribution) system for load proportioning of the brake system front and rear disc brake. The parking brake is a mechanical, cable actuated, internal expanding drum type, transmission mounted. The exhaust brake is standard and is vacuum operated. Four-channel antilock brake system. |
| Fuel Tank | 30-gallon rectangular stainless steel fuel tank. Mounted between the frame rails with electric type fuel pump (mounted in tank). Through the rail fuel fill. Fuel water separator with indicator light on instrument cluster. |
| Frame | Ladder type channel section straight frame rail 33.5 in wide through the total length of the frame.Yield strength 44,000 psi section modulus 11.89 cubic in, RBM 523,160 lb-in per rail. |
| Cab | All-steel, low cab forward, BBC 105.2 in., 7-passenger seating. |
| Cab Equipment | Gray and blue cross-pattern TRICOT breathable cloth covered high back driver’s seat with two occupant passenger seat. Dual cab mounted exterior mirrors with integral convex mirror. Tilt and telescoping steering column. Power windows and door locks, floor mats, tinted glass. AM/FM/CD Radio with Aux input/USB port and Bluetooth. Air conditioning, a rear body dome lamp switch, and a cab latch switch with an indicator and buzzer are standard. Bi-LED Head Lamps and Signature Light |
| Electrical | 12 Volt, negative ground, dual maintenance free batteries, 750 CCA each, 140 Amp alternator with integral regulator. |
| Options | see page 13 for options |

**NOTE:** These selected specifications are subject to change without notice.

# 2025 Chevrolet Low Cab Forward



## Vehicle Weights, Dimensions, and Ratings

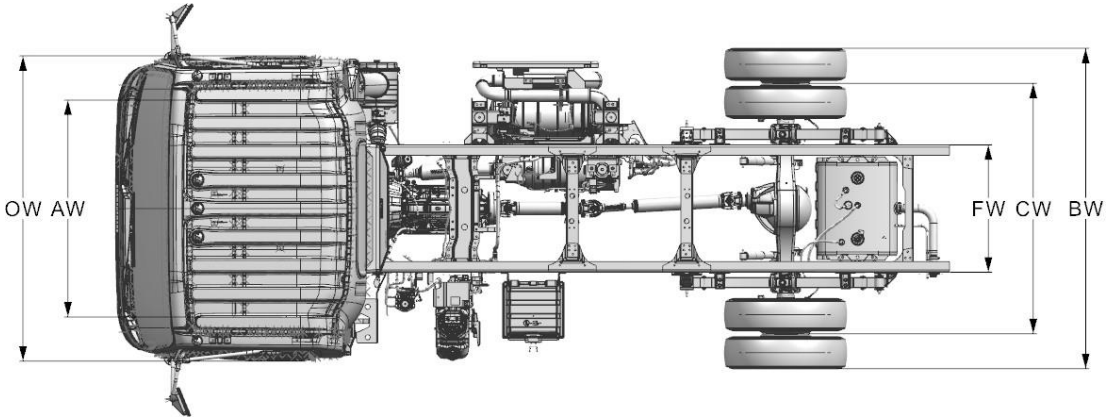



Figure 1

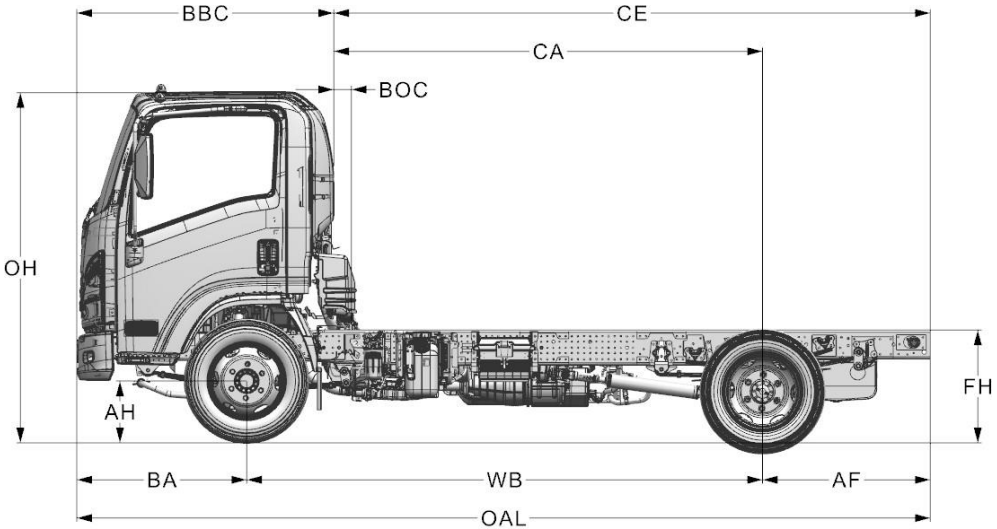



Figure 2

**Dimension Constants:**

| Code | Inches | Code | Inches |
|---|---|---|---|
| AH | 7.5 | BW | 83.3 |
| AW | 65.6 | CW | 65 |
| BA | 43.5 | FW | 33.5 |
| BBC | 65.9 | OH (16" Tire) | 91.3 |
| BOC | 7.7 | OH (19.5" Tire) | 92.9 |
| FH (16" Tire) | 31.6 | OW | 81.3 |
| FH (19.5" Tire) | 33.5 | | |

**Variable Chassis Dimensions:**

| Unit | WB | CA* | CE* | OAL | AF |
|---|---|---|---|---|---|
| inch | 109.0 | 86.5 | 129.6 | 195.7 | 43.1 |
| inch | 132.5 | 110.0 | 153.1 | 219.2 | 43.1 |
| inch | 150.0 | 127.5 | 170.6 | 236.7 | 43.1 |
| inch | 176.0 | 153.5 | 196.6 | 262.7 | 43.1 |
| inch | 200.0[1] | 177.5 | 220.6 | 286.7 | 43.1 |
| inch | 212.0[2] | 189.5 | 232.6 | 298.7 | 43.1 |

* Effective CA & CE are CA/CE less BOC.

**Vertical Exhaust Option Dimensions**

**Variable Chassis Dimensions:**

| Unit | WB | EFF CA* | EFF CE* | OAL | AF |
|---|---|---|---|---|---|
| inch | 109.0 | 62.5 | 105.6 | 195.7 | 43.1 |
| inch | 132.5 | 86.0 | 153.1 | 219.2 | 43.1 |
| inch | 150.0 | 103.5 | 146.6 | 236.7 | 43.1 |
| inch | 176.0 | 129.5 | 172.6 | 262.7 | 43.1 |
| inch | 200.0[1] | 153.5 | 196.6 | 286.7 | 43.1 |
| inch | 212.0[2] | 165.5 | 208.6 | 298.7 | 43.1 |

* Effective CA & CE are CA/CE less BOC. BOC = 24 in. for Vertical Exhaust equipped chassis

Note:

[1] - Only available on 5500 XD DERATE & 5500 XD

[2] - Only available on the 5500 XD

# 2025 Chevrolet Low Cab Forward



## Vehicle Weights, Dimensions, and Ratings - Standard Cab

### 4500 HG:

**In-Frame Tank Weights and Payload by Model:**

| Model | WB | Unit | Front | Rear | Total | Payload |
|---|---|---|---|---|---|---|
| 3F154 | 109.0 | lbs. | 3986 | 2044 | 6030 | 8470 |
| 3F124 | 109.0 | lbs. | 3996 | 2044 | 6040 | 8460 |
| 3F254 | 132.5 | lbs. | 4070 | 2030 | 6100 | 8400 |
| 3F224 | 132.5 | lbs. | 4080 | 2030 | 6110 | 8390 |
| 3F354 | 150.0 | lbs. | 4136 | 1997 | 6133 | 8367 |
| 3F324 | 150.0 | lbs. | 4146 | 1997 | 6143 | 8357 |
| 3F454 | 176.0 | lbs. | 4209 | 1964 | 6173 | 8327 |
| 3F424 | 176.0 | lbs. | 4219 | 1964 | 6183 | 8317 |

### 5500 XD DERATE*:

**In-Frame Tank Weight and Payload by Model:**

| Model | WB | Unit | Front | Rear | Total | Payload |
|---|---|---|---|---|---|---|
| 3U154 | 109.0 | lbs. | 4171 | 2359 | 6530 | 11420 |
| 3U124 | 109.0 | lbs. | 4181 | 2359 | 6540 | 11410 |
| 3U254 | 132.5 | lbs. | 4257 | 2355 | 6612 | 11338 |
| 3U224 | 132.5 | lbs. | 4267 | 2355 | 6622 | 11328 |
| 3U354 | 150.0 | lbs. | 4325 | 2307 | 6632 | 11318 |
| 3U324 | 150.0 | lbs. | 4335 | 2307 | 6642 | 11308 |
| 3U454 | 176.0 | lbs. | 4398 | 2281 | 6679 | 11271 |
| 3U424 | 176.0 | lbs. | 4408 | 2281 | 6689 | 11261 |

***Note: 5500 XD Derate available through PIO ordering**

### 4500 XD:

**In-Frame Tank Weights and Payload by Model:**

| Model | WB | Unit | Front | Rear | Total | Payload |
|---|---|---|---|---|---|---|
| 3Y154 | 109.0 | lbs. | 4162 | 2262 | 6424 | 9576 |
| 3Y124 | 109.0 | lbs. | 4172 | 2262 | 6434 | 9566 |
| 3Y254 | 132.5 | lbs. | 4246 | 2251 | 6497 | 9503 |
| 3Y224 | 132.5 | lbs. | 4256 | 2251 | 6507 | 9493 |
| 3Y354 | 150.0 | lbs. | 4325 | 2203 | 6528 | 9472 |
| 3Y324 | 150.0 | lbs. | 4335 | 2203 | 6538 | 9462 |
| 3Y454 | 176.0 | lbs. | 4395 | 2175 | 6570 | 9430 |
| 3Y424 | 176.0 | lbs. | 4405 | 2175 | 6580 | 9420 |

### 5500 XD:

**In-Frame Tank Weights and Payload by Model:**

| Model | WB | Unit | Front | Rear | Total | Payload |
|---|---|---|---|---|---|---|
| 3U154 | 109.0 | lbs. | 4171 | 2359 | 6530 | 12970 |
| 3U124 | 109.0 | lbs. | 4181 | 2359 | 6540 | 12960 |
| 3U254 | 132.5 | lbs. | 4257 | 2355 | 6612 | 12888 |
| 3U224 | 132.5 | lbs. | 4267 | 2355 | 6622 | 12878 |
| 3U354 | 150.0 | lbs. | 4325 | 2307 | 6632 | 12868 |
| 3U324 | 150.0 | lbs. | 4335 | 2307 | 6642 | 12858 |
| 3U454 | 176.0 | lbs. | 4398 | 2281 | 6679 | 12821 |
| 3U424 | 176.0 | lbs. | 4408 | 2281 | 6689 | 12811 |

**Technical Notes:**

*Chassis Curb Weight reflects standard equipment and fuel but no driver or payload. Maximum Payload Weight is the allowed maximum for equipment, body, payload and driver and is calculated by subtracting chassis curb weight from the GVWR.*

# 2025 Chevrolet Low Cab Forward

## Vehicle Weights, Dimensions, and Ratings

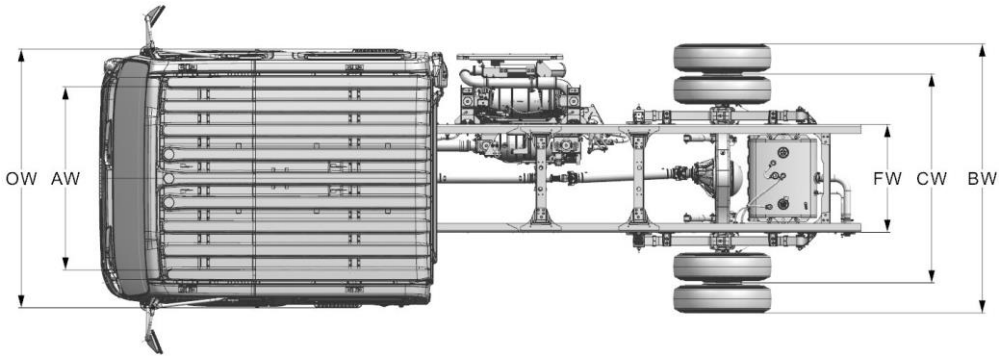



Figure 3

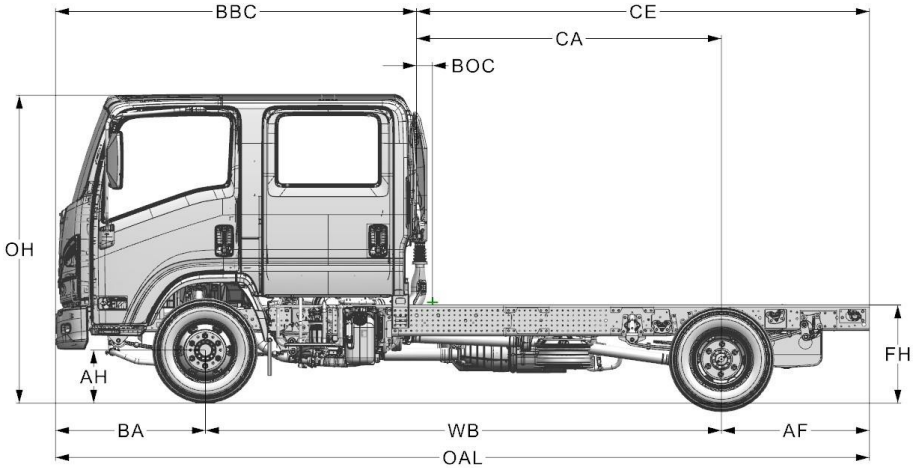



Figure 4

**Dimension Constants:**

| Code | Inches | Code | Inches |
|---|---|---|---|
| AH | 7.5 | BW | 83.3 |
| AW | 65.6 | CW | 65 |
| BA | 43.7 | FW | 33.5 |
| BBC | 105.2 | OH (16" Tire) | 90.5 |
| BOC | 5.3 | OH (19.5" Tire) | 92.4 |
| FH (16" Tire) | 31.6 | OW | 81.3 |
| FH (19.5" Tire) | 33.5 | | |

**Variable Chassis Dimensions:**

| Unit | WB | CA* | CE* | OAL | AF |
|---|---|---|---|---|---|
| inch | 150.0 | 88.5 | 131.6 | 236.7 | 43.1 |
| inch | 176.0 | 114.5 | 157.6 | 262.7 | 43.1 |

* Effective CA & CE are CA/CE less BOC

# 2025 Chevrolet Low Cab Forward



## Vehicle Weights, Dimensions, and Ratings - Crew Cab

**4500 HG:**

**In-Frame Tank Weights and Payload by Model:**

| Model | WB | Unit | Front | Rear | Total | Payload |
|---|---|---|---|---|---|---|
| 3G354 | 150.0 | lbs. | 4506 | 2218 | 6724 | 7776 |
| 3G324 | 150.0 | lbs. | 4516 | 2218 | 6734 | 7766 |
| 3G454 | 176.0 | lbs. | 4610 | 2165 | 6775 | 7725 |
| 3G424 | 176.0 | lbs. | 4620 | 2165 | 6785 | 7715 |

**5500 XD DERATE*:**

**In-Fram Tank Weights and Payload by Model:**

| Model | WB | Unit | Front | Rear | Total | Payload |
|---|---|---|---|---|---|---|
| 3V354 | 150.0 | lbs. | 4696 | 2544 | 7240 | 10710 |
| 3V324 | 150.0 | lbs. | 4706 | 2544 | 7250 | 10700 |
| 3V454 | 176.0 | lbs. | 4810 | 2481 | 7291 | 10659 |
| 3V424 | 176.0 | lbs. | 4820 | 2481 | 7301 | 10649 |

***Note: 5500 XD Derate available through PIO ordering**

**4500 XD:**

**In-Frame Tank Weights and Payload by Model:**

| Model | WB | Unit | Front | Rear | Total | Payload |
|---|---|---|---|---|---|---|
| 3Z354 | 150.0 | lbs. | 4683 | 2438 | 7121 | 8879 |
| 3Z324 | 150.0 | lbs. | 4693 | 2438 | 7131 | 8869 |
| 3Z454 | 176.0 | lbs. | 4795 | 2374 | 7169 | 8831 |
| 3Z424 | 176.0 | lbs. | 4805 | 2374 | 7179 | 8821 |

**5500 XD:**

**In-Frame Tank Weights and Payload by Model:**

| Model | WB | Unit | Front | Rear | Total | Payload |
|---|---|---|---|---|---|---|
| 3V354 | 150.0 | lbs. | 4696 | 2544 | 7240 | 12260 |
| 3V324 | 150.0 | lbs. | 4706 | 2544 | 7250 | 12250 |
| 3V454 | 176.0 | lbs. | 4810 | 2481 | 7291 | 12209 |
| 3V424 | 176.0 | lbs. | 4820 | 2481 | 7301 | 12199 |

**Technical Notes:**

*Chassis Curb Weight reflects standard equipment and fuel but no driver or payload. Maximum Payload Weight is the allowed maximum for equipment, body, payload and driver and is calculated by subtracting chassis curb weight from the GVWR.*

# 2025 Chevrolet Low Cab Forward

## Vehicle Weight Limits and Option Weights

| VEHICLE WEIGHT RATINGS | | | | |
|---|---|---|---|---|
| Description | 4500 HG Capacity (lb.) | 4500 XD Capacity (lb.) | 5500 XD DR Capacity (lb.) | 5500 Capacity (lb.) |
| GVWR Designed Maximum | 14,500 | 16,000 | 17,950 | 19,500 |
| GCWR Combined Maximum | 20,500 | 22,000 | 23,950 | 25,500 |
| GAWR - Front | 5,360 | 6,630 | 6,830 | 7,275 |
| GAWR - Rear | 9,880 | 11,020 | 12,980 | 13,660 |

Options Weights

| RPO[1] | Option Description | Front / Rear (lb) |
|---|---|---|
| I6B | AGM batteries (825 CCA x 2) | 25 / 22 |
| IF4 | Air deflector roof mounted (not available in crew cab) | 64 / 0 |
| I1V | Audio system with 7" diagonal color touch screen | 2 / 0 |
| I2V | Audio system with 7" diagonal color touch screen with backup camera (camera shipped loose) | 2 / 2 |
| UZF | Back up alarm | 0 / 2 |
| I8T | Chrome grille | 1 / 0 |
| I2M | Delete cruise control switch | 0 / 0 |
| IY4 | Delete standard radio | -3 / 0 |
| IS9 | Dual fuel tank - Additional 35 gallon diesel fuel tank mounted on LHS for 150" & 176" wheelbases only [18] | [2] |
| I79 | Engine block heater and oil pan heater with receptacle | 4 / 0 |
| I72 | Engine block heater with receptacle | 2 / 0 |
| IH2 | Engine emergency shutdown system HWT, LWL, LOP | 0 / 0 |
| IY9 | Engine idle shutdown (timer set at 3 minutes for engine shutdown) | 0 / 0 |
| I9A | Engine idle shutdown (timer set at 5 minutes for engine shutdown) | 0 / 0 |
| IF6 | Fire extinguisher and triangle kit mounted in rear organizer | 19 / 0 |
| I7F | FMS Jumper Harness | TBD |
| IZ5 | GVWR Derate from 19,500 lbs to 17,950 lbs [21] | 0 / 0 |
| I0W | Heated dual remote control mirrors | 4 / 0 |
| IS0 | Heated mirrors | 1 / 0 |
| I8L | High visibility seat belt (orange color, driver and RH passenger, availble on standard cab and front driver and RH passenger seat only crew cab) | 0 / 0 |
| I7L | High visibility seat belt (orange color, driver seat only, available on standard cab and front driver seat only of crew cab) | 0 / 0 |
| I4K | Keyless entry | 3 / 0 |
| I9I | LED Fog Lamps | 1 / 0 |
| I8I | LED Tail Light Package | 0 / 1 |
| I6K | Lockable DEF fill cap | 0 / 0 |
| I5L | Lockable DEF fill cap (all keyed alike on multiple chassis ordered together) | 0 / 0 |
| IU2 | Mirror bracket for 102'' wide body | 1 / 0 |
| IL9 | PTO enable switch and engine idle up switch recommended for PTO and idle applications only | 1 / 0 |
| IV9 | Seat covers crew cab | 6 / 0 |
| I1M | Seat covers for suspension seat standard cab | 6 / 0 |
| IV8 | Seat covers standard cab | 6 / 0 |
| I3Z | Spare keys (2 additional, 4 keys in total) | 0 / 0 |
| I1L | Speed limited to 58 MPH | 0 / 0 |
| I2L | Speed limited to 65 MPH | 0 / 0 |
| I3L | Speed limited to 68 MPH | 0 / 0 |
| I4L | Speed limited to 70 MPH | 0 / 0 |
| I6T | Suspension seat (not available in crew cab) | 18 / 0 |
| I0A | Vertical exhaust - Cross rail horizontal DPF/SCR with vertical exhaust | 100 / 100 |

| SEO[1] | Option Description | Front / Rear (lb) |
|---|---|---|
| 54 | Standard model specifications with power windows, power door locks and air conditioning | Standard chassis weight includes these features |
| 24 | Advanced Driver Assistance System (ADAS) | 22 / 0 |
| 55 | 35 Gallon Aluminum LH Side Fuel Tank | [4] |
| 25 | 35 Gallon Aluminum LH Side Fuel Tank w/ ADAS | [5] |
| 56 | 55 Gallon Aluminum LH Side Fuel Tank [3] | 149 / 43 |
| 26 | 55 Gallon Aluminum LH Side Fuel Tank w/ ADAS [3] | 171 / 43 |

[1] RPO is Regular Production Option that is stocked in port inventory. SEO is Special Equipment Option and requires 90-120 day lead time for delivery.
[2] Weights: 150 wb +77 lbs. front and +171 lbs. rear and 176 wb +89 lbs. front and +159 lbs. rear
[3] 176 inch WB std. cab only
[4] Weights: 150 wb +102 lbs. front and -52 lbs. rear and 176 wb +110 lbs. front and -60 lbs. rear
[5] Weights: 150 wb +124 lbs. front and -52 lbs. rear and 176 wb +132 lbs. front and -60 lbs. rear

# 2025 Chevrolet Low Cab Forward

## Frame and Crossmember Specifications - Standard Cab

**Previous Model Year Shown. Update Coming Soon**

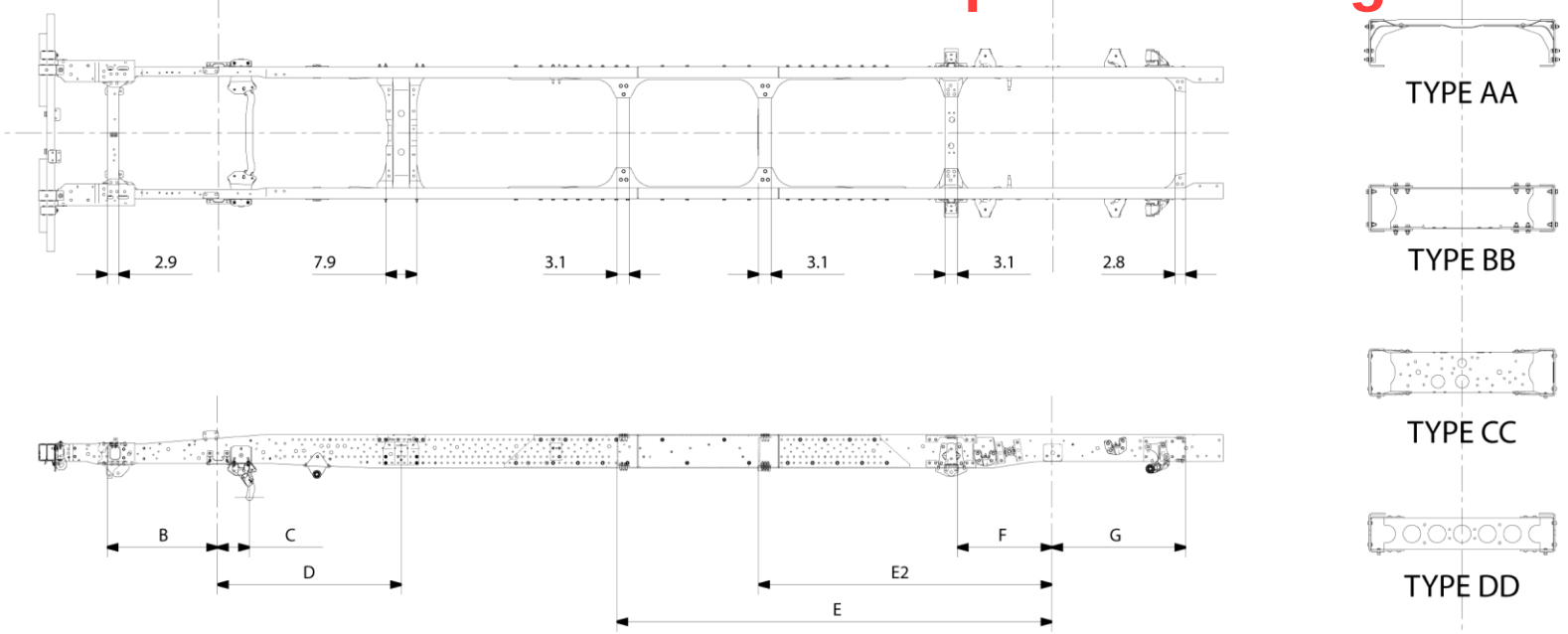



Figure 5

| Wheelbase | Frame Thickness | Crossmember Type/Location | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | B | C | D | | E | | E2 | | F | | G | |
| 109 | 0.2 | 28.3 | 7.9 | AA | 47.2 | - | | - | | CC | 24.2 | DD | 33.8 |
| 132.5 | 0.2 | 28.3 | 7.9 | AA | 47.2 | BB | 57.5 | - | | CC | 24.2 | DD | 33.8 |
| 150 | 0.2 | 28.3 | 7.9 | AA | 47.2 | BB | 57.9 | - | | CC | 24.2 | DD | 33.8 |
| 176 | 0.2 | 28.3 | 7.9 | AA | 47.2 | BB | 74.4 | - | | CC | 24.2 | DD | 33.8 |
| 200[1] | 0.2 | 28.3 | 7.9 | AA | 47.2 | BB | 98.9 | BB | 74.9 | CC | 24.2 | DD | 33.8 |
| 212[2] | 0.2 | 28.3 | 7.9 | AA | 47.2 | BB | 110.9 | BB | 74.9 | CC | 24.2 | DD | 33.8 |

[1] - Only available on 5500 XD DERATE & 5500 XD
[2] - Only available on the 5500 XD

Figure 6

Note: Dimensions in inches

# 2025 Chevrolet Low Cab Forward

## Frame Chart - Standard Cab

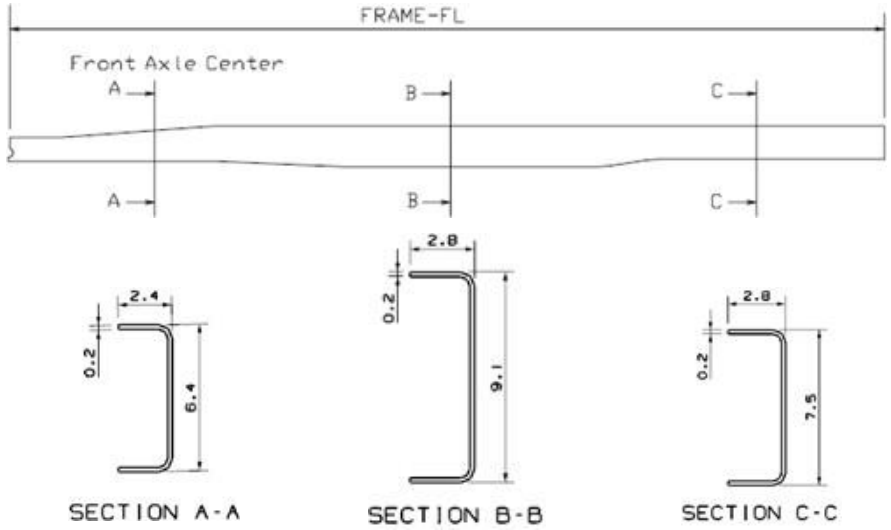



Figure 7

| Wheelbase | Frame FL | Frame Thickness |
|---|---|---|
| 109.0 | 182.5 | 0.2 |
| 132.5 | 206.1 | 0.2 |
| 150.0 | 223.8 | 0.2 |
| 176.0 | 249.8 | 0.2 |
| 200.0[1] | 273.8 | 0.2 |
| 212.0[2] | 285.8 | 0.2 |

[1] - Only available on 5500 XD DERATE & 5500 XD
[2] - Only available on the 5500 XD

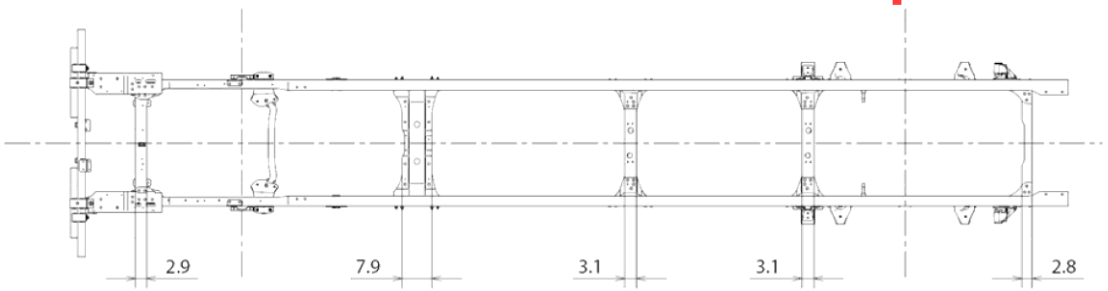
Figure 8

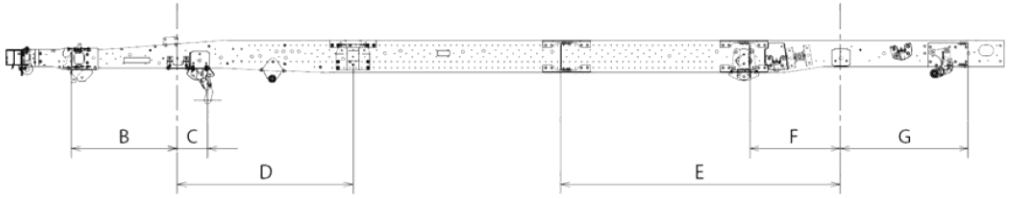
Note: Dimensions in inches

# 2025 Chevrolet Low Cab Forward

## Frame and Crossmember Specifications - Crew Cab

**Previous Model Year Shown. Update Coming Soon**



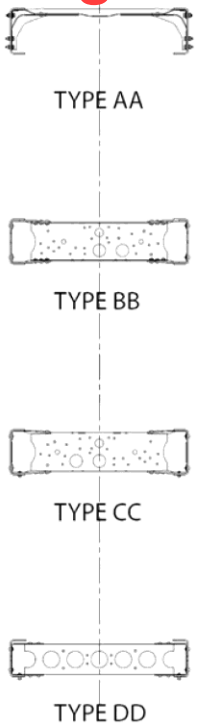




Figure 9

| Wheelbase | Frame Thick | Crossmember Type/Location | | | | | |
|---|---|---|---|---|---|---|---|
| | | B | C | D | E | F | G |
| 150.0 | 0.2 | 28.3 | 7.9 | AA 47.2 | BB 57.9 | CC 24.2 | DD 33.8 |
| 176.0 | 0.2 | 28.3 | 7.9 | AA 47.2 | BB 74.4 | CC 24.2 | DD 33.8 |

Figure 10

Note: Dimensions in inches

# 2025 Chevrolet Low Cab Forward

## Frame Chart - Crew Cab

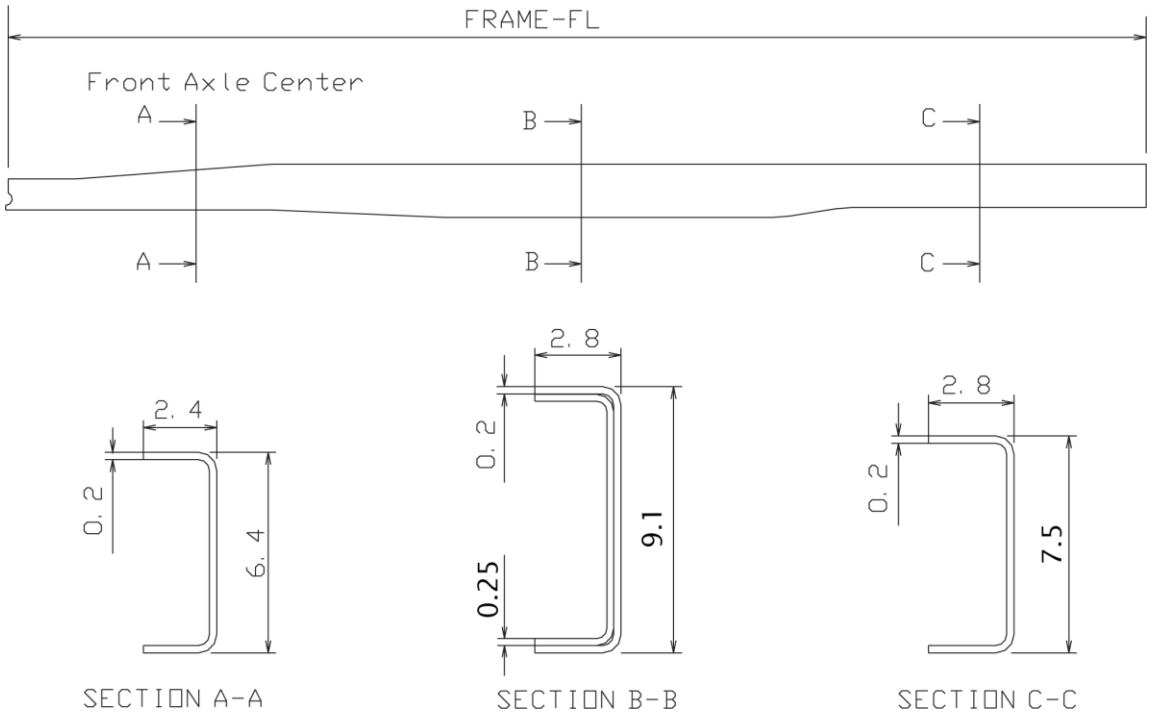



Figure 11

| Wheelbase | Frame FL | Frame Thickness |
|---|---|---|
| 150.0 | 223.8 | 0.2 |
| 176.0 | 249.8 | 0.2 |

Figure 12

Note: Dimensions in inches

# 2025 Chevrolet Low Cab Forward

## Diesel Standard Cab - Top View

| WB | A | B |
|---|---|---|
| 109 | 43.4 | 80.1 |
| 132.5 | 49.7 | 84.4 |
| 150 | 43.4 | 80.1 |
| 176 | 43.4 | 80.1 |
| 200[1] | 43.4 | 80.1 |
| 212[2] | 43.4 | 80.1 |

[1] - Only available on 5500 XD DERATE & 5500 XD
[2] - Only available on the 5500 XD

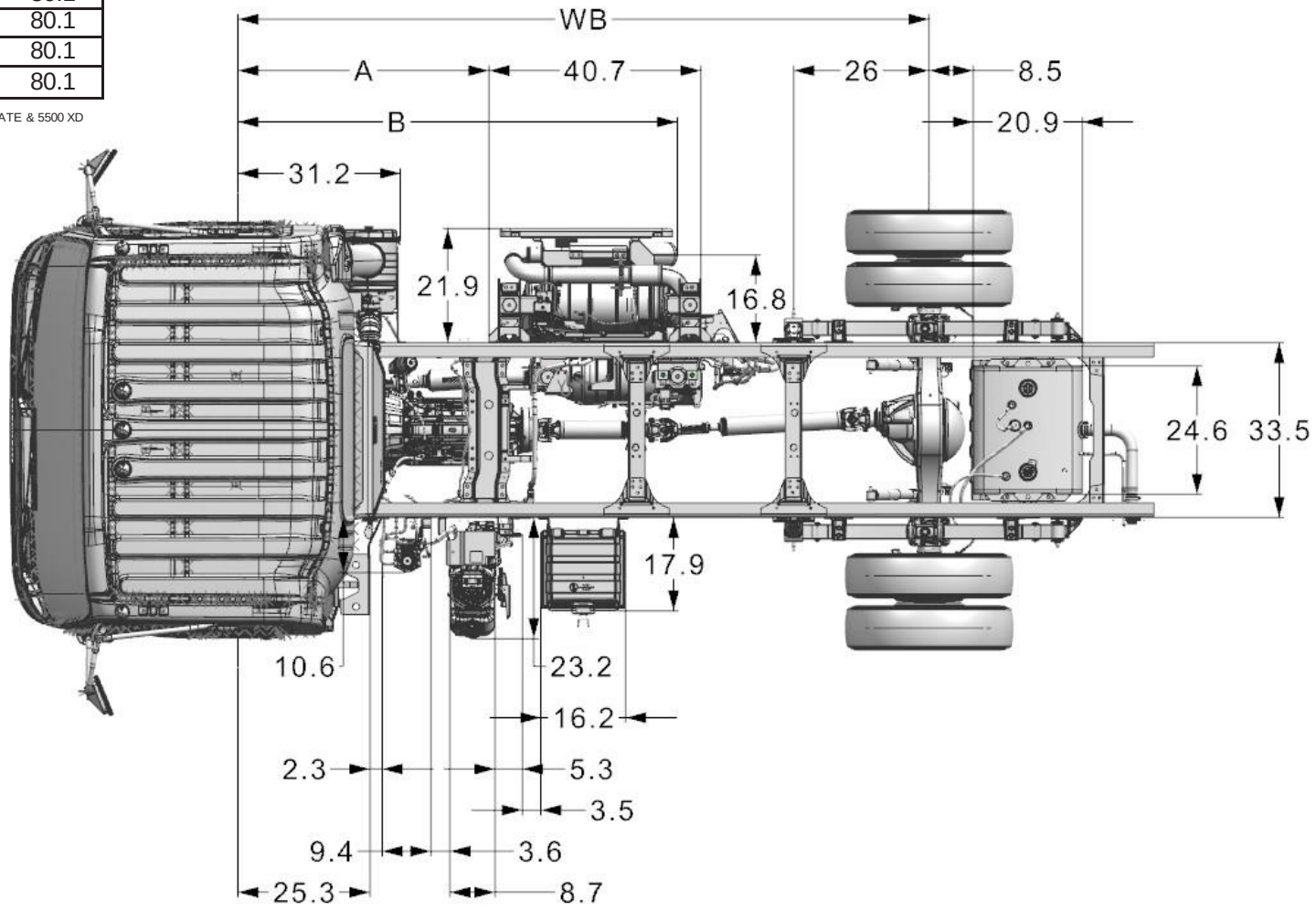



Figure 13

Note: Dimensions in inches

# 2025 Chevrolet Low Cab Forward

## Diesel Standard Cab - Left Side View

| WB | A |
|---|---|
| 109 | 81.6 |
| 132.5 | 87.9 |
| 150 | 81.6 |
| 176 | 81.6 |
| 200[1] | 81.6 |
| 212[2] | 81.6 |

[1] - Only available on NRR DERATE & NRR
[2] - Only available on the NRR

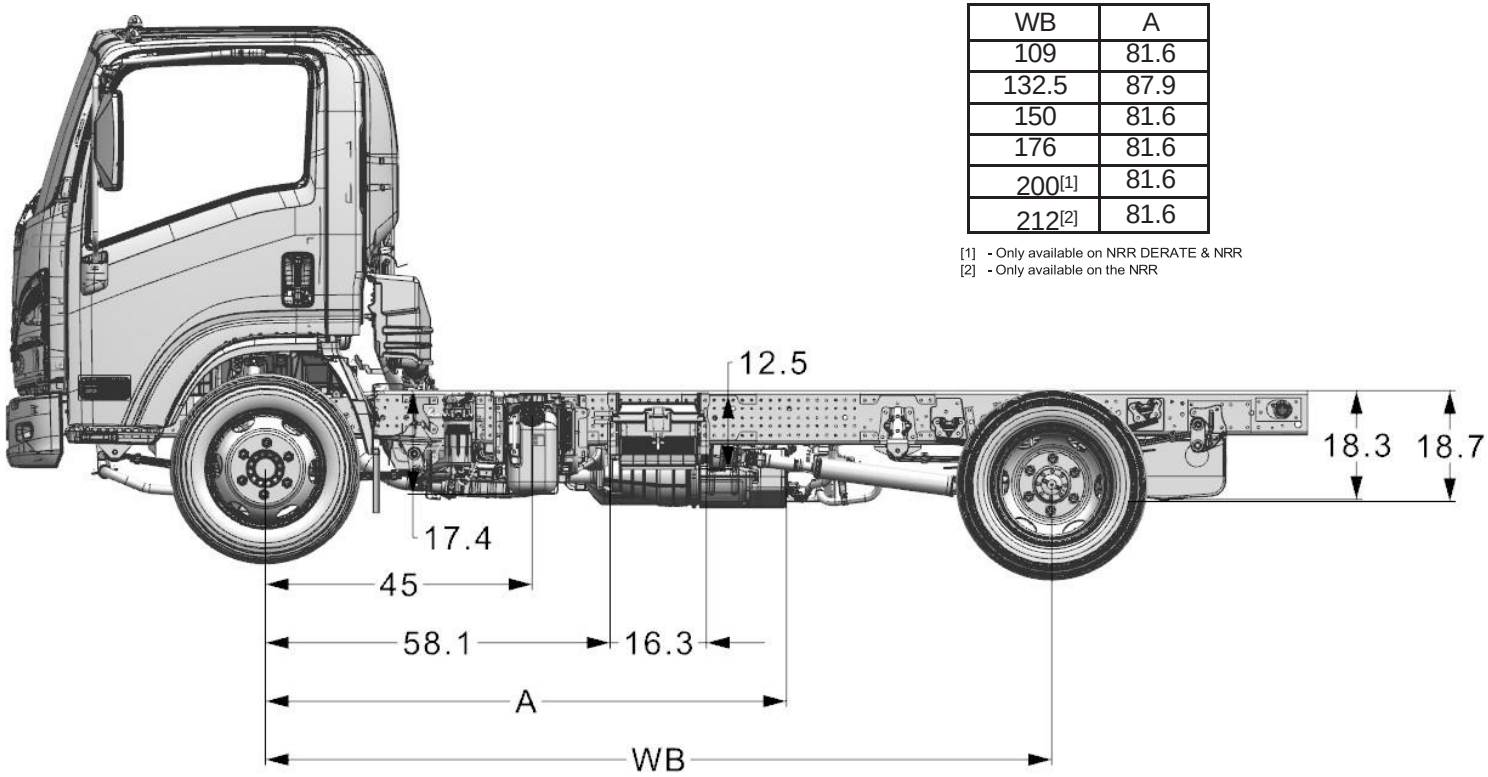



Figure 14

Note: Dimensions in inches

# 2025 Chevrolet Low Cab Forward

## Diesel Standard Cab - Right Side View

| WB | A |
|---|---|
| 109 | 44.0 |
| 132.5 | 50.3 |
| 150 | 44.0 |
| 176 | 44.0 |
| 200[1] | 44.0 |
| 212[2] | 44.0 |

[1] - Only available on NRR DERATE & NRR
[2] - Only available on the NRR

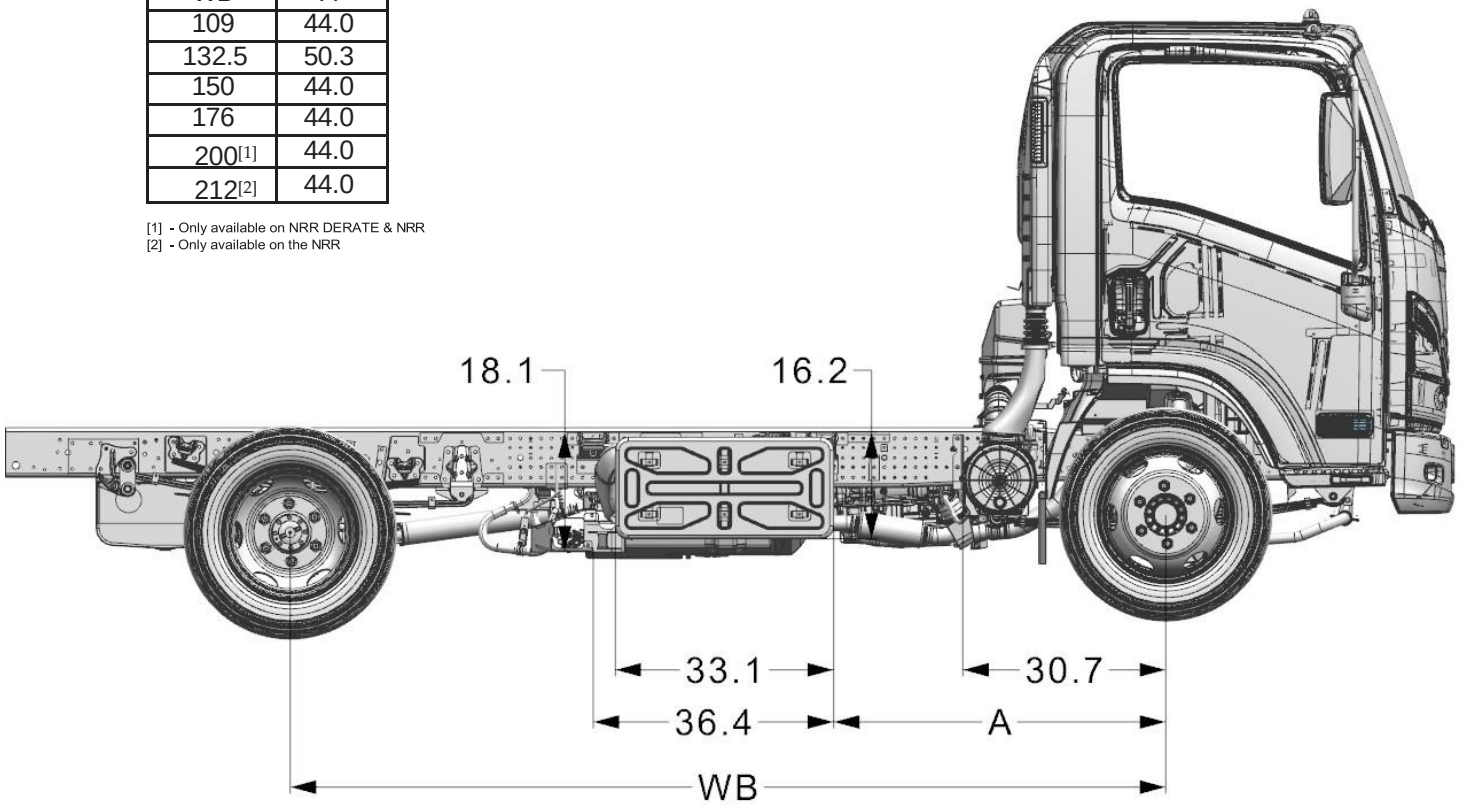



Figure 15

Note: Dimensions in inches

# 2025 Chevrolet Low Cab Forward

## Diesel Crew Cab - Top View

| WB | A | B |
|---|---|---|
| 150 | 103.7 | 67.0 |
| 176 | 111.1 | 76.5 |

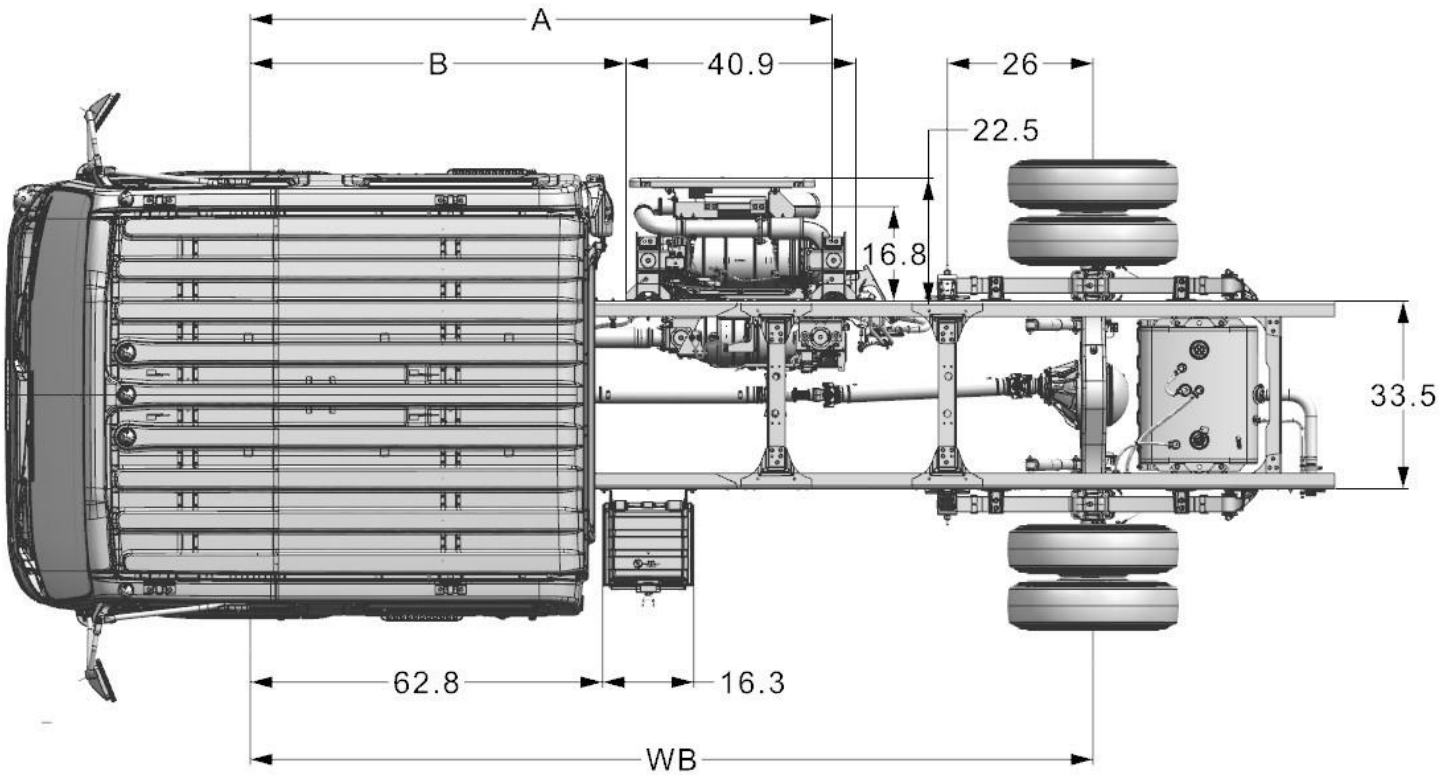



Figure 16

Note: Dimensions in inches

## Diesel Crew Cab - Left Side View

| WB | A |
|---|---|
| 150 | 104.3 |
| 176 | 113.8 |

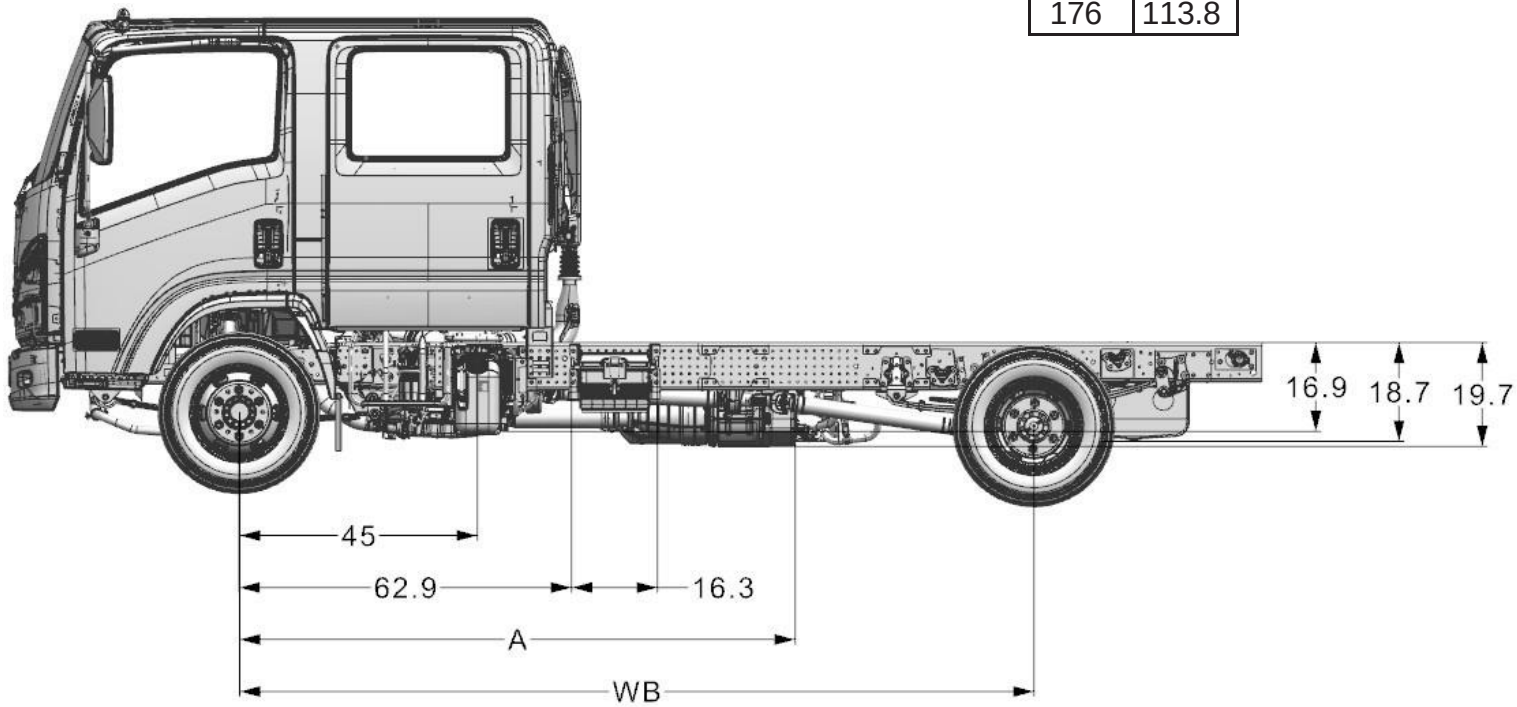



Figure 17

Note: Dimensions in inches

# 2025 Chevrolet Low Cab Forward

## Diesel Crew Cab - Right Side View

| WB | A |
|---|---|
| 150 | 67.6 |
| 176 | 77.1 |

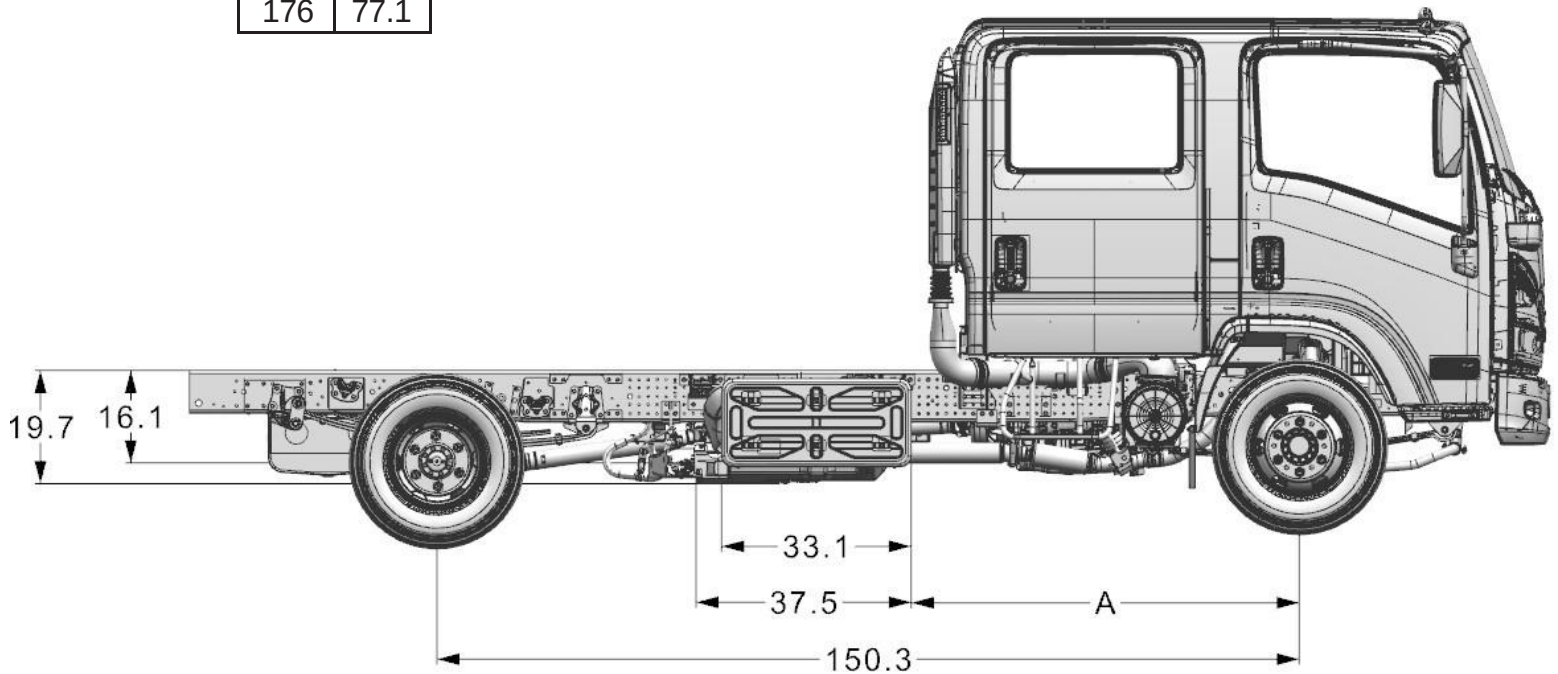



Figure 18

Note: Dimensions in inches

# 2025 Chevrolet Low Cab Forward

## Exhaust System Dimensions
## SCR / DPF 4HK1-TC

View from top of chassis

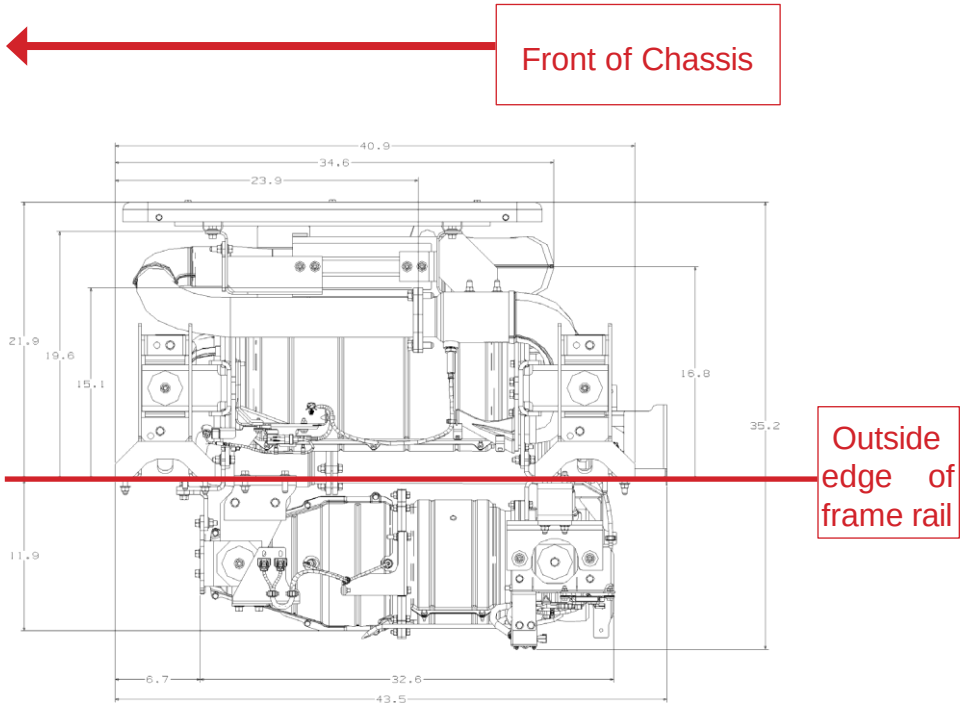



Figure 19

View from front to rear chassis

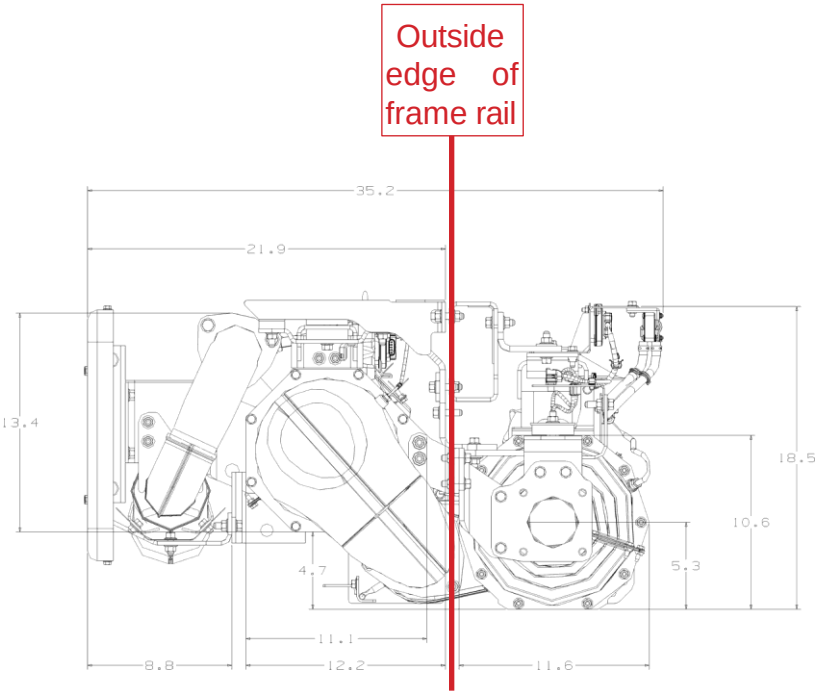



Figure 20

Note: Dimensions in inches

# 2025 Chevrolet Low Cab Forward

## 35 Gallon Aluminum Side Mounted Diesel Fuel Tank

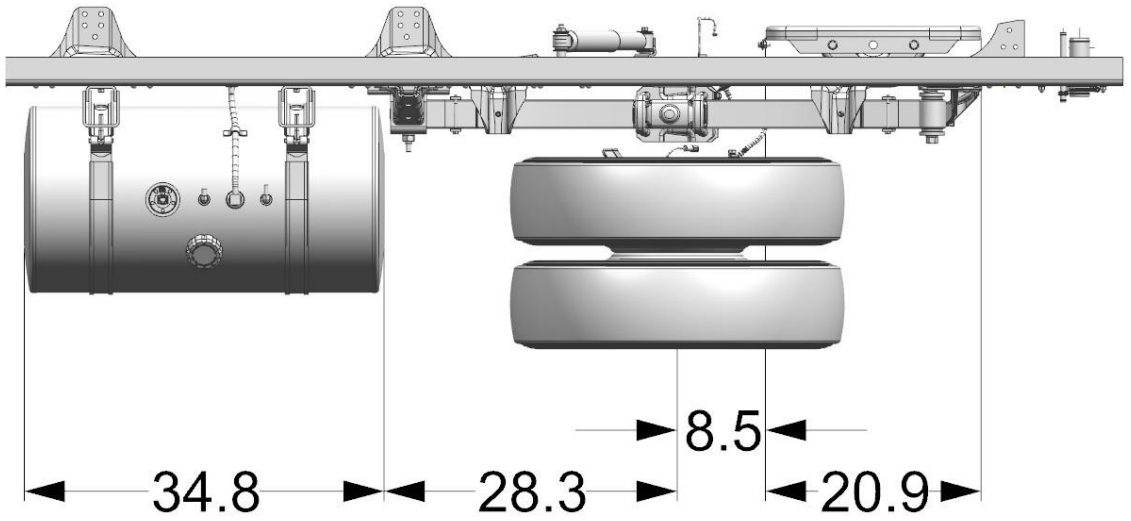



Figure 21

← Front of chassis

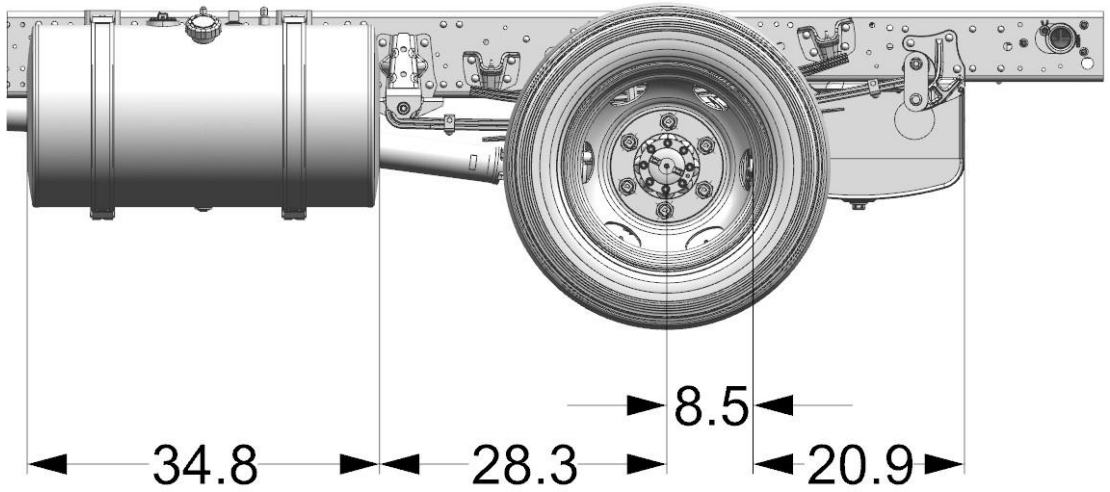



Figure 22

Note: Dimensions in inches

## 55 Gallon Aluminum Side Mounted Diesel Fuel Tank

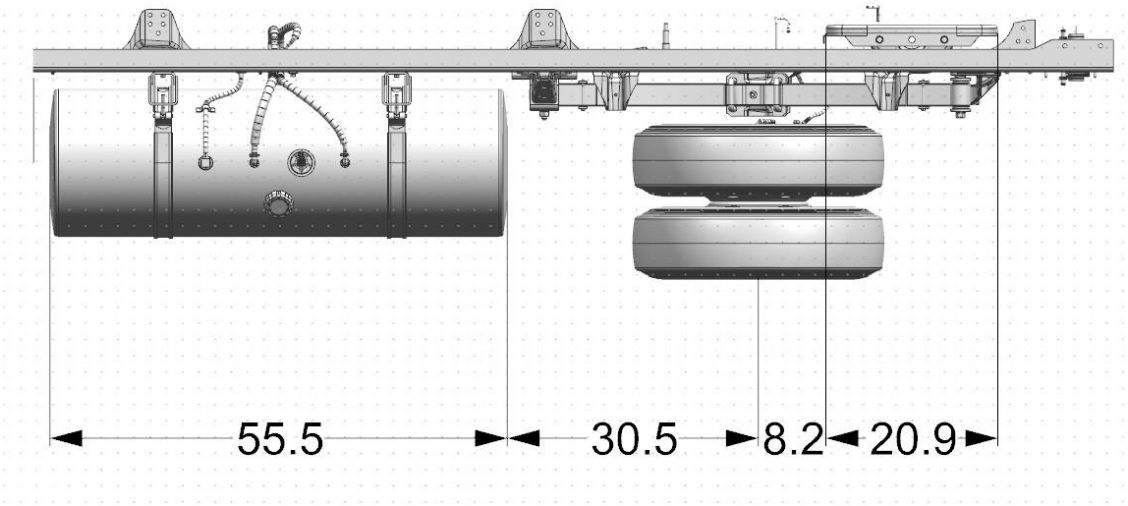



Figure 23

← Front of chassis

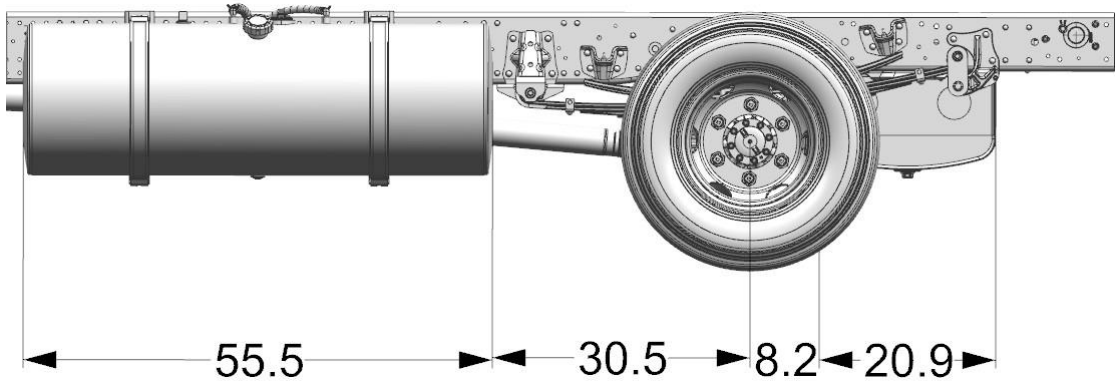



Figure 24

Note: Dimensions in inches

## 35 and 55 Gallon Side Mounted Fuel Tank Mounting Location and End View Dimensions

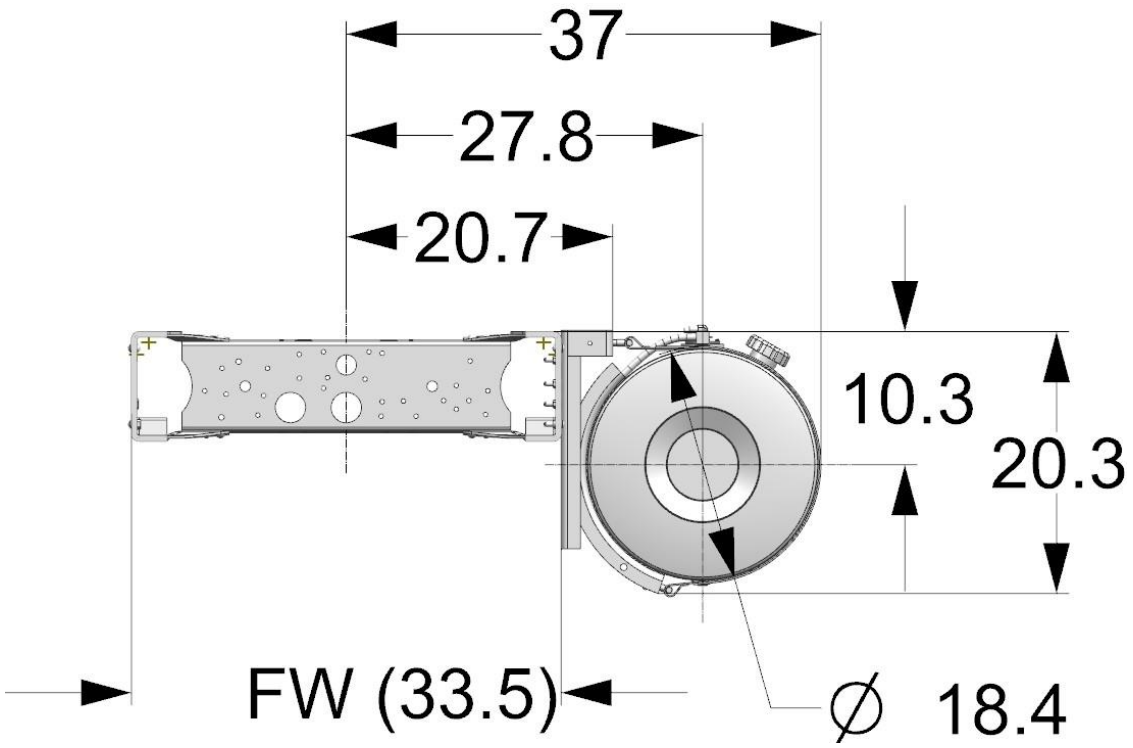



Figure 25

Note: Dimensions in inches

## Cab Tilt Diagram

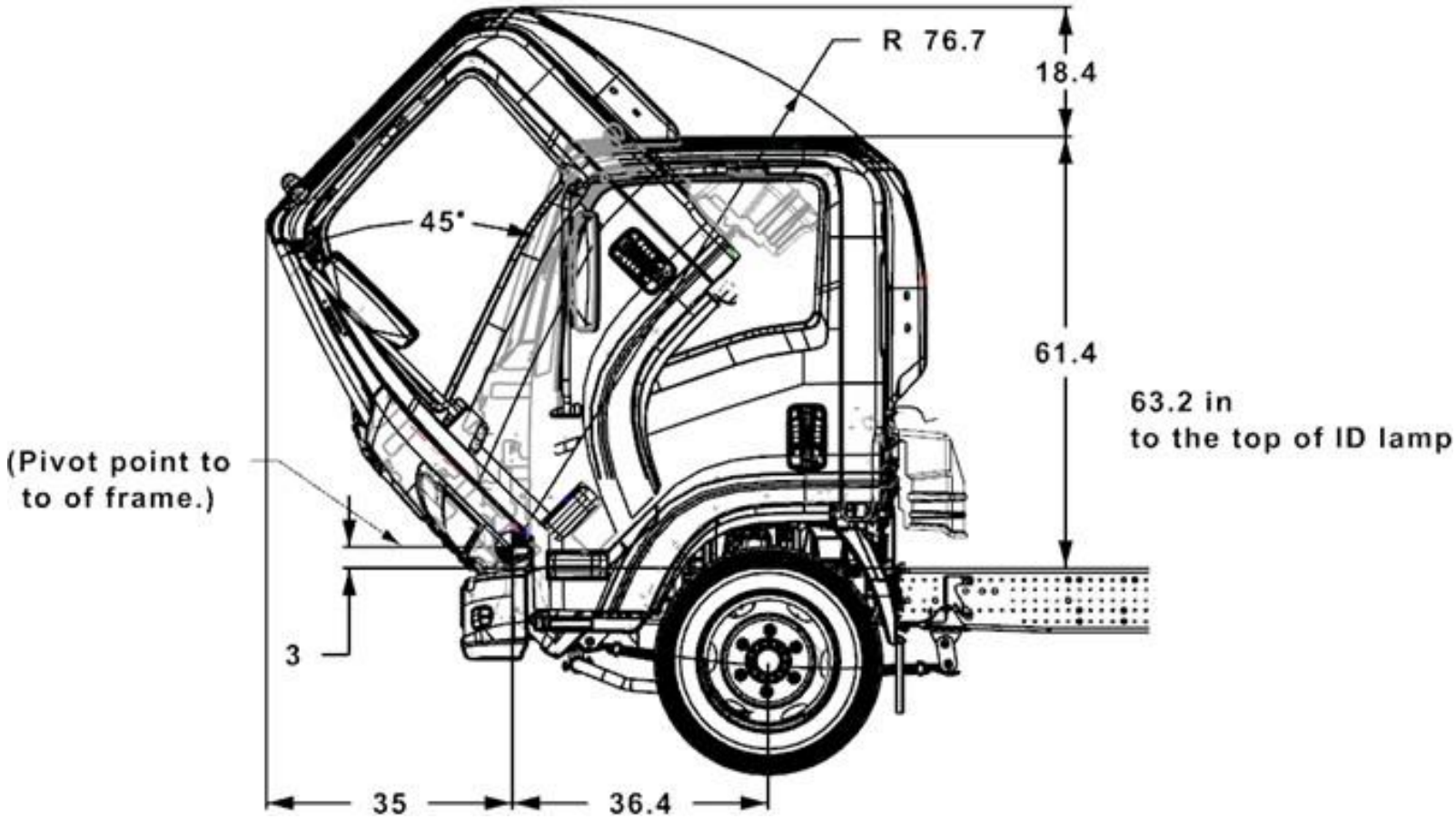



Figure 26

Note: Dimensions in inches

# 2025 Chevrolet Low Cab Forward

## Turning Diameter

**4500 HG (215/85R-16E Tire):**

**Turning Diameters (design value)**

| WB | B (ft) | C (ft) |
|---|---|---|
| | Curb to Curb | Wall to Wall |
| 109 | 31.5 | 37.1 |
| 132.5 | 38.7 | 44 |
| 150[3] | 42.7 | 48.9 |
| 176[3] | 51.2 | 56.4 |

The 4500 HG Diesel steering features a 49.5 degree inside wheel cut angle.

**4500 XD, 5500 XD DERATE & 5500 XD (225/70R-19.5F):**

**Turning Diameters (design value)**

| WB | B (ft) | C (ft) |
|---|---|---|
| | Curb to Curb | Wall to Wall |
| 109 | 32.8 | 38.7 |
| 132.5 | 40.0 | 44.9 |
| 150[3] | 45.3 | 50.2 |
| 176[3] | 52.5 | 58.1 |
| 200[1] | 61.0 | 67.2 |
| 212[2] | 66.0 | 73.0 |

[1] - Only available on 5500 XD DERATE & 5500 XD
[2] - Only available on the 5500 XD
[3] - Applies to both single and crew cab chassis

The 4500 XD, 5500 XD DERATE & 5500 XD Diesel steering features a 46.5 degree inside wheel cut angle.

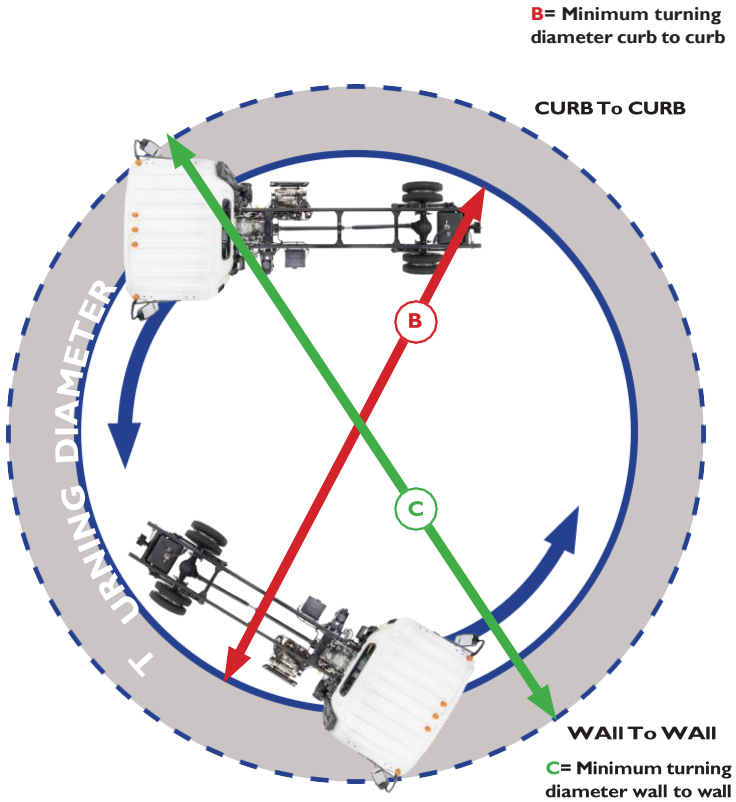



Figure 27

# 2025 Chevrolet Low Cab Forward

## Center of Gravity - STD CAB

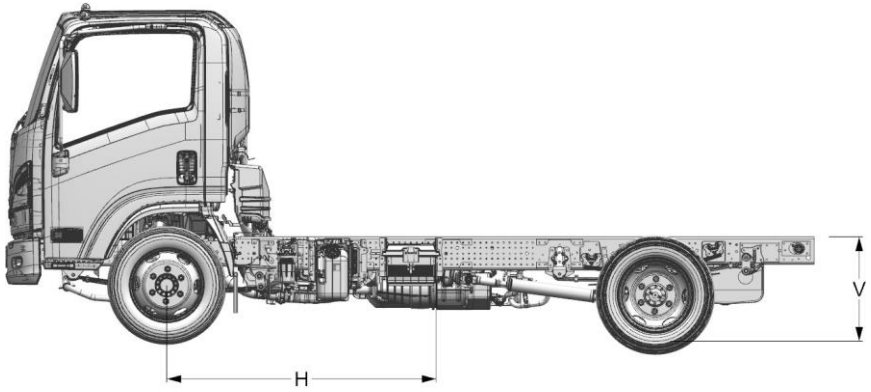



Figure 29

| Horizontal and Vertical Center of Gravity of Chassis - STD Cab | | | | | |
|---|---|---|---|---|---|
| Model | Wheelbase | Vertical CG - V - | Horizontal CG - H - In-Frame Fuel Tank | Horizontal CG - H - 35 gal. Side Fuel Tank | Horizontal CG - H - 55 gal. Side Fuel Tank |
| 4500 HD | 109 | 22.2 | 36.6 | - | - |
| | 132.5 | 22.1 | 43.8 | - | - |
| | 150 | 22 | 48.5 | 46.8 | - |
| | 176 | 22 | 55.7 | 54.0 | 50.0 |

| Horizontal and Vertical Center of Gravity of Chassis - STD Cab | | | | | |
|---|---|---|---|---|---|
| Model | Wheelbase | Vertical CG - V - | Horizontal CG - H - In-Frame Fuel Tank | Horizontal CG - H - 35 gal. Side Fuel Tank | Horizontal CG - H - 55 gal. Side Fuel Tank |
| 4500 XD | 109 | 23.5 | 38.2 | - | - |
| | 132.5 | 23.3 | 45.7 | - | - |
| | 150 | 23.3 | 50.8 | 49.2 | - |
| | 176 | 23.3 | 58.4 | 56.4 | 57.9 |

| Horizontal and Vertical Center of Gravity of Chassis - STD Cab | | | | | |
|---|---|---|---|---|---|
| Model | Wheelbase | Vertical CG - V - | Horizontal CG - H - In-Frame Fuel Tank | Horizontal CG - H - 35 gal. Side Fuel Tank | Horizontal CG - H - 55 gal. Side Fuel Tank |
| 5500 XD DR | 109 | 23.5 | 39.2 | - | - |
| | 132.5 | 23.3 | 47.0 | - | - |
| | 150 | 23.3 | 52.2 | 50.6 | - |
| | 176 | 23.3 | 60.1 | 58.1 | 59.5 |
| | 200 | 23.3 | 62.0 | - | - |

| Horizontal and Vertical Center of Gravity of Chassis - STD Cab | | | | | |
|---|---|---|---|---|---|
| Model | Wheelbase | Vertical CG - V - | Horizontal CG - H - In-Frame Fuel Tank | Horizontal CG - H - 35 gal. Side Fuel Tank | Horizontal CG - H - 55 gal. Side Fuel Tank |
| 5500 XD | 109 | 23.4 | 39.2 | - | - |
| | 132.5 | 23.3 | 47.0 | - | - |
| | 150 | 23.4 | 52.2 | 50.7 | - |
| | 176 | 23.4 | 60.1 | 58.1 | 59.6 |
| | 200 | 23.4 | 62.0 | - | - |
| | 212 | 23.2 | 62.2 | - | - |

The center of gravity of the completed vehicle with a full load should not exceed 63 inches above ground level at full GVWR and must be located horizontally between the centerlines of the front and rear axles.

NOTE: The Final Manufacturer must ensure that the combined vertical center of gravity of the chassis, body, and available payload at full GVW does not exceed the maximum vertical center of gravity outlined in the Incomplete Vehicle Document and the Body Builders.

The maximum dimensions for a body installed on the LCF chassis are 102 inches wide (outside*) by 91 inches high (inside). If approval is needed for larger body applications, please contact GM Upfitter.

* With 102 inches wide mirror brackets installed in place of standard mirror brackets

Note: Dimensions in inches

# 2025 Chevrolet Low Cab Forward

## Center of Gravity - Crew Cab

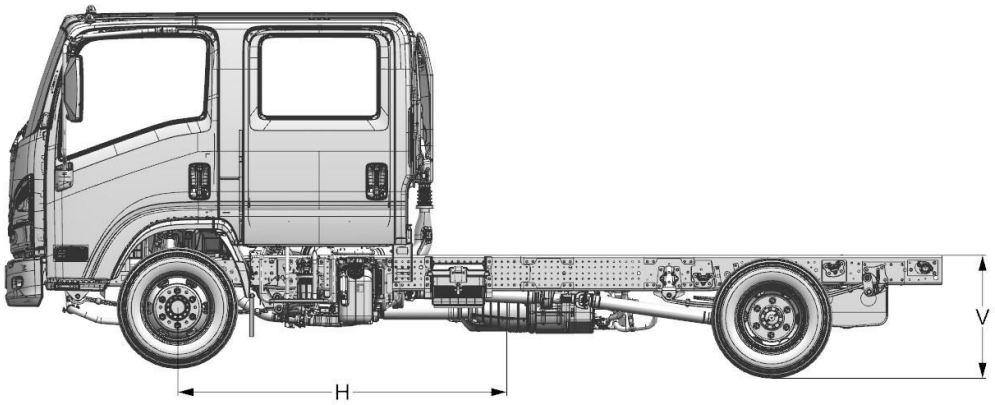



Figure 30

| Horizontal and Vertical Center of Gravity of Chassis - Crew Cab | | | | | |
|---|---|---|---|---|---|
| Model | Wheelbase | Vertical CG - V - | Horizontal CG - H - In-Frame Fuel Tank | Horizontal CG - H - 35 gal. Side Fuel Tank | Horizontal CG - H - 55 gal. Side Fuel Tank |
| 4500 HD | 150 | 25.3 | 49.2 | 47.7 | - |
| | 176 | 25.2 | 55.9 | 53.1 | 55.5 |

| Horizontal and Vertical Center of Gravity of Chassis - Crew Cab | | | | | |
|---|---|---|---|---|---|
| Model | Wheelbase | Vertical CG - V - | Horizontal CG - H - In-Frame Fuel Tank | Horizontal CG - H - 35 gal. Side Fuel Tank | Horizontal CG - H - 55 gal. Side Fuel Tank |
| 4500 XD | 150 | 25.3 | 51.2 | 49.8 | - |
| | 176 | 25.2 | 58.4 | 56.5 | 57.9 |

| Horizontal and Vertical Center of Gravity of Chassis - Crew Cab | | | | | |
|---|---|---|---|---|---|
| Model | Wheelbase | Vertical CG - V - | Horizontal CG - H - In-Frame Fuel Tank | Horizontal CG - H - 35 gal. Side Fuel Tank | Horizontal CG - H - 55 gal. Side Fuel Tank |
| 5500 XD DR | 150 | 25.3 | 52.5 | 51.1 | - |
| | 176 | 25.2 | 59.9 | 58.1 | 59.4 |

| Horizontal and Vertical Center of Gravity of Chassis - Crew Cab | | | | | |
|---|---|---|---|---|---|
| Model | Wheelbase | Vertical CG - V - | Horizontal CG - H - In-Frame Fuel Tank | Horizontal CG - H - 35 gal. Side Fuel Tank | Horizontal CG - H - 55 gal. Side Fuel Tank |
| 5500 XD | 150 | 25.3 | 52.6 | 51.1 | - |
| | 176 | 25.2 | 60.0 | 58.1 | 59.5 |

The center of gravity of the completed vehicle with a full load should not exceed 63 inches above ground level at full GVWR and must be located horizontally between the centerlines of the front and rear axles.

NOTE: The Final Manufacturer must ensure that the combined vertical center of gravity of the chassis, body, and available payload at full GVW does not exceed the maximum vertical center of gravity outlined in the Incomplete Vehicle Document and the Body Builders.

The maximum dimensions for a body installed on the LCF chassis are 102 inches wide (outside*) by 91 inches high (inside). If approval is needed for larger body applications, please contact GM Upfitter.

Note: Dimensions in inches

* With 102 inches wide mirror brackets installed in place of standard mirror brackets

## Front Axle Chart

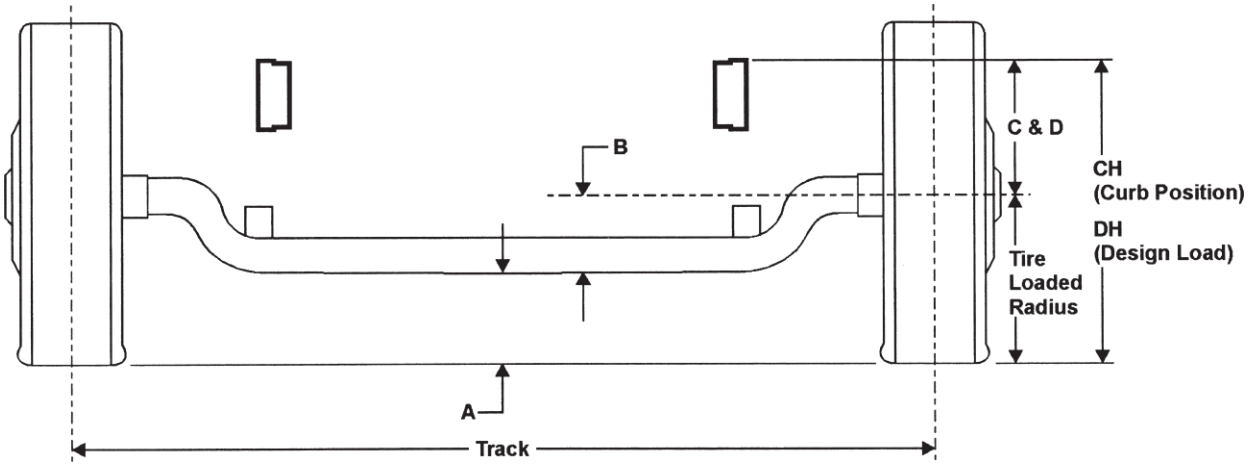



Figure 31

Formulas for calculating height dimensions:

A = Tire Loaded Radius – B
*C* = *Centerline of Axle to Top of Frame Rail at Curb Position*
*D* = *Centerline of Axle to Top of Frame Rail at Design Load*
CH = C + Tire Unloaded Radius
DH = D + Tire Loaded Radius

| Model | Tire | GVWR | GAWR | A | B | C | D | CH | DH | Track | Tire Radius | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | | | Unloaded | Loaded |
| 4500 HD | 215/85 R 16-E | 14,500 lbs. | 5,360 lbs. | 7.5 | 6.6 | 12.8 | 11.7 | 27.4 | 25.8 | 65.5 | 14.6 | 14.1 |
| 4500 XD | 225/70R 19.5F | 16,000 lbs. | 6,630 lbs. | 8.3 | 6.6 | 13 | 11.5 | 29 | 26.4 | 65.5 | 16 | 14.93 |
| 5500 XD DERATE | 225/70R 19.5F | 17,950 lbs. | 6,830 lbs. | 8.3 | 6.6 | 12.3 | 11.5 | 28.3 | 26.4 | 65.5 | 16 | 14.91 |
| 5500 XD | 225/70R 19.5F | 19,500 lbs. | 7,275 lbs. | 8.3 | 6.6 | 12.3 | 11.5 | 28.3 | 26.4 | 65.5 | 16 | 14.91 |

Figure 32

Note: Dimensions in inches

# Rear Axle Chart

| Definitions | |
|---|---|
| A | Centerline of axle to bottom of axle bowl. |
| B | Centerline of axle to top of frame rail at metal---to---metal position. |
| C | Centerline of axle to top of frame rail at curb position. |
| D | Centerline of axle to top of frame rail at design load. |
| E | Rear Tire Clearance: Maximum clearance required for tires and chain measured from top of the frame at the vehicle centerline of the rear axle, when rear wheels on one side ride over a high spot. |
| CH | Rear Frame Height (Curb Load): Vertical distance between the normal top of frame rail and the ground---line through the centerline of the rear axle at curb position. |
| DH | Rear Frame Height (Design Load): Vertical distance between the normal top of frame rail and the ground---line through the centerline of the rear axle at design position. |
| DW | Minimum distance between the inner surfaces of the rear tires. |
| EW | Minimum Rear Width: Overall width of the vehicle measured at the outermost surfaces of the rear tires. |
| HH | Rear Tire Clearance: Minimum clearance between the rear axle and the ground---line. |
| HW | Dual Tire Spacing: Distance between the centerlines of the tires in a set of dual tires. |
| KH | Tire Bounce Clearance: Minimum distance required for tire bounce as measured from the centerline of the rear axle and the top of the rear tire when one wheel rides over a high spot. |
| CW | Track Dual Rear Wheel Vehicle: Distance between the centerlines of the dual wheels measured at the ground---line. |
| KW | Clearance between body and tires. |
| **Equations** | |
| CH | = Tire loaded radius + C |
| DH | = Tire loaded radius + D |
| DW | = CW + 2 tire sections --- tire clearance |
| EW | = CW + 2 tire sections + tire clearance |
| HH | = Tire loaded radius --- A |
| JH | = KH --- B |
| KH | = Tire radius + 3.0 inches |
| KW | = DW --- 5.0 inches |
| LW | = 1.0 inch minimum clearance between tires and springs |

**Values**

| Model | Tire | GAWR | CW | A | B | C | D | E |
|---|---|---|---|---|---|---|---|---|
| 4500 HD | 215/85R 16-E | 9,880 lbs. | 65.0 | 6.5 | 9.3 | 15.4 | 13.0 | 7.8 |
| 4500 XD | 225/70R 19.5F | 11,020 lbs. | 65.7 | 7.7 | 9.3 | 15.3 | 13.4 | 8.4 |
| 5500 XD DERATE | 225/70R 19.5F | 12,980 lbs. | 65.7 | 7.7 | 9.3 | 15.6 | 13.4 | 8.4 |
| 5500 XD | 225/70R 19.5F | 13,660 lbs. | 65.7 | 7.7 | 9.3 | 15.6 | 13.4 | 8.4 |

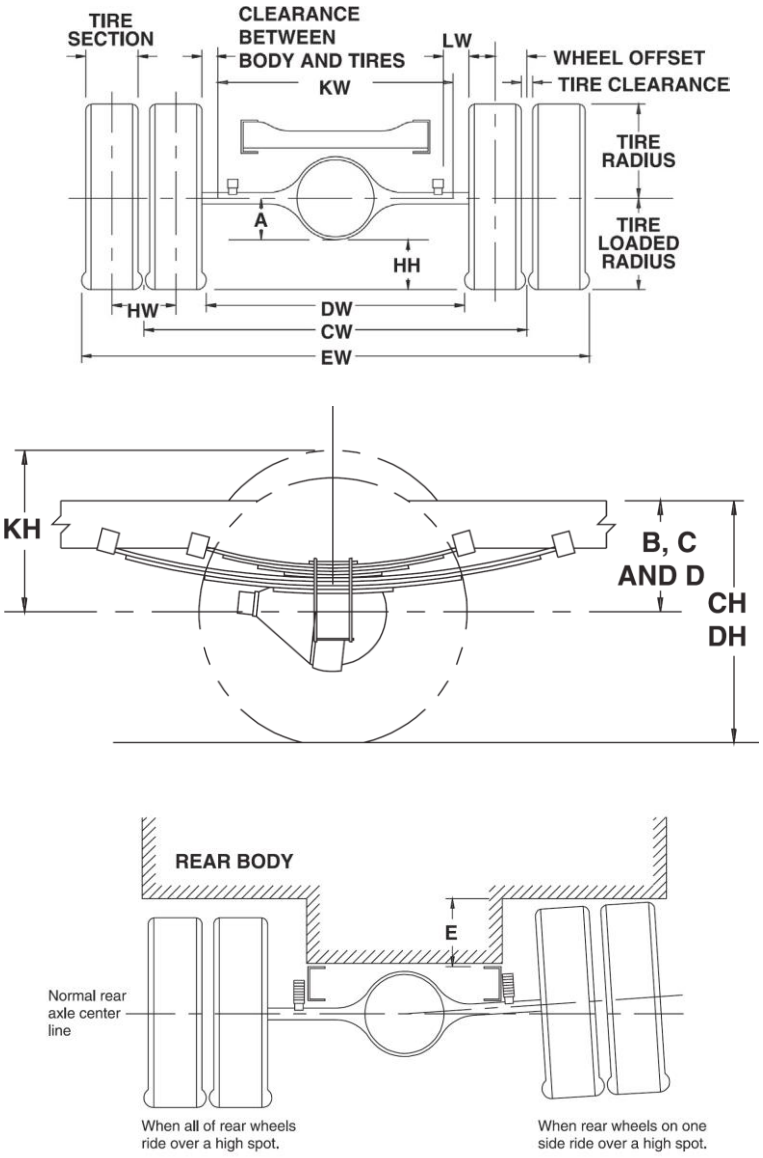



Figure 33

Note: Dimensions in inches

## Suspension Deflection Charts

4500 HD

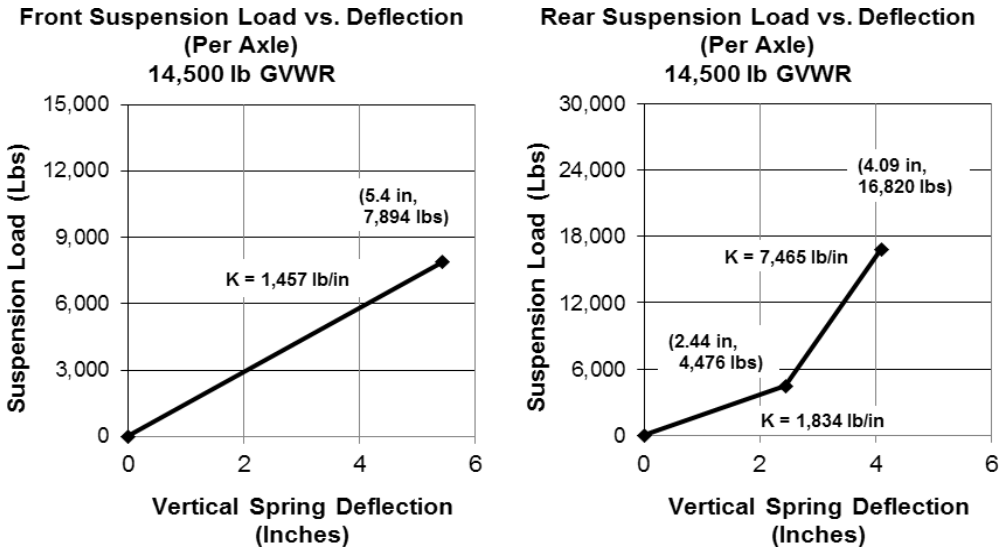



Figure 34

4500 XD

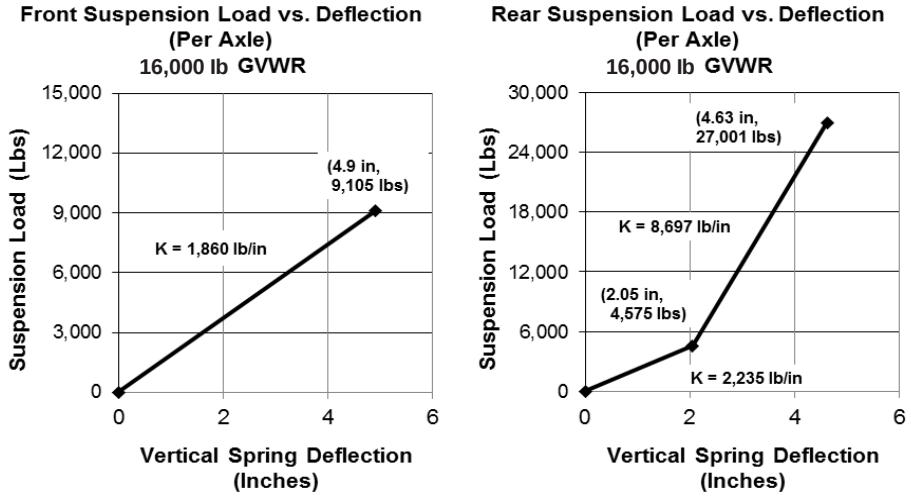



Figure 35

## Suspension Deflection Charts

5500 XD DERATE

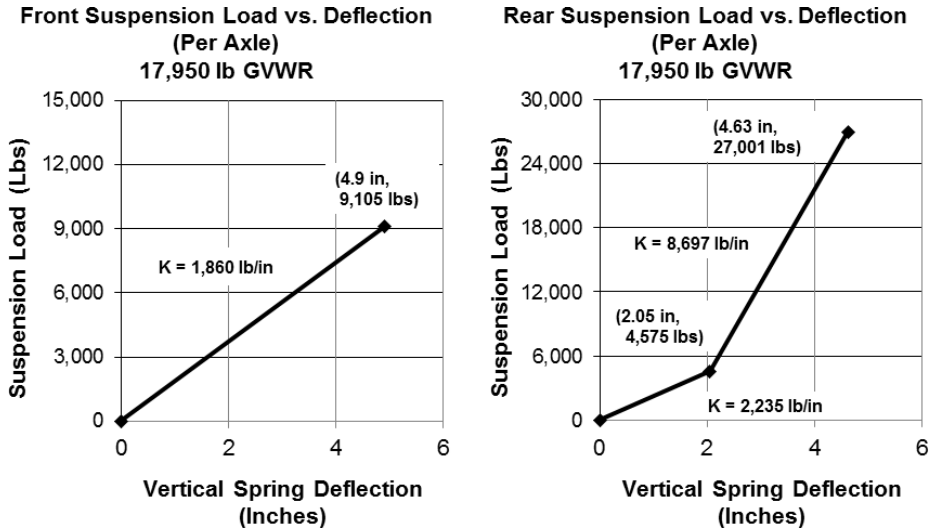



Figure 36

5500 XD

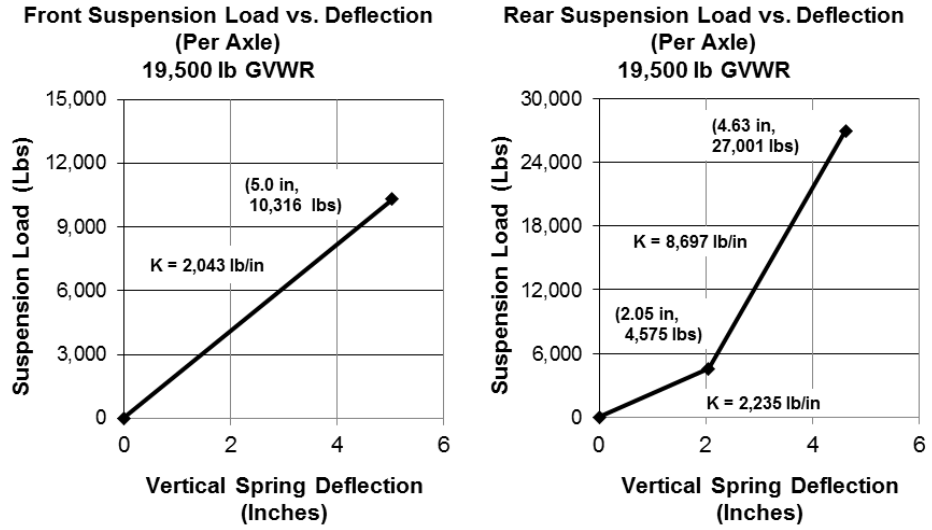



Figure 37

# 2025 Chevrolet Low Cab Forward

## Tire and Disc Wheel Chart

### *Tire*

| Model | Tire Size | GVWR (lbs.) | Tire Load Limit and Cold Inflation Pressures | | | | Maximum Tire Load Limits (lbs.) | |
|---|---|---|---|---|---|---|---|---|
| | | | Single | | Dual | | Front | Rear |
| | | | LBS. | PSI | LBS. | PSI | 2 Single | 4 Dual |
| 4500 HD | 215/85R-16E | 14,500 | 2,680 | 80 | 2,470 | 80 | 5,360 | 9,880 |
| 4500 XD | 225/70R-19.5F | 16,000 | 3,315 | 85 | 3,115 | 85 | 6,630 | 12,460 |
| 5500 XD DERATE | 225/70R-19.5F | 17,950 | 3,640 | 95 | 3,415 | 95 | 7,280 | 13,660 |
| 5500 XD | 225/70R-19.5F | 19,500 | 3,640 | 95 | 3,415 | 95 | 7,280 | 13,660 |

Figure 38

| Model | Tire Size | GVWR (lbs.) | Tire Radius | | | | Tire Section Width | Tire Clearance | Design Rim Width |
|---|---|---|---|---|---|---|---|---|---|
| | | | Loaded | | Unloaded | | | | |
| | | | Front | Rear | Front | Rear | | | |
| 4500 HD | 215/85R-16E | 14,500 | 14.1 | 14.1 | 14.6 | 14.6 | 8.2 | 1.8 | 6.0 |
| 4500 XD | 225/70R-19.5F | 16,000 | 14.93 | 14.98 | 16 | 16 | 8.7 | 1.3 | 6.0 |
| 5500 XD DERATE | 225/70R-19.5F | 17,950 | 14.91 | 14.96 | 16 | 16 | 8.7 | 1.3 | 6.0 |
| 5500 XD | 225/70R-19.5F | 19,500 | 14.91 | 14.96 | 16 | 16 | 8.7 | 1.3 | 6.0 |

Figure 39

### *Disc Wheel*

| Wheel Size | Bolt Holes | Bolt Circle Dia. | Ft./Rr. Nut Size* | Rear Stud Size* | Nut/Stud Torque Specs. | Inner Circle | Outside Offset | Disc Thickness | Rim Type | Material Mfg. |
|---|---|---|---|---|---|---|---|---|---|---|
| 16 x 6 K | 6 JIS | 8.75 | 1.6142 (41 mm) BUD HEX | 0.8268 (21 mm) SQUARE | 325 ft-lb. (440 N•M) | 6.46 | 5.0 | 0.37 | 5° DC | Steel TOPY |
| 19.5 x 6.00 K | 6 JIS | 8.75 | 1.6142 (41 mm) BUD HEX | 0.8268 (21 mm) SQUARE | 325 ft-lb. (440 N•M) | 6.46 | 5.0 | 0.35 | 15° DC | Steel TOPY |

*O.D. Wrench Sizes

Figure 40

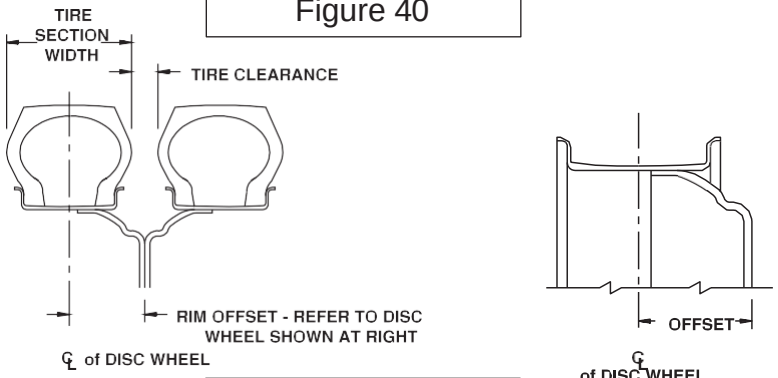
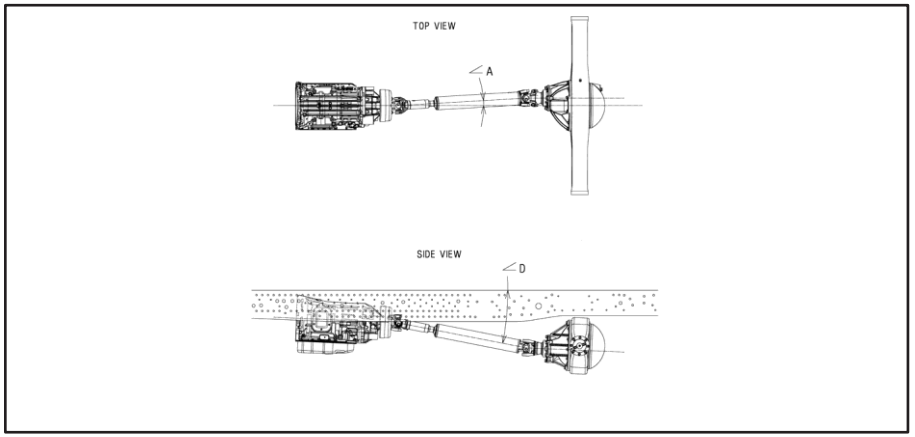
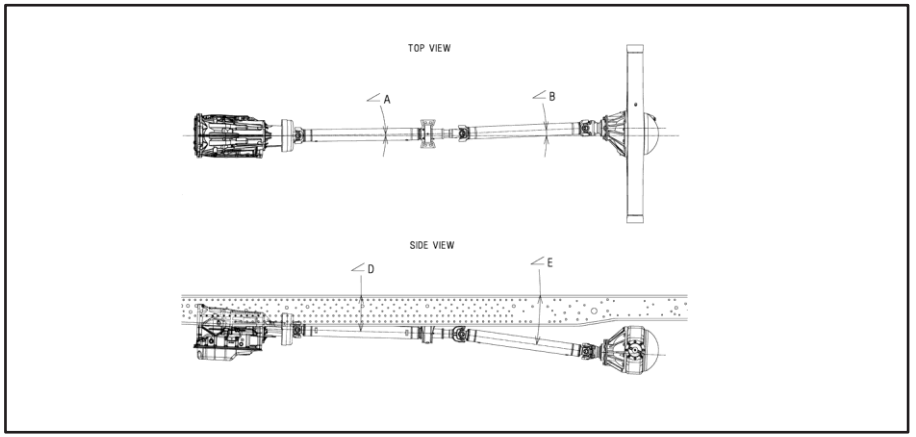


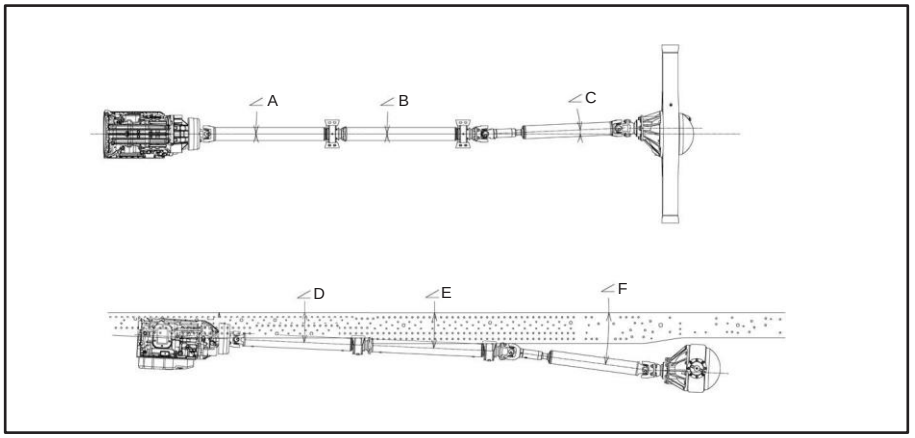

Figure 41

Note: Dimensions in inches

## Propeller Shaft




| Wheelbase (in.) | Top View | | | Side View | | | | |
|---|---|---|---|---|---|---|---|---|
| | ∠A | ∠B | ∠C | ∠D | ∠E | ∠F | Trans. | Rear Axle |
| 109 | 2.4º | - | - | 10.6º | - | - | 2.5º | 2.5º |
| 132.5 | 0º | 3.2º | - | 5.4º | 7.7º | - | 2.5º | 2.5º |
| 150 | 0º | 2.7 | - | 2.6º | 8.2º | - | 2.5º | 2.5º |
| 176 | 0.3º | 2.0º | - | 1.9º | 5.8º | - | 2.5º | 2.5º |
| 200[1] | 0º | 0.2º | 2.1º | 2.3º | 3.3º | 3.5º | 2.5º | 2.5º |
| 212[2] | 0º | 0.1º | 2.1º | 2.3º | 1.6º | 4.0º | 2.5º | 2.5º |

[1] - Only available on 5500 XD DERATE & 5500 XD
[2] - Only available on the 5500 XD

Figure 42

**Note:** 1. Angles provided in table are relative to the frame angle. Please take this into consideration for service measurements.
2. Driveline angles are based on the chassis curb weight which includes standard fuel but no driver, body, or payload.

# 2025 Chevrolet Low Cab Forward

## Propeller Shaft Continued

| Wheelbase | 109 | 132.5 | 150 | 176 | 200[1] | 212[2] |
|---|---|---|---|---|---|---|
| | | | | | | |
| No. of Shafts | 1 | 2 | 2 | 2 | 3 | 3 |
| Shaft #1 O.D. | 3.54 | 3.54 | 3.54 | 3.54 | 3.54 | 3.54 |
| Thickness | 0.091 | 0.126 | 0.091 | 0.126 | 0.126 | 0.126 |
| Length | 37.42 | 22.64 | 44.26 | 49.69 | 49.69 | 49.69 |
| Type | A | B | B | B | B | B |
| | | | | | | |
| Shaft #2 O.D. | N/A | 3.54 | 3.54 | 3.54 | 3.54 | 3.54 |
| Thickness | N/A | 0.126 | 0.091 | 0.126 | 0.126 | 0.126 |
| Length | N/A | 36.53 | 34.17 | 52.93 | 23.93 | 35.68 |
| Type | N/A | C | C | C | B | B |
| | | | | | | |
| Shaft #3 O.D. | N/A | N/A | N/A | N/A | 3.54 | 3.54 |
| Thickness | N/A | N/A | N/A | N/A | 0.126 | 0.126 |
| Length | N/A | N/A | N/A | N/A | 52.93 | 53.01 |
| Type | N/A | N/A | N/A | N/A | C | C |

Figure 43

[1] - Only available on 5500 XD DERATE & 5500 XD
[2] - Only available on the 5500 XD

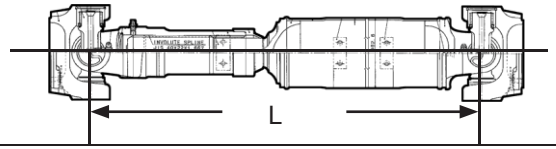
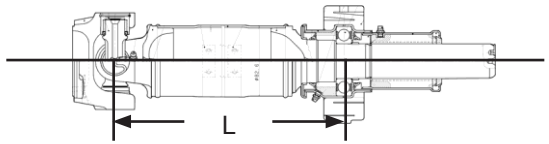
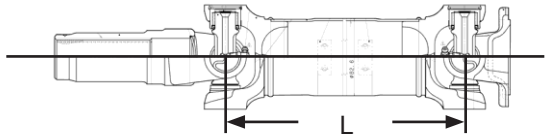
| Type | Description | Illustration |
|---|---|---|
| Type **A** | 1st shaft in 1-piece driveline |   |
| Type **B** | 1st shaft in 2-piece driveline |   |
| Type **C** | 2nd shaft in 2-piece driveline |   |

Figure 44

Note: Dimensions in inches

# Brake System Diagram - 14,500 & 16,000 GVW

***Vacuum Over Hydraulic***

Please refer to Introduction Section of book for antilock system cautions and wheelbase modification requirements.

**Previous Model Year Shown. Update Coming Soon**

**Legend**

(1) Electronic Hydraulic Control Unit (EHCU)
(2) Rear Brake
(3) Vacuum Pump
(4) Check Valve
(5) Exhaust Brake Valve
(6) Magnetic Valve
(7) Exhaust Brake
(8) Check Valve (One-way Valve)
(9) Vacuum Tank
(10) Vacuum Sensor
(11) Vacuum Booster (Servo Unit)
(12) Master Cylinder
(13) Brake Fluid Reservoir
(14) Front Brake

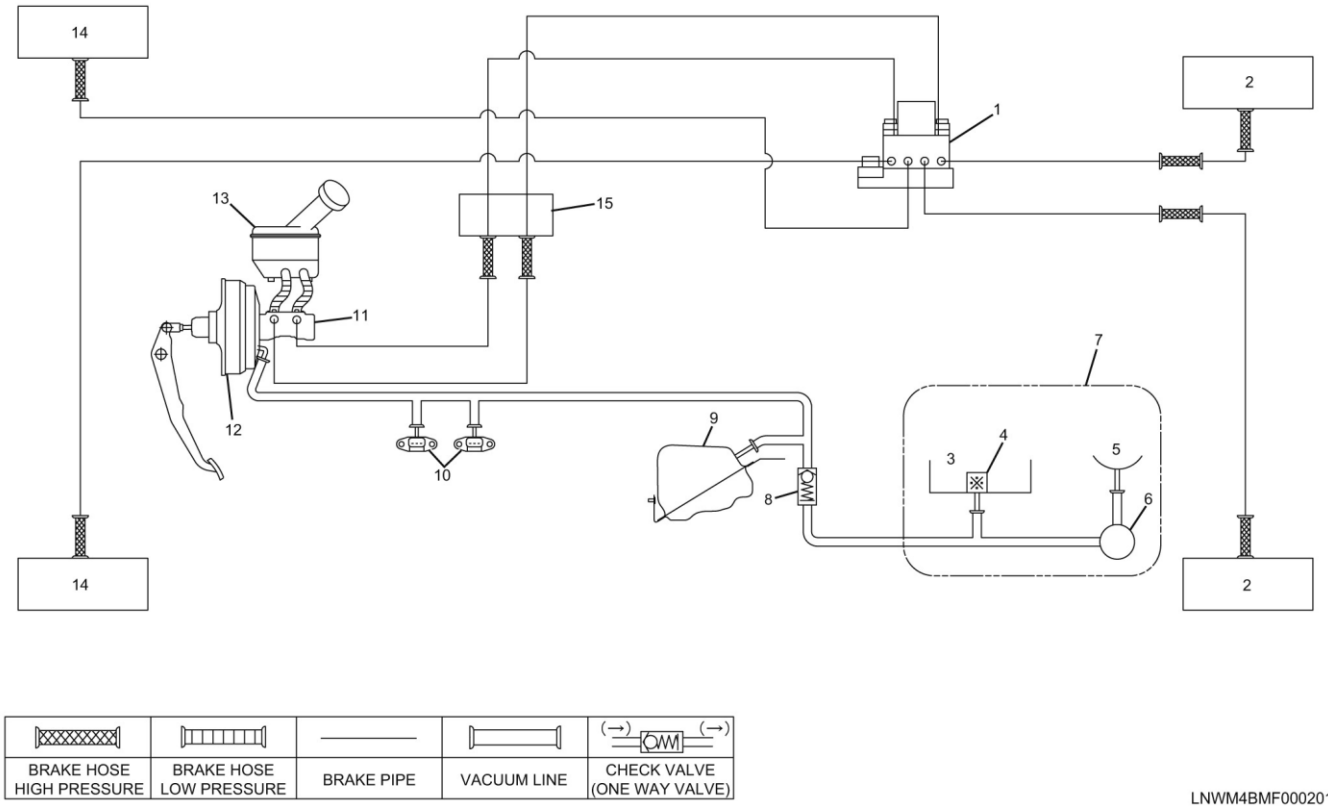


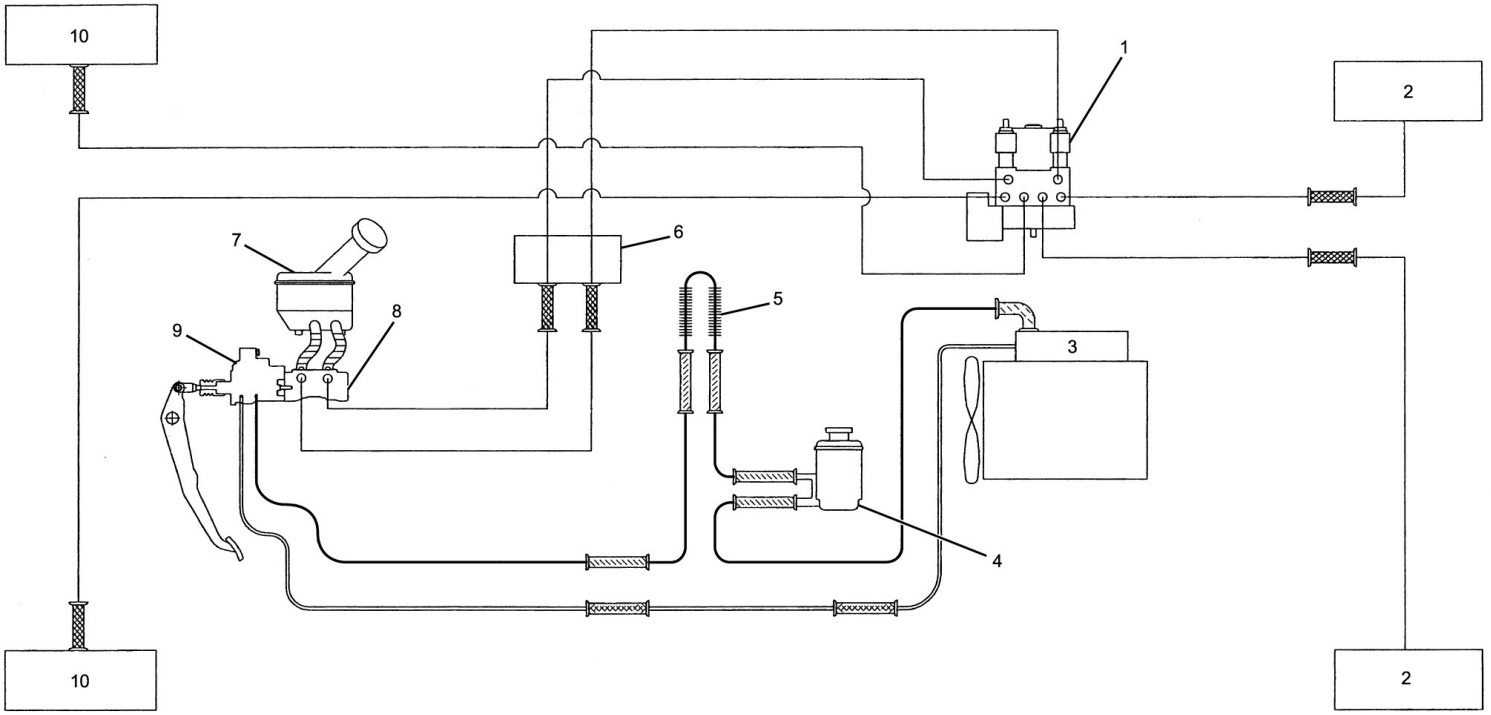

Figure 45

# Brake System Diagram - 17,950 & 19,500 GVW

***Vacuum Over Hydraulic***

Please refer to Introduction Section of book for antilock system cautions and wheelbase modification requirements.

**Previous Model Year Shown. Update Coming Soon**




**Legend**

(1) Electronic Hydraulic Control Unit (EHCU)
(2) Rear Brake
(3) Hydraulic Booster Oil Pump
(4) Hydraulic Booster Reservoir
(5) Cooler Pipe
(6) Pipe Connector
(7) Brake Fluid Reservoir
(8) Master Cylinder
(9) Hydraulic Booster Unit
(10) Front Brake

LNWC5AMF000301

Figure 46

# 2025 Chevrolet Low Cab Forward



## Chassis Specifications

| Model | 6500 XD |
|---|---|
| GVWR/GCWR | 25,950 lbs. / 30,000 lbs. |
| WB | 152 in., 170 in., 188 in., 200 in., 212 in., 224 in., 236 in., 248 in. |
| Engine | Cummins B6.7 diesel engine, 6-cylinder, turbocharged, inter-cooled, EGR cooler, high pressure common rail fuel system, and single module aftertreatment. |
| Model/Displacement | B6.7 / 408 CID (6.7L) |
| HP (Gross) | 260 HP at 2400 RPM |
| Torque (Gross) | 660 lb.-ft. torque at 1600 RPM with automatic transmission |
| Equipment | Dry element air cleaner with vertical intake; 1 row 748 $in^2$ radiator; 11 blade 24.8in diameter fan with electro-viscous drive. Cold weather starting device and an oil cooler. Engine oil level check switch and light. Engine warning system with audible warning for low oil pressure, high coolant temperature, and low coolant level. Engine cruise control function, coolant temperature, and low coolant level. Engine cruise control function. |
| Transmission | Allison 2550 RDS 6 speed automatic transmission. A single PTO opening on the left hand side of the transmission with a maximum torque value of 250 lb-ft. |
| Steering | Integral power steering. Tilt and Telescoping steering column. Steering ratio of 22.4:1 |
| Front GAWR | 11R22.5G tires - 12,000 lbs.; 255/70R22.5H tires - 11,000 lbs. |
| Front Axle | Dana E-1254W reverse Elliot “I”-Beam type steer axle rated at 12,000 lbs. |
| Front Suspension | Semi-elliptical steel alloy tapered leaf springs with stabilizer bar and shock absorbers, rated at 12,000 lbs. |
| Rear GAWR | 19,000 lbs. |
| Rear Axle | Dana S19-140 single-speed, 19,000 lbs. capacity drive axle. |
| Rear Suspension | Semi-elliptical steel alloy multi-leaf springs rated at 21,000 lbs. |
| | Air spring suspension with single leveling valve, dual shock absorbers, and an in cab dump/fill switch rated at 23,000 lbs. |
| Wheels | 22.5 x 8.25 inch 10 hole disc wheels, painted white.; 22.5 x 8.25 inch 10 hole aluminum disc wheels. |
| Tires | 11R22.5G LRR (Low Rolling Resistance) tubeless steel belted radials, premium highway front tread and premium highway traction rear tread. |
| | 255/70R22.5H LRR (Low Rolling Resistance) Low Profile, tubeless steel belted radials, premium highway front tread and premium highway traction rear tread. |
| Brakes | Dual circuit S-CAM drum air service brakes with 4 channel anti-lock brake system. An air operated exhaust brake, air controlled parking brake, heated air dryer, and automatic slack adjusters are standard. |
| Fuel Tank | 50 / 100 gal. (depending on chassis wheelbase) rectangular aluminum fuel tank mounted on left hand frame. Includes a fuel water separator with indicator light. |
| Frame | Ladder type channel section straight frame rail, 33.5 in wide along the total length of the frame. Yield strength 80,000 psi; Section Modulus 12.69 cub. In, RBM 1,015,000 lb-in |
| Cab | All steel low cab forward, BBC 81.5 in, 45-degree mechanical tilt with torsion assist. |
| Cab Equipment | TRICOT breathable cloth covered high back air ride driver’s seat with rigid passenger seat and center seat with fold down back. Dual cab mounted exterior mirrors with integral convex mirror and a right hand side mounted side cross mirror. Tilt and telescoping steering column. Power windows and door locks, floor mats, tinted glass, AM/FM/CD stereo radio with Bluetooth. Rear body dome lamp switch. Cab latch switch with indicator and buzzer. |
| Electrical | 12 Volt, negative ground, dual maintenance free batteries with threaded posts, 750 CCA each, 160 Amp alternator with integral regulator. |
| Options | See page 3 for options |

NOTE: These selected specifications are subject to change without notice.

# 2025 Chevrolet Low Cab Forward



## Chassis Specifications

| Model | 7500 XD |
|---|---|
| GVWR/GCWR | 33,000 lbs. / 33,000 lbs. |
| WB | 152 in., 170 in., 188 in., 200 in., 212 in., 224 in., 236 in., 248 in. |
| Engine | Cummins B6.7 diesel engine, 6-cylinder, turbocharged, inter-cooled, EGR cooler, high pressure common rail fuel system, and single module aftertreatment. |
| Model/Displacement | B6.7 / 408 CID (6.7L) |
| HP (Gross) | 260 HP at 2400 RPM |
| Torque (Gross) | 660 lb.-ft. torque at 1600 RPM with automatic transmission |
| Equipment | Dry element air cleaner with vertical intake; 1 row 748 $in^2$ radiator; 11 blade 24.8in diameter fan with electro-viscous drive. Cold weather starting device and an oil cooler. Engine oil level check switch and light. Engine warning system with audible warning for low oil pressure, high coolant temperature, and low coolant level. Engine cruise control function, coolant temperature, and low coolant level. Engine cruise control function. |
| Transmission | Allison 2500 RDS 6 speed automatic transmission. A single PTO opening on the left hand side of the transmission with a maximum torque value of 250 lb-ft. |
| Steering | Integral power steering. Tilt and Telescoping steering column. Steering ratio of 22.4:1 |
| Front GAWR | 11R22.5G tires - 12,000 lbs. |
| Front Axle | Dana E-1254W reverse Elliot “I”-Beam type steer axle rated at 12,000 lbs. |
| Front Suspension | Semi-elliptical steel alloy tapered leaf springs with stabilizer bar and shock absorbers, rated at 12,000 lbs. |
| Rear GAWR | 21,000 lbs. |
| Rear Axle | Dana S21-140 single-speed, 21,000 lbs. capacity drive axle. |
| Rear Suspension | Semi-elliptical steel alloy multi-leaf springs rated at 21,000 lbs. |
| | Air spring suspension with single leveling valve, dual shock absorbers, and an in cab dump/fill switch rated at 23,000 lbs. |
| Wheels | 22.5 x 8.25 inch 10 hole disc wheels, painted white.; 22.5 x 8.25 inch 10 hole aluminum disc wheels. |
| Tires | 11R22.5G LRR (Low Rolling Resistance) tubeless steel belted radials, premium highway front tread and premium highway traction rear tread. |
| Brakes | Dual circuit S-CAM drum air service brakes with 4 channel anti-lock brake system. An air operated exhaust brake, air controlled parking brake, heated air dryer, and automatic slack adjusters are standard. |
| Fuel Tank | 50 / 100 gal. (depending on chassis wheelbase) rectangular aluminum fuel tank mounted on left hand frame. Includes a fuel water separator with indicator light. |
| Frame | Ladder type channel section straight frame rail, 33.5 in wide along the total length of the frame. Yield strength 80,000 psi; Section Modulus 12.69 cub. In, RBM 1,015,000 lb-in |
| Cab | All steel low cab forward, BBC 81.5 in, 45-degree mechanical tilt with torsion assist. |
| Cab Equipment | TRICOT breathable cloth covered high back air ride driver’s seat with rigid passenger seat and center seat with fold down back. Dual cab mounted exterior mirrors with integral convex mirror and a right hand side mounted side cross mirror. Tilt and telescoping steering column. Power windows and door locks, floor mats, tinted glass, AM/FM/CD stereo radio with Bluetooth. Rear body dome lamp switch. Cab latch switch with indicator and buzzer. |
| Electrical | 12 Volt, negative ground, dual maintenance free batteries with threaded posts, 750 CCA each, 160 Amp alternator with integral regulator. |
| Options | See page 3 for options |

NOTE: These selected specifications are subject to change without notice.

# 2025 Chevrolet Low Cab Forward



## Chassis Specifications

| Model | 7500 XD DERATE |
|---|---|
| GVWR/GCWR | 25,950 lbs. / 33,000 lbs. |
| WB | 152 in., 170 in., 188 in., 200 in., 212 in., 224 in., 236 in., 248 in. |
| Engine | Cummins B6.7 diesel engine, 6-cylinder, turbocharged, inter-cooled, EGR cooler, high pressure common rail fuel system, and single module aftertreatment. |
| Model/Displacement | B6.7 / 408 CID (6.7L) |
| HP (Gross) | 260 HP at 2400 RPM |
| Torque (Gross) | 660 lb.-ft. torque at 1600 RPM with automatic transmission |
| Equipment | Dry element air cleaner with vertical intake; 1 row 748 $in^2$ radiator; 11 blade 24.8in diameter fan with electro-viscous drive. Cold weather starting device and an oil cooler. Engine oil level check switch and light. Engine warning system with audible warning for low oil pressure, high coolant temperature, and low coolant level. Engine cruise control function, coolant temperature, and low coolant level. Engine cruise control function. |
| Transmission | Allison 2500 RDS 6 speed automatic transmission. A single PTO opening on the left hand side of the transmission with a maximum torque value of 250 lb-ft. |
| Steering | Integral power steering. Tilt and Telescoping steering column. Steering ratio of 22.4:1 |
| Front GAWR | 11R22.5G tires - 12,000 lbs. |
| Front Axle | Dana E-1254W reverse Elliot “I”-Beam type steer axle rated at 12,000 lbs. |
| Front Suspension | Semi-elliptical steel alloy tapered leaf springs with stabilizer bar and shock absorbers, rated at 12,000 lbs. |
| Rear GAWR | 21,000 lbs. |
| Rear Axle | Dana S21-140 single-speed, 21,000 lbs. capacity drive axle. |
| Rear Suspension | Semi-elliptical steel alloy multi-leaf springs rated at 21,000 lbs. |
| | Air spring suspension with single leveling valve, dual shock absorbers, and an in cab dump/fill switch rated at 23,000 lbs. |
| Wheels | 22.5 x 8.25 inch 10 hole disc wheels, painted white.; 22.5 x 8.25 inch 10 hole aluminum disc wheels. |
| Tires | 11R22.5G LRR (Low Rolling Resistance) tubeless steel belted radials, premium highway front tread and premium highway traction rear tread. |
| Brakes | Dual circuit S-CAM drum air service brakes with 4 channel anti-lock brake system. An air operated exhaust brake, air controlled parking brake, heated air dryer, and automatic slack adjusters are standard. |
| Fuel Tank | 50 / 100 gal. (depending on chassis wheelbase) rectangular aluminum fuel tank mounted on left hand frame. Includes a fuel water separator with indicator light. |
| Frame | Ladder type channel section straight frame rail, 33.5 in wide along the total length of the frame. Yield strength 80,000 psi; Section Modulus 12.69 cub. In, RBM 1,015,000 lb-in |
| Cab | All steel low cab forward, BBC 81.5 in, 45-degree mechanical tilt with torsion assist. |
| Cab Equipment | TRICOT breathable cloth covered high back air ride driver’s seat with rigid passenger seat and center seat with fold down back. Dual cab mounted exterior mirrors with integral convex mirror and a right hand side mounted side cross mirror. Tilt and telescoping steering column. Power windows and door locks, floor mats, tinted glass, AM/FM/CD stereo radio with Bluetooth. Rear body dome lamp switch. Cab latch switch with indicator and buzzer. |
| Electrical | 12 Volt, negative ground, dual maintenance free batteries with threaded posts, 750 CCA each, 160 Amp alternator with integral regulator. |
| Options | See page 3 for options |

NOTE: These selected specifications are subject to change without notice.

# 2025 Chevrolet Low Cab Forward



## *Vehicle Weights, Dimensions and Ratings*
## *6500 XD Multi-leaf Suspension*

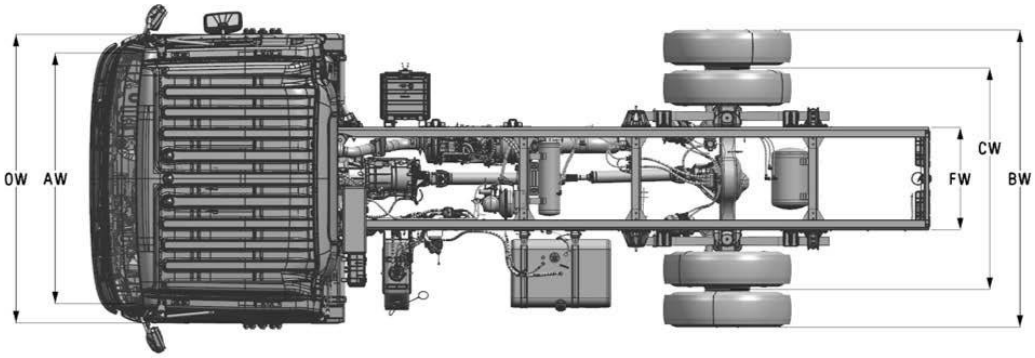



Figure 1

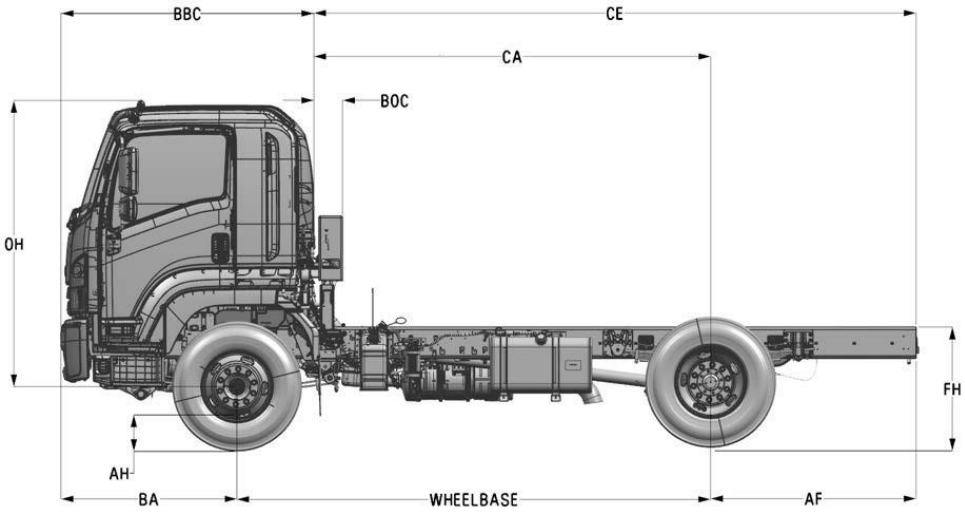



Figure 2

| CHASSIS DIMENSIONS (in) | | | | | | |
|---|---|---|---|---|---|---|
| MODEL | WB | CA[1] | CE[2] | AF | FL | OAL |
| MT1 | 152 | 127 | 192.9 | 65.9 | 270.5 | 274.4 |
| MT2 | 170 | 145 | 220 | 75 | 297.6 | 301.5 |
| MT3 | 188 | 163 | 247 | 84.1 | 324.6 | 328.5 |
| MT4 | 200 | 175 | 264.9 | 90 | 342.5 | 346.4 |
| MT5 | 212 | 187 | 283.1 | 96.1 | 360.6 | 364.6 |
| MT6 | 224 | 199 | 301 | 102 | 378.5 | 382.5 |
| MT7 | 236 | 211 | 319.1 | 108.1 | 396.7 | 400.6 |
| MT8 | 248 | 223 | 337 | 114 | 414.6 | 418.5 |

| DIMENSION CONSTANTS (in) | |
|---|---|
| AW = Front axle track | 81.1 |
| BA = Front bumper to centerline of axle | 56.5 |
| BBC = Bumper to back of cab | 81.5 |
| BOC = Back of cab clearance | 10.4 |
| BW = Overall width across rear axle | 96 |
| CW = Rear axle track | 72.2 |
| FW = Frame width | 33.5 |
| OW = Overall width across cab (without mirrors) | 93.5 |

| DIMENSIONS BY TIRE SIZE (in.) | 11R22.5G | 255/70R22.5H |
|---|---|---|
| AH = Ground to bottom of axle | 10 | 7.7 |
| FH = Frame height (unladen) at E.O.F.[3] | 42.5 | 39.9 |
| FH = Frame height (unladen) at R/A[4] | 41 | 39.2 |
| FH = Frame height (laden) at R/A[5] | 37.5 | 36.4 |
| OH = Overall height (without clearance lights) | 112 | 110.2 |

Notes:

[1] Effective CA is CA less BOC.

[2] Effective CE is CE less BOC.

[3] Measured at the end of the frame from the top of the frame to the ground at curb weight.

[4] Measured at the rear axle from the top of the frame to the ground with the chassis at curb.

[5] Measured at the rear axle from the top of the frame to the ground with the chassis loaded to GVWR.

# 2025 Chevrolet Low Cab Forward

## Vehicle Weights, Dimensions and Ratings
## 6500 XD Air-spring Suspension

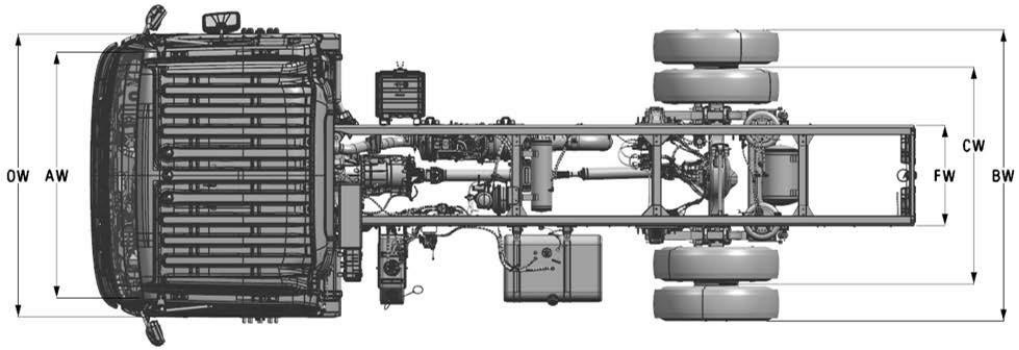



Figure 3

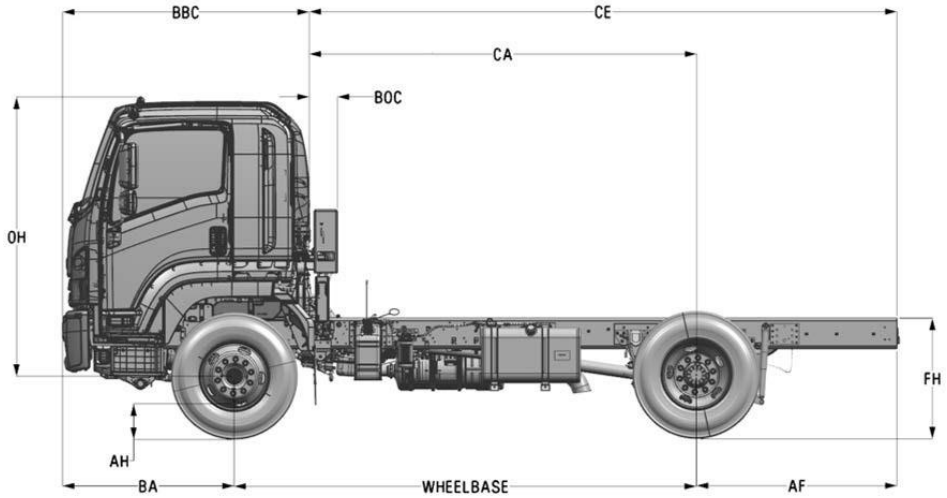



Figure 4

| CHASSIS DIMENSIONS (in) | | | | | | |
|---|---|---|---|---|---|---|
| MODEL | WB | CA[1] | CE[2] | AF | FL | OAL |
| MT1 | 152 | 127 | 192.9 | 65.9 | 270.5 | 274.4 |
| MT2 | 170 | 145 | 220 | 75 | 297.6 | 301.5 |
| MT3 | 188 | 163 | 247 | 84.1 | 324.6 | 328.5 |
| MT4 | 200 | 175 | 264.9 | 90 | 342.5 | 346.4 |
| MT5 | 212 | 187 | 283.1 | 96.1 | 360.6 | 364.6 |
| MT6 | 224 | 199 | 301 | 102 | 378.5 | 382.5 |
| MT7 | 236 | 211 | 319.1 | 108.1 | 396.7 | 400.6 |
| MT8 | 248 | 223 | 337 | 114 | 414.6 | 418.5 |

| DIMENSION CONSTANTS (in) | | |
|---|---|---|
| AW = Front axle track | | 81.1 |
| BA = Front bumper to centerline of axle | | 56.5 |
| BBC = Bumper to back of cab | | 81.5 |
| BOC = Back of cab clearance | | 10.4 |
| BW = Overall width across rear axle | | 96 |
| CW = Rear axle track | | 72.2 |
| FW = Frame width | | 33.5 |
| OW = Overall width across cab (without mirrors) | | 93.5 |
| DIMENSIONS BY TIRE SIZE (in.) | 11R22.5G | 255/70R22.5H |
| AH = Ground to bottom of axle | 10 | 7.7 |
| FH = Frame height (unladen) at E.O.F.[3] | 38.2 | 35.9 |
| FH = Frame height (unladen) at R/A[4] | 38.2 | 35.9 |
| FH = Frame height (laden) at R/A[5] | 38.2 | 35.9 |
| FH = Frame height (dump position) at R/A | 35.3 | 33 |
| OH = Overall height (without clearance lights) | 108.6 | 107 |

Notes:

[1] Effective CA is CA less BOC.

[2] Effective CE is CE less BOC.

[3] Measured at the end of the frame from the top of the frame to the ground at curb weight.

[4] Measured at the rear axle from the top of the frame to the ground with the chassis at curb.

[5] Measured at the rear axle from the top of the frame to the ground with the chassis loaded to GVWR.

# 2025 Chevrolet Low Cab Forward

## Vehicle Weights, Dimensions and Ratings

## 7500 XD / 7500 XD Derate Multi-leaf Suspension

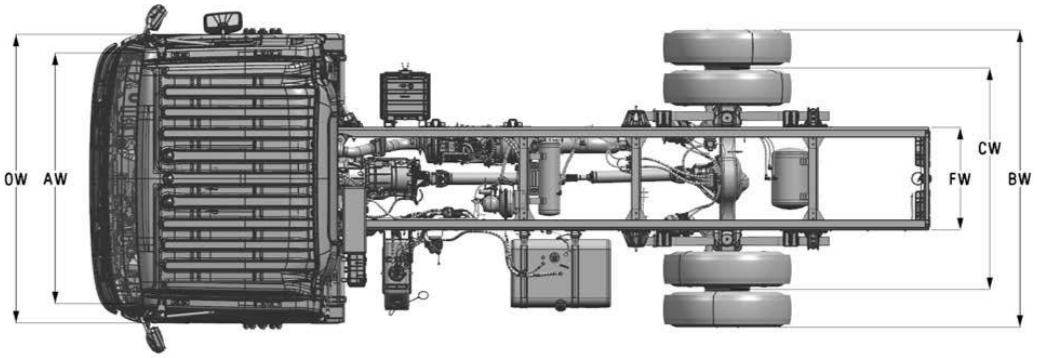



Figure 5

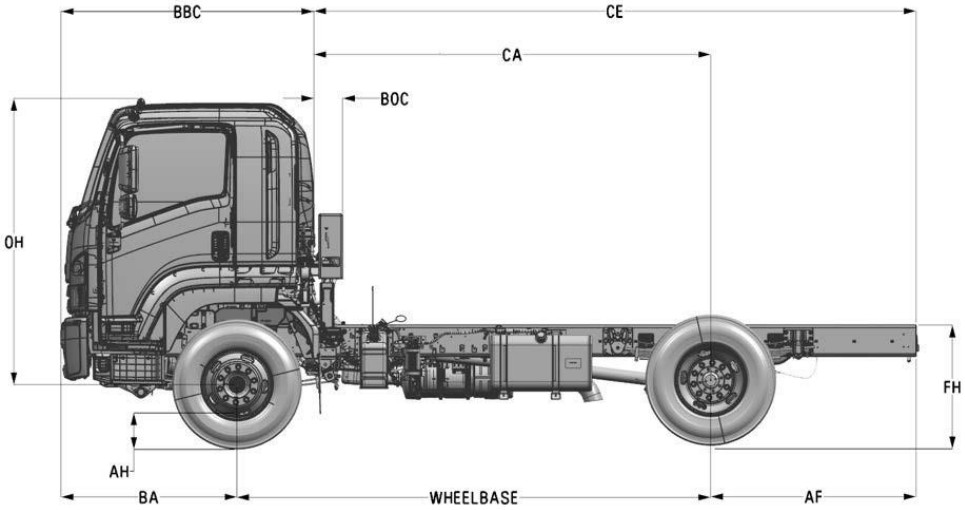



Figure 6

| CHASSIS DIMENSIONS (in) | | | | | | |
|---|---|---|---|---|---|---|
| MODEL | WB | CA[1] | CE[2] | AF | FL | OAL |
| MV1 / MW1 | 152 | 127 | 192.9 | 65.9 | 270.5 | 274.4 |
| MV2 / MW2 | 170 | 145 | 220 | 75 | 297.6 | 301.5 |
| MV3 / MW3 | 188 | 163 | 247 | 84.1 | 324.6 | 328.5 |
| MV4 / MW4 | 200 | 175 | 264.9 | 90 | 342.5 | 346.4 |
| MV5 / MW5 | 212 | 187 | 283.1 | 96.1 | 360.6 | 364.6 |
| MV6 / MW6 | 224 | 199 | 301 | 102 | 378.5 | 382.5 |
| MV7 / MW7 | 236 | 211 | 319.1 | 108.1 | 396.7 | 400.6 |
| MV8 / MW8 | 248 | 223 | 337 | 114 | 414.6 | 418.5 |

| DIMENSION CONSTANTS (in) | |
|---|---|
| AW = Front axle track | 81.1 |
| BA = Front bumper to centerline of axle | 56.5 |
| BBC = Bumper to back of cab | 81.5 |
| BOC = Back of cab clearance | 10.4 |
| BW = Overall width across rear axle | 96 |
| CW = Rear axle track | 72.2 |
| FW = Frame width | 33.5 |
| OW = Overall width across cab (without mirrors) | 93.5 |
| DIMENSIONS BY TIRE SIZE (in.) | 11R22.5G |
| AH = Ground to bottom of axle | 10 |
| FH = Frame height (unladen) at E.O.F.[3] | 42.5 |
| FH = Frame height (unladen) at R/A[4] | 41 |
| FH = Frame height (laden) at R/A[5] | 37.5 |
| OH = Overall height (without clearance lights) | 112 |

Notes:

[1] Effective CA is CA less BOC.

[2] Effective CE is CE less BOC.

[3] Measured at the end of the frame from the top of the frame to the ground at curb weight.

[4] Measured at the rear axle from the top of the frame to the ground with the chassis at curb.

[5] Measured at the rear axle from the top of the frame to the ground with the chassis loaded to GVWR.

# 2025 Chevrolet Low Cab Forward



## Vehicle Weights, Dimensions and Ratings
## 7500 XD / 7500 XD Derate Air-spring Suspension

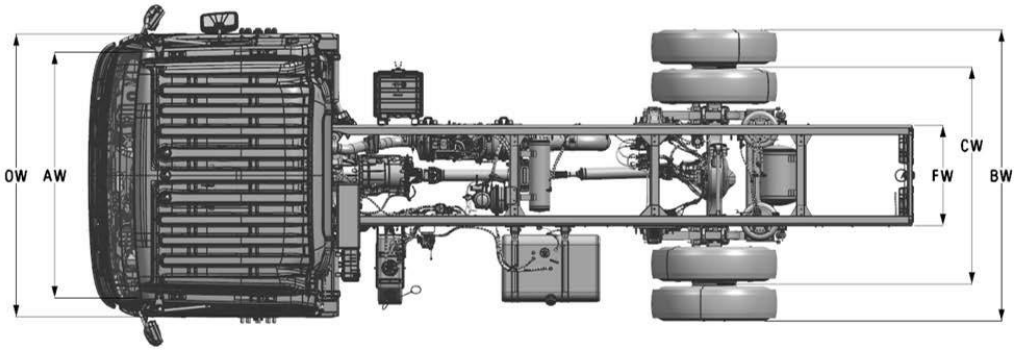



Figure 7

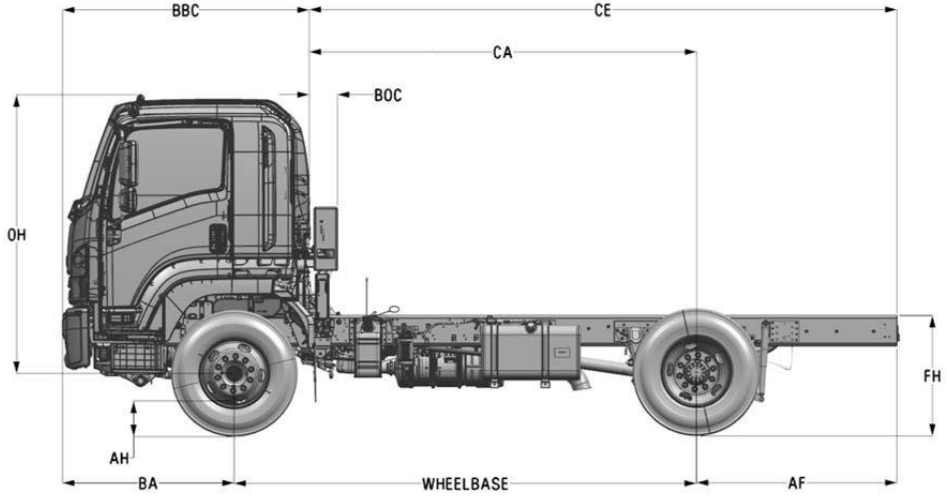



Figure 8

| CHASSIS DIMENSIONS (in) | | | | | | |
|---|---|---|---|---|---|---|
| MODEL | WB | CA[1] | CE[2] | AF | FL | OAL |
| MV1 / MW1 | 152 | 127 | 192.9 | 65.9 | 270.5 | 274.4 |
| MV2 / MW2 | 170 | 145 | 220 | 75 | 297.6 | 301.5 |
| MV3 / MW3 | 188 | 163 | 247 | 84.1 | 324.6 | 328.5 |
| MV4 / MW4 | 200 | 175 | 264.9 | 90 | 342.5 | 346.4 |
| MV5 / MW5 | 212 | 187 | 283.1 | 96.1 | 360.6 | 364.6 |
| MV6 / MW6 | 224 | 199 | 301 | 102 | 378.5 | 382.5 |
| MV7 / MW7 | 236 | 211 | 319.1 | 108.1 | 396.7 | 400.6 |
| MV8 / MW8 | 248 | 223 | 337 | 114 | 414.6 | 418.5 |

| DIMENSION CONSTANTS (in) | |
|---|---|
| AW = Front axle track | 81.1 |
| BA = Front bumper to centerline of axle | 56.5 |
| BBC = Bumper to back of cab | 81.5 |
| BOC = Back of cab clearance | 10.4 |
| BW = Overall width across rear axle | 96 |
| CW = Rear axle track | 72.2 |
| FW = Frame width | 33.5 |
| OW = Overall width across cab (without mirrors) | 93.5 |
| DIMENSIONS BY TIRE SIZE (in.) | 11R22.5G |
| AH = Ground to bottom of axle | 10 |
| FH = Frame height (unladen) at E.O.F.[3] | 38.2 |
| FH = Frame height (unladen) at R/A[4] | 38.2 |
| FH = Frame height (laden) at R/A[5] | 38.2 |
| FH = Frame height (dump position) at R/A | 35.3 |
| OH = Overall height (without clearance lights) | 108.6 |

Notes:

[1] Effective CA is CA less BOC.

[2] Effective CE is CE less BOC.

[3] Measured at the end of the frame from the top of the frame to the ground at curb weight.

[4] Measured at the rear axle from the top of the frame to the ground with the chassis at curb.

[5] Measured at the rear axle from the top of the frame to the ground with the chassis loaded to GVWR.

# 2025 Chevrolet Low Cab Forward

## Vehicle Weights, Dimensions and Ratings
## Multi-leaf Suspension – 6500 XD

| VEHICLE WEIGHT LIMITS | | |
|---|---|---|
| Rating | Tire | Capacity |
| GVWR Designed Maximum | All tire options | 25,950 lb |
| GCWR Combined Maximum | All tire options | 30,000 lb |
| Front GAWR | 11R22.5G tires | 12,000 lb |
| | 255/70R22.5H tires | 11,000 lb |
| Rear GAWR | All tire options | 19,000 lb |

| CURB WEIGHTS AND PAYLOAD | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| COC | OCC | WB (in) | Fuel Tank Capacity (gal) | Tire Size | Final Ratio | Front (lb) | Rear (lb) | Total (lb) | Payload (lb) |
| FTR LEAF SUSPENSION - STANDARD TIRES | | | | | | | | | |
| MT1 | G1 | 152 | 50 | 11R22.5 | 5.57 | 6575 | 3668 | 10243 | 15707 |
| MT2 | G1 | 170 | 50 | 11R22.5 | 5.57 | 6650 | 3671 | 10321 | 15629 |
| MT3 | G1 | 188 | 50 | 11R22.5 | 5.57 | 6724 | 3780 | 10504 | 15446 |
| MT3 | G2 | 188 | 100 | 11R22.5 | 5.57 | 6773 | 3852 | 10625 | 15325 |
| MT4 | G1 | 200 | 50 | 11R22.5 | 5.57 | 6823 | 3925 | 10748 | 15202 |
| MT4 | G2 | 200 | 100 | 11R22.5 | 5.57 | 6872 | 3997 | 10869 | 15081 |
| MT5 | G1 | 212 | 50 | 11R22.5 | 5.57 | 6850 | 3986 | 10836 | 15114 |
| MT5 | G2 | 212 | 100 | 11R22.5 | 5.57 | 6912 | 4046 | 10958 | 14992 |
| MT6 | G1 | 224 | 50 | 11R22.5 | 5.57 | 6973 | 4108 | 11081 | 14869 |
| MT6 | G2 | 224 | 100 | 11R22.5 | 5.57 | 7031 | 4170 | 11201 | 14749 |
| MT7 | G2 | 236 | 100 | 11R22.5 | 5.57 | 7093 | 4231 | 11324 | 14626 |
| MT8 | G2 | 248 | 100 | 11R22.5 | 5.57 | 7153 | 4292 | 11445 | 14505 |
| FTR LEAF SUSPENSION - LOW PROFILE TIRES | | | | | | | | | |
| MT1 | G5 | 152 | 50 | 255/70R22.5 | 4.88 | 6503 | 3515 | 10018 | 15932 |
| MT2 | G5 | 170 | 50 | 255/70R22.5 | 4.88 | 6578 | 3518 | 10096 | 15854 |
| MT3 | G5 | 188 | 50 | 255/70R22.5 | 4.88 | 6652 | 3627 | 10279 | 15671 |
| MT3 | G6 | 188 | 100 | 255/70R22.5 | 4.88 | 6701 | 3699 | 10400 | 15550 |
| MT4 | G5 | 200 | 50 | 255/70R22.5 | 4.88 | 6751 | 3772 | 10523 | 15427 |
| MT4 | G6 | 200 | 100 | 255/70R22.5 | 4.88 | 6800 | 3844 | 10644 | 15306 |
| MT5 | G5 | 212 | 50 | 255/70R22.5 | 4.88 | 6778 | 3833 | 10611 | 15339 |
| MT5 | G6 | 212 | 100 | 255/70R22.5 | 4.88 | 6840 | 3893 | 10733 | 15217 |
| MT6 | G5 | 224 | 50 | 255/70R22.5 | 4.88 | 6901 | 3955 | 10856 | 15094 |
| MT6 | G6 | 224 | 100 | 255/70R22.5 | 4.88 | 6959 | 4017 | 10976 | 14974 |
| MT7 | G6 | 236 | 100 | 255/70R22.5 | 4.88 | 7021 | 4078 | 11099 | 14851 |
| MT8 | G6 | 248 | 100 | 255/70R22.5 | 4.88 | 7081 | 4139 | 11220 | 14730 |

Notes: [1] Chassis Curb Weight reflects standard equipment and fuel, but no driver or payload.
[2] Maximum Payload Weight is the allowed maximum for equipment, body, payload and driver and is calculated by subtracting chassis curb weight from the GVWR.

# 2025 Chevrolet Low Cab Forward

## Vehicle Weights, Dimensions and Ratings
## Multi-leaf Suspension – 6500 XD

| VEHICLE WEIGHT LIMITS | | |
|---|---|---|
| Rating | Tire | Capacity |
| GVWR Designed Maximum | All tire options | 25,950 lb |
| GCWR Combined Maximum | All tire options | 30,000 lb |
| Front GAWR | 11R22.5G tires | 12,000 lb |
| | 255/70R22.5H tires | 11,000 lb |
| Rear GAWR | All tire options | 19,000 lb |

| CURB WEIGHTS AND PAYLOAD | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| COC | OCC | WB (in) | Fuel Tank Capacity (gal) | Tire Size | Final Ratio | Front (lb) | Rear (lb) | Total (lb) | Payload (lb) |
| FTR LEAF SUSPENSION - STANDARD TIRES - ALUMINUM WHEELS | | | | | | | | | |
| MT1 | A1 | 152 | 50 | 11R22.5 | 5.57 | 6519 | 3556 | 10075 | 15875 |
| MT2 | A1 | 170 | 50 | 11R22.5 | 5.57 | 6594 | 3559 | 10153 | 15797 |
| MT3 | A1 | 188 | 50 | 11R22.5 | 5.57 | 6668 | 3668 | 10336 | 15614 |
| MT3 | A2 | 188 | 100 | 11R22.5 | 5.57 | 6717 | 3740 | 10457 | 15493 |
| MT4 | A1 | 200 | 50 | 11R22.5 | 5.57 | 6767 | 3813 | 10580 | 15370 |
| MT4 | A2 | 200 | 100 | 11R22.5 | 5.57 | 6816 | 3885 | 10701 | 15249 |
| MT5 | A1 | 212 | 50 | 11R22.5 | 5.57 | 6794 | 3874 | 10668 | 15282 |
| MT5 | A2 | 212 | 100 | 11R22.5 | 5.57 | 6856 | 3934 | 10790 | 15160 |
| MT6 | A1 | 224 | 50 | 11R22.5 | 5.57 | 6917 | 3996 | 10913 | 15037 |
| MT6 | A2 | 224 | 100 | 11R22.5 | 5.57 | 6975 | 4058 | 11033 | 14917 |
| MT7 | A2 | 236 | 100 | 11R22.5 | 5.57 | 7037 | 4119 | 11156 | 14794 |
| MT8 | A2 | 248 | 100 | 11R22.5 | 5.57 | 7097 | 4180 | 11277 | 14673 |
| FTR LEAF SUSPENSION - LOW PROFILE TIRES - ALUMINUM WHEELS | | | | | | | | | |
| MT1 | A5 | 152 | 50 | 255/70R22.5 | 4.88 | 6447 | 3403 | 9850 | 16100 |
| MT2 | A5 | 170 | 50 | 255/70R22.5 | 4.88 | 6522 | 3406 | 9928 | 16022 |
| MT3 | A5 | 188 | 50 | 255/70R22.5 | 4.88 | 6596 | 3515 | 10111 | 15839 |
| MT3 | A6 | 188 | 100 | 255/70R22.5 | 4.88 | 6645 | 3587 | 10232 | 15718 |
| MT4 | A5 | 200 | 50 | 255/70R22.5 | 4.88 | 6695 | 3660 | 10355 | 15595 |
| MT4 | A6 | 200 | 100 | 255/70R22.5 | 4.88 | 6744 | 3732 | 10476 | 15474 |
| MT5 | A5 | 212 | 50 | 255/70R22.5 | 4.88 | 6722 | 3721 | 10443 | 15507 |
| MT5 | A6 | 212 | 100 | 255/70R22.5 | 4.88 | 6784 | 3781 | 10565 | 15385 |
| MT6 | A5 | 224 | 50 | 255/70R22.5 | 4.88 | 6845 | 3843 | 10688 | 15262 |
| MT6 | A6 | 224 | 100 | 255/70R22.5 | 4.88 | 6903 | 3905 | 10808 | 15142 |
| MT7 | A6 | 236 | 100 | 255/70R22.5 | 4.88 | 6965 | 3966 | 10931 | 15019 |
| MT8 | A6 | 248 | 100 | 255/70R22.5 | 4.88 | 7025 | 4027 | 11052 | 14898 |

Notes: [1] Chassis Curb Weight reflects standard equipment and fuel, but no driver or payload.
[2] Maximum Payload Weight is the allowed maximum for equipment, body, payload and driver and is calculated by subtracting chassis curb weight from the GVWR.

# 2025 Chevrolet Low Cab Forward



## Vehicle Weights, Dimensions and Ratings
## Air-spring Suspension – 6500 XD

| VEHICLE WEIGHT LIMITS | | |
|---|---|---|
| Rating | Tire | Capacity |
| GVWR Designed Maximum | All tire options | 25,950 lb |
| GCWR Combined Maximum | All tire options | 30,000 lb |
| Front GAWR | 11R22.5G tires | 12,000 lb |
| | 255/70R22.5H tires | 11,000 lb |
| Rear GAWR | All tire options | 19,000 lb |

| CURB WEIGHTS AND PAYLOAD | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| COC | OCC | WB (in) | Fuel Tank Capacity (gal) | Tire Size | Final Ratio | Front (lb) | Rear (lb) | Total (lb) | Payload (lb) |
| FTR AIR SUSPENSION- STANDARD TIRES | | | | | | | | | |
| MT1 | G3 | 152 | 50 | 11R22.5 | 5.57 | 6575 | 3504 | 10079 | 15871 |
| MT2 | G3 | 170 | 50 | 11R22.5 | 5.57 | 6650 | 3507 | 10157 | 15793 |
| MT3 | G3 | 188 | 50 | 11R22.5 | 5.57 | 6724 | 3616 | 10340 | 15610 |
| MT3 | G4 | 188 | 100 | 11R22.5 | 5.57 | 6773 | 3688 | 10461 | 15489 |
| MT4 | G3 | 200 | 50 | 11R22.5 | 5.57 | 6823 | 3761 | 10584 | 15366 |
| MT4 | G4 | 200 | 100 | 11R22.5 | 5.57 | 6872 | 3833 | 10705 | 15245 |
| MT5 | G3 | 212 | 50 | 11R22.5 | 5.57 | 6850 | 3822 | 10672 | 15278 |
| MT5 | G4 | 212 | 100 | 11R22.5 | 5.57 | 6912 | 3882 | 10794 | 15156 |
| MT6 | G3 | 224 | 50 | 11R22.5 | 5.57 | 6973 | 3944 | 10917 | 15033 |
| MT6 | G4 | 224 | 100 | 11R22.5 | 5.57 | 7031 | 4006 | 11037 | 14913 |
| MT7 | G4 | 236 | 100 | 11R22.5 | 5.57 | 7093 | 4067 | 11160 | 14790 |
| MT8 | G4 | 248 | 100 | 11R22.5 | 5.57 | 7153 | 4128 | 11281 | 14669 |
| FTR AIR SUSPENSION - LOW PROFILE TIRES | | | | | | | | | |
| MT1 | G7 | 152 | 50 | 255/70R22.5 | 4.88 | 6503 | 3351 | 9854 | 16096 |
| MT2 | G7 | 170 | 50 | 255/70R22.5 | 4.88 | 6578 | 3354 | 9932 | 16018 |
| MT3 | G7 | 188 | 50 | 255/70R22.5 | 4.88 | 6652 | 3463 | 10115 | 15835 |
| MT3 | G8 | 188 | 100 | 255/70R22.5 | 4.88 | 6701 | 3535 | 10236 | 15714 |
| MT4 | G7 | 200 | 50 | 255/70R22.5 | 4.88 | 6751 | 3608 | 10359 | 15591 |
| MT4 | G8 | 200 | 100 | 255/70R22.5 | 4.88 | 6800 | 3680 | 10480 | 15470 |
| MT5 | G7 | 212 | 50 | 255/70R22.5 | 4.88 | 6778 | 3669 | 10447 | 15503 |
| MT5 | G8 | 212 | 100 | 255/70R22.5 | 4.88 | 6840 | 3729 | 10569 | 15381 |
| MT6 | G7 | 224 | 50 | 255/70R22.5 | 4.88 | 6901 | 3791 | 10692 | 15258 |
| MT6 | G8 | 224 | 100 | 255/70R22.5 | 4.88 | 6959 | 3853 | 10812 | 15138 |
| MT7 | G8 | 236 | 100 | 255/70R22.5 | 4.88 | 7021 | 3914 | 10935 | 15015 |
| MT8 | G8 | 248 | 100 | 255/70R22.5 | 4.88 | 7081 | 3975 | 11056 | 14894 |

Notes: [1] Chassis Curb Weight reflects standard equipment and fuel, but no driver or payload.
[2] Maximum Payload Weight is the allowed maximum for equipment, body, payload and driver and is calculated by subtracting chassis curb weight from the GVWR.

# 2025 Chevrolet Low Cab Forward



## Vehicle Weights, Dimensions and Ratings
## Air-spring Suspension – 6500 XD

| VEHICLE WEIGHT LIMITS | | |
|---|---|---|
| Rating | Tire | Capacity |
| GVWR Designed Maximum | All tire options | 25,950 lb |
| GCWR Combined Maximum | All tire options | 30,000 lb |
| Front GAWR | 11R22.5G tires | 12,000 lb |
| | 255/70R22.5H tires | 11,000 lb |
| Rear GAWR | All tire options | 19,000 lb |

| CURB WEIGHTS AND PAYLOAD | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| COC | OCC | WB (in) | Fuel Tank Capacity (gal) | Tire Size | Final Ratio | Front (lb) | Rear (lb) | Total (lb) | Payload (lb) |
| 6500 XD AIR SUSPENSION- STANDARD TIRES - ALUMINUM WHEELS | | | | | | | | | |
| MT1 | A3 | 152 | 50 | 11R22.5 | 5.57 | 6519 | 3392 | 9911 | 16039 |
| MT2 | A3 | 170 | 50 | 11R22.5 | 5.57 | 6594 | 3395 | 9989 | 15961 |
| MT3 | A3 | 188 | 50 | 11R22.5 | 5.57 | 6668 | 3504 | 10172 | 15778 |
| MT3 | A4 | 188 | 100 | 11R22.5 | 5.57 | 6717 | 3576 | 10293 | 15657 |
| MT4 | A3 | 200 | 50 | 11R22.5 | 5.57 | 6767 | 3649 | 10416 | 15534 |
| MT4 | A4 | 200 | 100 | 11R22.5 | 5.57 | 6816 | 3721 | 10537 | 15413 |
| MT5 | A3 | 212 | 50 | 11R22.5 | 5.57 | 6794 | 3710 | 10504 | 15446 |
| MT5 | A4 | 212 | 100 | 11R22.5 | 5.57 | 6856 | 3770 | 10626 | 15324 |
| MT6 | A3 | 224 | 50 | 11R22.5 | 5.57 | 6917 | 3832 | 10749 | 15201 |
| MT6 | A4 | 224 | 100 | 11R22.5 | 5.57 | 6975 | 3894 | 10869 | 15081 |
| MT7 | A4 | 236 | 100 | 11R22.5 | 5.57 | 7037 | 3955 | 10992 | 14958 |
| MT8 | A4 | 248 | 100 | 11R22.5 | 5.57 | 7097 | 4016 | 11113 | 14837 |
| 6500 XD AIR SUSPENSION - LOW PROFILE TIRES - ALUMINUM WHEELS | | | | | | | | | |
| MT1 | A7 | 152 | 50 | 255/70R22.5 | 4.88 | 6447 | 3239 | 9686 | 16264 |
| MT2 | A7 | 170 | 50 | 255/70R22.5 | 4.88 | 6522 | 3242 | 9764 | 16186 |
| MT3 | A7 | 188 | 50 | 255/70R22.5 | 4.88 | 6596 | 3351 | 9947 | 16003 |
| MT3 | A8 | 188 | 100 | 255/70R22.5 | 4.88 | 6645 | 3423 | 10068 | 15882 |
| MT4 | A7 | 200 | 50 | 255/70R22.5 | 4.88 | 6695 | 3496 | 10191 | 15759 |
| MT4 | A8 | 200 | 100 | 255/70R22.5 | 4.88 | 6744 | 3568 | 10312 | 15638 |
| MT5 | A7 | 212 | 50 | 255/70R22.5 | 4.88 | 6722 | 3557 | 10279 | 15671 |
| MT5 | A8 | 212 | 100 | 255/70R22.5 | 4.88 | 6784 | 3617 | 10401 | 15549 |
| MT6 | A7 | 224 | 50 | 255/70R22.5 | 4.88 | 6845 | 3679 | 10524 | 15426 |
| MT6 | A8 | 224 | 100 | 255/70R22.5 | 4.88 | 6903 | 3741 | 10644 | 15306 |
| MT7 | A8 | 236 | 100 | 255/70R22.5 | 4.88 | 6965 | 3802 | 10767 | 15183 |
| MT8 | A8 | 248 | 100 | 255/70R22.5 | 4.88 | 7025 | 3863 | 10888 | 15062 |

Notes: [1] Chassis Curb Weight reflects standard equipment and fuel, but no driver or payload.
[2] Maximum Payload Weight is the allowed maximum for equipment, body, payload and driver and is calculated by subtracting chassis curb weight from the GVWR.

# 2025 Chevrolet Low Cab Forward

## Vehicle Weights, Dimensions and Ratings
## Multi-leaf Suspension – 7500 XD

| CHASSIS WEIGHT RATINGS | | |
|---|---|---|
| Description | Tires | Capacity (lb) |
| Front GAWR | 11R22.5G | 12,000 |
| Rear GAWR | ALL TIRE OPTIONS | 21,000 |
| GVWR Designed Maximum | | 33,000 |
| GCWR Combined Maximum | | 33,000 |

| CURB WEIGHTS AND PAYLOAD | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| COC | OCC | WB (in) | Fuel Tank Capacity (gal) | Tire Size | Final Ratio | Front (lb) | Rear (lb) | Total (lb) | Payload (lb) |
| 7500 XD Standard Tires - Leaf Suspension | | | | | | | | | |
| MV1 | G1 | 152 | 50 | 11R22.5 | 5.57 | 6575 | 3768 | 10343 | 22657 |
| MV2 | G1 | 170 | 50 | | | 6650 | 3771 | 10421 | 22579 |
| MV3 | G2 | 188 | 100 | | | 6850 | 4086 | 10936 | 22064 |
| MV4 | G2 | 200 | 100 | | | 6912 | 4146 | 11058 | 21942 |
| MV5 | G2 | 212 | 100 | | | 6973 | 4208 | 11181 | 21819 |
| MV6 | G2 | 224 | 100 | | | 7031 | 4270 | 11301 | 21699 |
| MV7 | G2 | 236 | 100 | | | 7093 | 4331 | 11424 | 21576 |
| MV8 | G2 | 248 | 100 | | | 7153 | 4392 | 11545 | 21455 |
| 7500 XD Standard Tires - Leaf Suspension - Aluminum Wheels | | | | | | | | | |
| MV1 | A1 | 152 | 50 | 11R22.5 | 5.57 | 6519 | 3656 | 10175 | 22825 |
| MV2 | A1 | 170 | 50 | | | 6594 | 3659 | 10253 | 22747 |
| MV3 | A2 | 188 | 100 | | | 6794 | 3974 | 10768 | 22232 |
| MV4 | A2 | 200 | 100 | | | 6856 | 4034 | 10890 | 22110 |
| MV5 | A2 | 212 | 100 | | | 6917 | 4096 | 11012 | 21988 |
| MV6 | A2 | 224 | 100 | | | 6975 | 4158 | 11133 | 21867 |
| MV7 | A2 | 236 | 100 | | | 7037 | 4219 | 11256 | 21744 |
| MV8 | A2 | 248 | 100 | | | 7097 | 4280 | 11377 | 21623 |

NOTES: [1] Curb weights reflect standard equipment and fuel, but no driver or payload.

[2] Payload weight is the allowed maximum for equipment, body, payload and driver and is calculated by subtracting chassis curb weight from the GVWR.

# 2025 Chevrolet Low Cab Forward

## Vehicle Weights, Dimensions and Ratings
## Multi-leaf Suspension – 7500 XD DERATE

| CHASSIS WEIGHT RATINGS | | |
|---|---|---|
| Description | Tires | Capacity (lb) |
| Front GAWR | 11R22.5G | 12,000 |
| Rear GAWR | ALL TIRE OPTIONS | 21,000 |
| GVWR Designed Maximum | | 25,950 |
| GCWR Combined Maximum | | 33,000 |

| CURB WEIGHTS AND PAYLOAD | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| COC | OCC | WB (in) | Fuel Tank Capacity (gal) | Tire Size | Final Ratio | Front (lb) | Rear (lb) | Total (lb) | Payload (lb) |
| 7500 XD DERATE Standard Tires - Leaf Suspension | | | | | | | | | |
| MW1 | G1 | 152 | 50 | 11R22.5 | 5.57 | 6575 | 3768 | 10343 | 15607 |
| MW2 | G1 | 170 | 50 | | | 6650 | 3771 | 10421 | 15529 |
| MW3 | G2 | 188 | 100 | | | 6850 | 4086 | 10937 | 15014 |
| MW4 | G2 | 200 | 100 | | | 6912 | 4146 | 11058 | 14893 |
| MW5 | G2 | 212 | 100 | | | 6973 | 4208 | 11181 | 14770 |
| MW6 | G2 | 224 | 100 | | | 7031 | 4270 | 11302 | 14649 |
| MW7 | G2 | 236 | 100 | | | 7093 | 4331 | 11424 | 14527 |
| MW8 | G2 | 248 | 100 | | | 7153 | 4392 | 11545 | 14405 |
| 7500 XD DERATE Standard Tires - Leaf Suspension - Aluminum Wheels | | | | | | | | | |
| MW1 | A1 | 152 | 50 | 11R22.5 | 5.57 | 6519 | 3656 | 10175 | 15775 |
| MW2 | A1 | 170 | 50 | | | 6594 | 3659 | 10253 | 15697 |
| MW3 | A2 | 188 | 100 | | | 6794 | 3974 | 10769 | 15182 |
| MW4 | A2 | 200 | 100 | | | 6856 | 4034 | 10890 | 15061 |
| MW5 | A2 | 212 | 100 | | | 6917 | 4096 | 11013 | 14938 |
| MW6 | A2 | 224 | 100 | | | 6975 | 4158 | 11134 | 14817 |
| MW7 | A2 | 236 | 100 | | | 7037 | 4219 | 11256 | 14695 |
| MW8 | A2 | 248 | 100 | | | 7097 | 4280 | 11377 | 14573 |

NOTES: [1] Curb weights reflect standard equipment and fuel, but no driver or payload.

[2] Payload weight is the allowed maximum for equipment, body, payload and driver and is calculated by subtracting chassis curb weight from the GVWR.

# 2025 Chevrolet Low Cab Forward

## Vehicle Weights, Dimensions and Ratings
## Air-spring Suspension – 7500 XD

| CHASSIS WEIGHT RATINGS | | |
|---|---|---|
| Description | Tires | Capacity (lb) |
| Front GAWR | 11R22.5G | 12,000 |
| Rear GAWR | ALL TIRE OPTIONS | 21,000 |
| GVWR Designed Maximum | | 33,000 |
| GCWR Combined Maximum | | 33,000 |

| CURB WEIGHTS AND PAYLOAD | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| COC | OCC | WB (in) | Fuel Tank Capacity (gal) | Tire Size | Final Ratio | Front (lb) | Rear (lb) | Total (lb) | Payload (lb) |
| 7500 XD Standard Tires - Air Suspension | | | | | | | | | |
| MV1 | G3 | 152 | 50 | 11R22.5 | 5.57 | 6575 | 3604 | 10179 | 22821 |
| MV2 | G3 | 170 | 50 | | | 6650 | 3607 | 10257 | 22743 |
| MV3 | G4 | 188 | 100 | | | 6850 | 3922 | 10772 | 22228 |
| MV4 | G4 | 200 | 100 | | | 6912 | 3982 | 10894 | 22106 |
| MV5 | G4 | 212 | 100 | | | 6973 | 4044 | 11017 | 21983 |
| MV6 | G4 | 224 | 100 | | | 7031 | 4106 | 11137 | 21863 |
| MV7 | G4 | 236 | 100 | | | 7093 | 4167 | 11260 | 21740 |
| MV8 | G4 | 248 | 100 | | | 7153 | 4228 | 11381 | 21619 |
| 7500 XD Standard Tires - Air Suspension - Aluminum Wheels | | | | | | | | | |
| MV1 | A3 | 152 | 50 | 11R22.5 | 5.57 | 6519 | 3492 | 10011 | 22989 |
| MV2 | A3 | 170 | 50 | | | 6594 | 3495 | 10089 | 22911 |
| MV3 | A4 | 188 | 100 | | | 6794 | 3810 | 10604 | 22396 |
| MV4 | A4 | 200 | 100 | | | 6856 | 3870 | 10726 | 22274 |
| MV5 | A4 | 212 | 100 | | | 6917 | 3932 | 10849 | 22151 |
| MV6 | A4 | 224 | 100 | | | 6975 | 3994 | 10969 | 22031 |
| MV7 | A4 | 236 | 100 | | | 7037 | 4055 | 11092 | 21908 |
| MV8 | A4 | 248 | 100 | | | 7097 | 4116 | 11213 | 21787 |

NOTES: [1] Curb weights reflect standard equipment and fuel, but no driver or payload.

[2] Payload weight is the allowed maximum for equipment, body, payload and driver and is calculated by subtracting chassis curb weight from the GVWR.

# 2025 Chevrolet Low Cab Forward

## Vehicle Weights, Dimensions and Ratings
## Air-spring Suspension – 7500 XD DERATE

| CHASSIS WEIGHT RATINGS | | |
|---|---|---|
| Description | Tires | Capacity (lb) |
| Front GAWR | 11R22.5G | 12,000 |
| Rear GAWR | ALL TIRE OPTIONS | 21,000 |
| GVWR Designed Maximum | | 25,950 |
| GCWR Combined Maximum | | 33,000 |

| CURB WEIGHTS AND PAYLOAD | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| COC | OCC | WB (in) | Fuel Tank Capacity (gal) | Tire Size | Final Ratio | Front (lb) | Rear (lb) | Total (lb) | Payload (lb) |
| 7500 XD DERATE Standard Tires - Air Suspension | | | | | | | | | |
| MW1 | G3 | 152 | 50 | 11R22.5 | 5.57 | 6575 | 3604 | 10179 | 15771 |
| MW2 | G3 | 170 | 50 | | | 6650 | 3607 | 10257 | 15693 |
| MW3 | G4 | 188 | 100 | | | 6850 | 3922 | 10773 | 15178 |
| MW4 | G4 | 200 | 100 | | | 6912 | 3982 | 10894 | 15057 |
| MW5 | G4 | 212 | 100 | | | 6973 | 4044 | 11017 | 14934 |
| MW6 | G4 | 224 | 100 | | | 7031 | 4106 | 11138 | 14813 |
| MW7 | G4 | 236 | 100 | | | 7093 | 4167 | 11260 | 14691 |
| MW8 | G4 | 248 | 100 | | | 7153 | 4228 | 11381 | 14569 |
| 7500 XD DERATE Standard Tires - Air Suspension - Aluminum Wheels | | | | | | | | | |
| MW1 | A3 | 152 | 50 | 11R22.5 | 5.57 | 6519 | 3492 | 10011 | 15939 |
| MW2 | A3 | 170 | 50 | | | 6594 | 3495 | 10089 | 15861 |
| MW3 | A4 | 188 | 100 | | | 6794 | 3810 | 10605 | 15346 |
| MW4 | A4 | 200 | 100 | | | 6856 | 3870 | 10726 | 15225 |
| MW5 | A4 | 212 | 100 | | | 6917 | 3932 | 10849 | 15102 |
| MW6 | A4 | 224 | 100 | | | 6975 | 3994 | 10970 | 14981 |
| MW7 | A4 | 236 | 100 | | | 7037 | 4055 | 11092 | 14859 |
| MW8 | A4 | 248 | 100 | | | 7097 | 4116 | 11213 | 14737 |

NOTES: [1] Curb weights reflect standard equipment and fuel, but no driver or payload.

[2] Payload weight is the allowed maximum for equipment, body, payload and driver and is calculated by subtracting chassis curb weight from the GVWR.

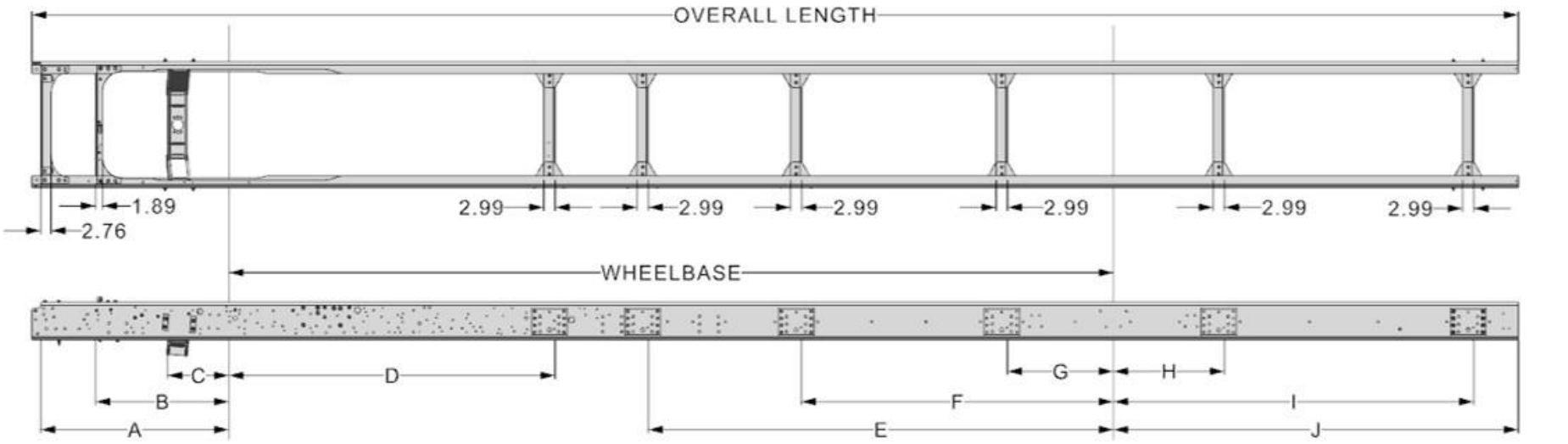
# 2025 Chevrolet Low Cab Forward

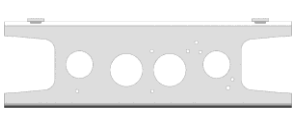
## Optional Equipment Weights

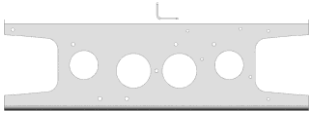
| OPTION WEIGHTS | | |
|---|---|---|
| RPO Code | Description | Front / Rear (lbs) |
| I6B | AGM batteries (825 CCA x 2) | 14 / 4 |
| I7V | Aluminum wheels: 4 aluminum wheels + 2 steel rear inner wheels | -56 / -56 |
| I8V | Aluminum wheels: 6 aluminum wheels | -56 / -112 |
| I1V | Audio system with 7" diagonal color touch screen | 2 / 0 |
| I2V | Audio system with 7" diagonal color touch screen with backup camera (camera shipped loose) | 2 / 2 |
| UZF | Back up alarm | 0 / 1 |
| I79 | Block heater and oil pan heater with receptacle | 3 / 0 |
| I72 | Block heater with receptacle | 2 / 0 |
| V22 | Chrome grille | 1 / 0 |
| I2M | Delete cruise control switch | -3 / 0 |
| IY4 | Delete radio | -3 / 0 |
| IH2 | Engine emergency shutdown system HWT, LWL, LOP | 0 / 0 |
| IY9 | Engine idle shutdown (timer set at 3 minutes for engine shutdown) | 0 / 0 |
| I9A | Engine idle shutdown (timer set at 5 minutes for engine shutdown) | 0 / 0 |
| IF6 | Fire extinguisher (2.5 lbs) and triangle kit | 22 / 0 |
| I8P | Fire extinguisher (5 lbs) and triangle kit | 27 / 0 |
| I4V | Forward collision and lane departure warning (Mobileye) | 2 / 0 |
| I8L | High visibility seat belt (orange color, driver and RH passenger seat only) | 0 / 0 |
| I7L | High visibility seat belt (orange color, driver seat only) | 0 / 0 |
| I4K | Keyless entry | 1 / 0 |
| I6L | LED lighting package | 0 / 0 |
| IL9 | PTO enable switch and engine idle up switch recommended for PTO and idle applications only | 0 / 0 |
| IV8 | Seat covers | 6 / 0 |
| I3Z | Spare keys (2 additional, 4 keys in total) | 0 / 0 |
| I0Z | Spartan Modification Center Ship Thru Code | 0 / 0 |
| I1L | Speed limited to 58 MPH | 0 / 0 |
| I2L | Speed limited to 65 MPH | 0 / 0 |
| I3L | Speed limited to 68 MPH | 0 / 0 |
| I4L | Speed limited to 70 MPH | 0 / 0 |
| I4Q | 102'' wide standard mirror heads | 2 / 0 |
| I5Q | 102" wide heated mirrors (flat & convex) | 2 / 0 |
| I6Q | 102" wide heated remote mirrors (heated flat & convex, remote flat only) | 3 / 0 |
| I2Q | 96" wide heated mirrors (flat & convex) | 1 / 0 |
| I3Q | 96" wide heated remote mirrors (heated flat & convex, remote flat only) | 2 / 0 |

# 2025 Chevrolet Low Cab Forward

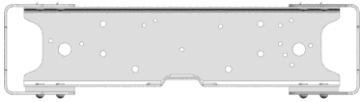
## Frame and Crossmember Specifications





Type A-A


Type B-B


Type C-C


Type D-D


Type E-E

Figure 9

| WHEEL BASE | OVERALL LENGTH | FRAME THICKNESS | CROSSMEMBER TYPE / LOCATION | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | A | | B | | C | | D | | E | | F | | G | | | H | | | I | | J | |
| | | | | | | | | | | | | | | | LEAF | AIR | | LEAF | AIR | | | | |
| 152 | 270.5 | 0.31 | A-A | 50.2 | B-B | 35.6 | C-C | 16.3 | D-D | 87.0 | - | - | | | E-E | 28.3 | 18.4 | E-E | 29.6 | 27.5 | - | - | - | 65.9 |
| 170 | 297.6 | | | 50.2 | | 35.6 | | 16.3 | | 87.0 | E-E | 58.1 | - | - | | 28.3 | 18.4 | | 29.6 | 27.5 | E-E | 63.1 | - | 75.0 |
| 188 | 324.6 | | | 50.2 | | 35.6 | | 16.3 | | 87.0 | | 76.1 | - | - | | 28.3 | 18.4 | | 29.6 | 27.5 | | 72.1 | - | 84.0 |
| 200 | 342.5 | | | 50.2 | | 35.6 | | 16.3 | | 87.0 | | 81.2 | - | - | | 28.3 | 18.4 | | 29.6 | 27.5 | | 78.0 | - | 89.9 |
| 212 | 360.6 | | | 50.2 | | 35.6 | | 16.3 | | 87.0 | | 100.1 | E-E | 68.4 | | 28.3 | 18.4 | | 29.6 | 27.5 | | 84.1 | - | 96.0 |
| 224 | 378.5 | | | 50.2 | | 35.6 | | 16.3 | | 87.0 | | 112.1 | | 68.4 | | 28.3 | 18.4 | | 29.6 | 27.5 | | 90.0 | - | 101.9 |
| 236 | 396.7 | | | 50.2 | | 35.6 | | 16.3 | | 87.0 | | 124.1 | | 83.2 | | 28.3 | 18.4 | | 29.6 | 27.5 | | 96.1 | - | 108.0 |
| 248 | 414.6 | | | 50.2 | | 35.6 | | 16.3 | | 87.0 | | 136.1 | | 83.2 | | 28.3 | 18.4 | | 29.6 | 27.5 | | 102.0 | - | 113.9 |

NOTE: Dimensions in inches

NOTE: Air Suspension Measurement to Inside Trim Edge

Figure 10

## Frame Chart

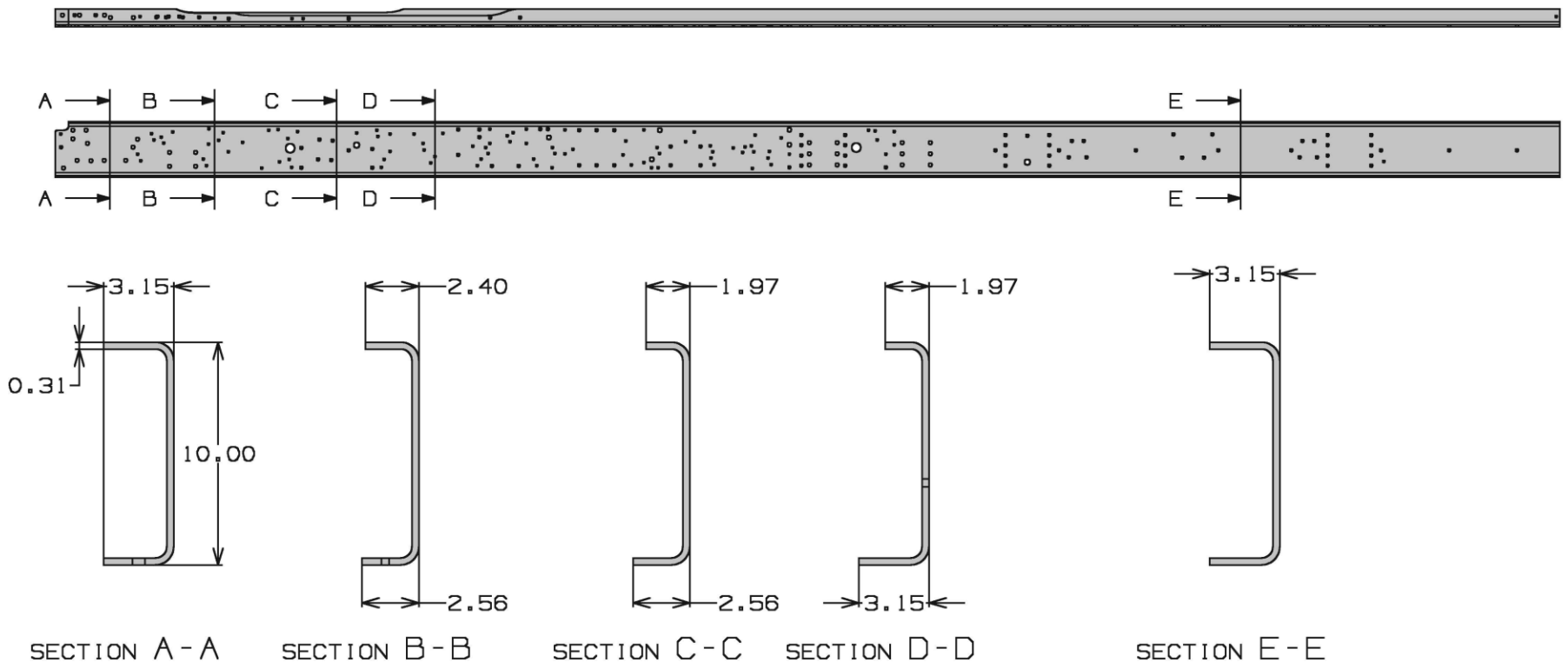



Figure 11

| Wheelbase | Frame Length | Frame Thickness |
|---|---|---|
| 152 | 270.5 | 0.315 |
| 170 | 297.6 | 0.315 |
| 188 | 324.6 | 0.315 |
| 200 | 342.5 | 0.315 |
| 212 | 360.6 | 0.315 |
| 224 | 378.5 | 0.315 |
| 236 | 396.7 | 0.315 |
| 248 | 414.6 | 0.315 |

Figure 12

Note: Dimensions in inches

# 2025 Chevrolet Low Cab Forward

## Diesel Multi-Leaf Spring Suspension - Top View

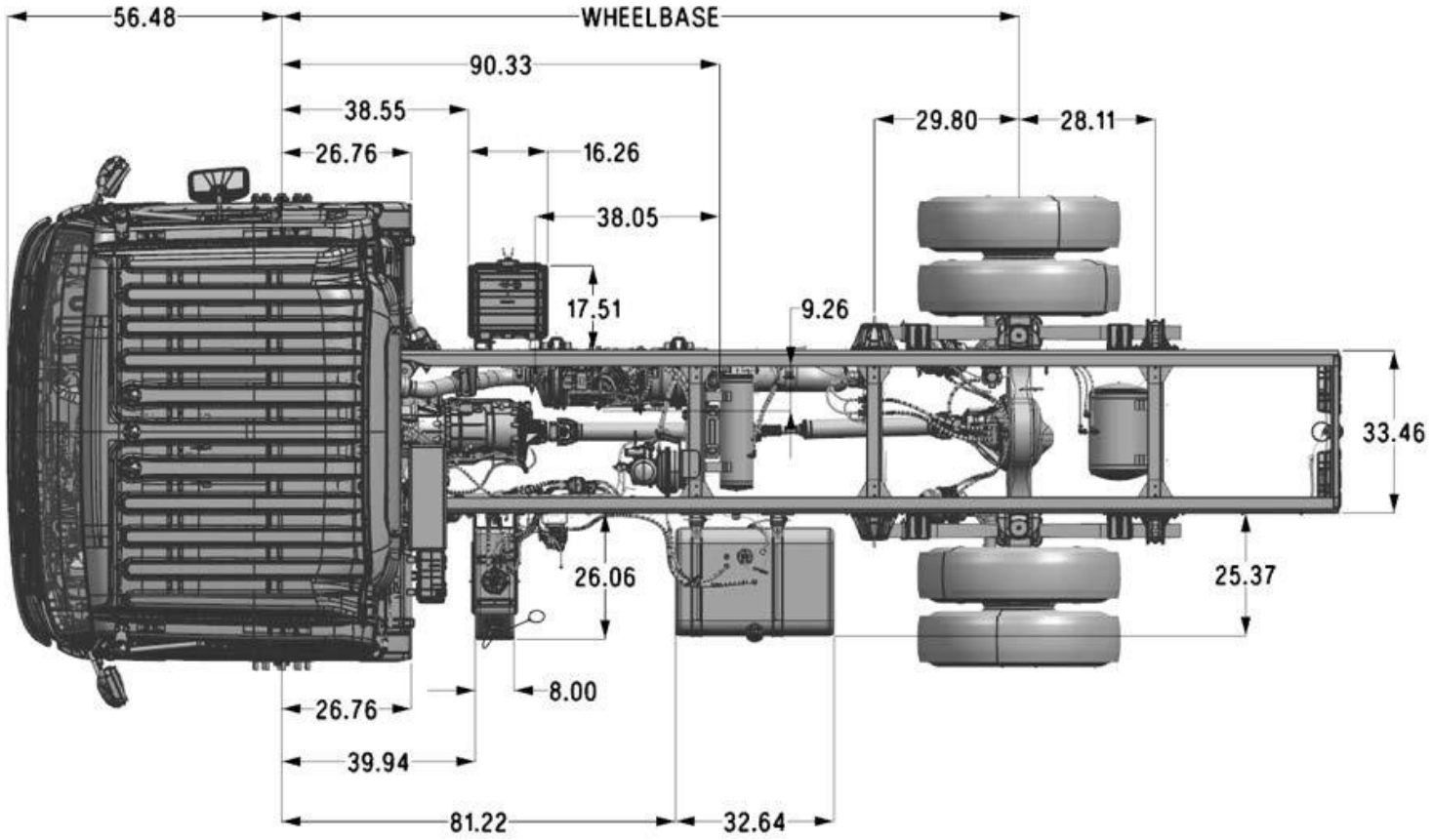



Figure 13

Note: Dimensions in inches

# 2025 Chevrolet Low Cab Forward

## Diesel Multi-Leaf Spring Suspension - Left Side View

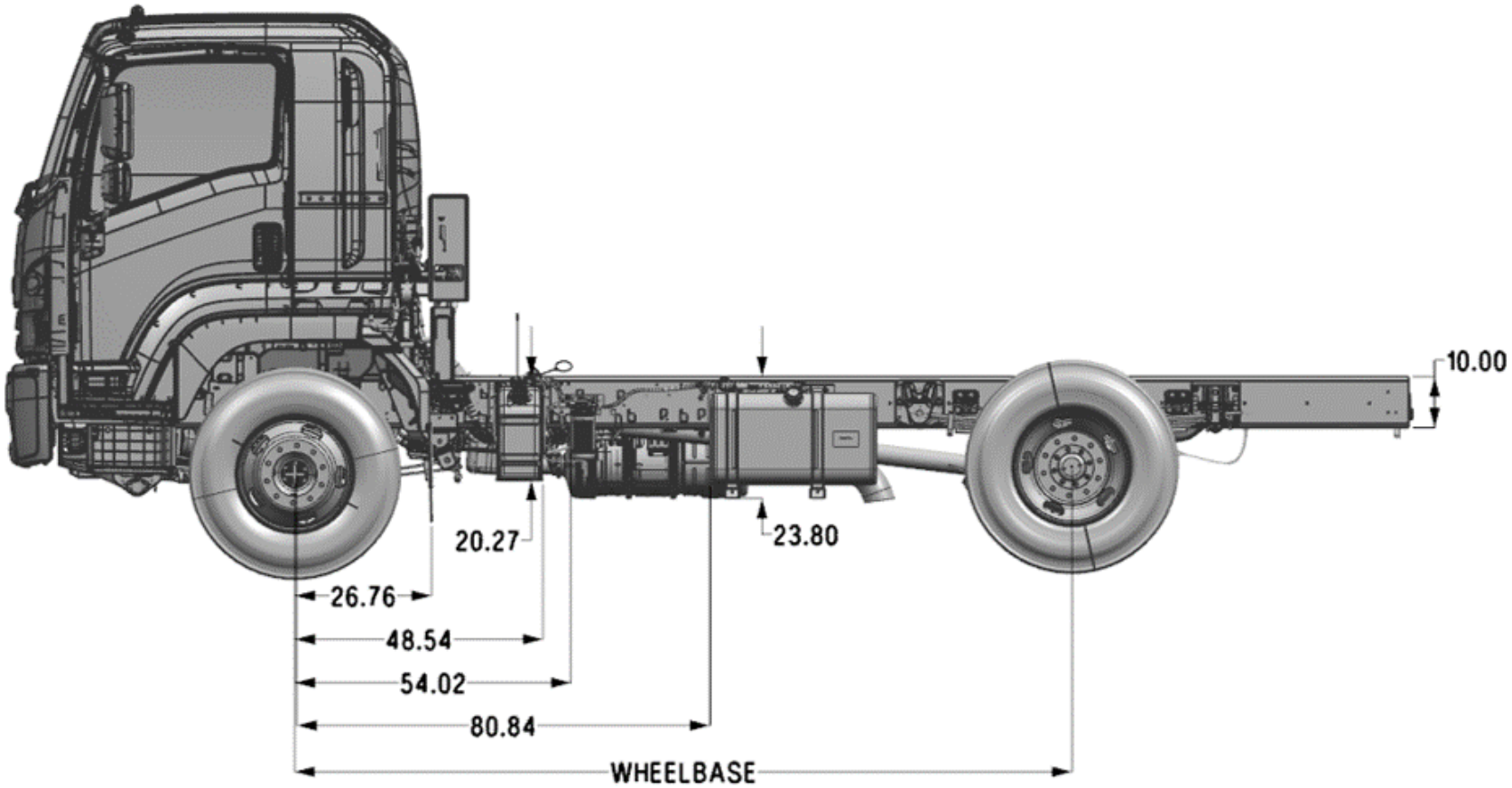



Figure 14

Note: Dimensions in inches

# 2025 Chevrolet Low Cab Forward

## Diesel Multi-Leaf Spring Suspension - Right Side View

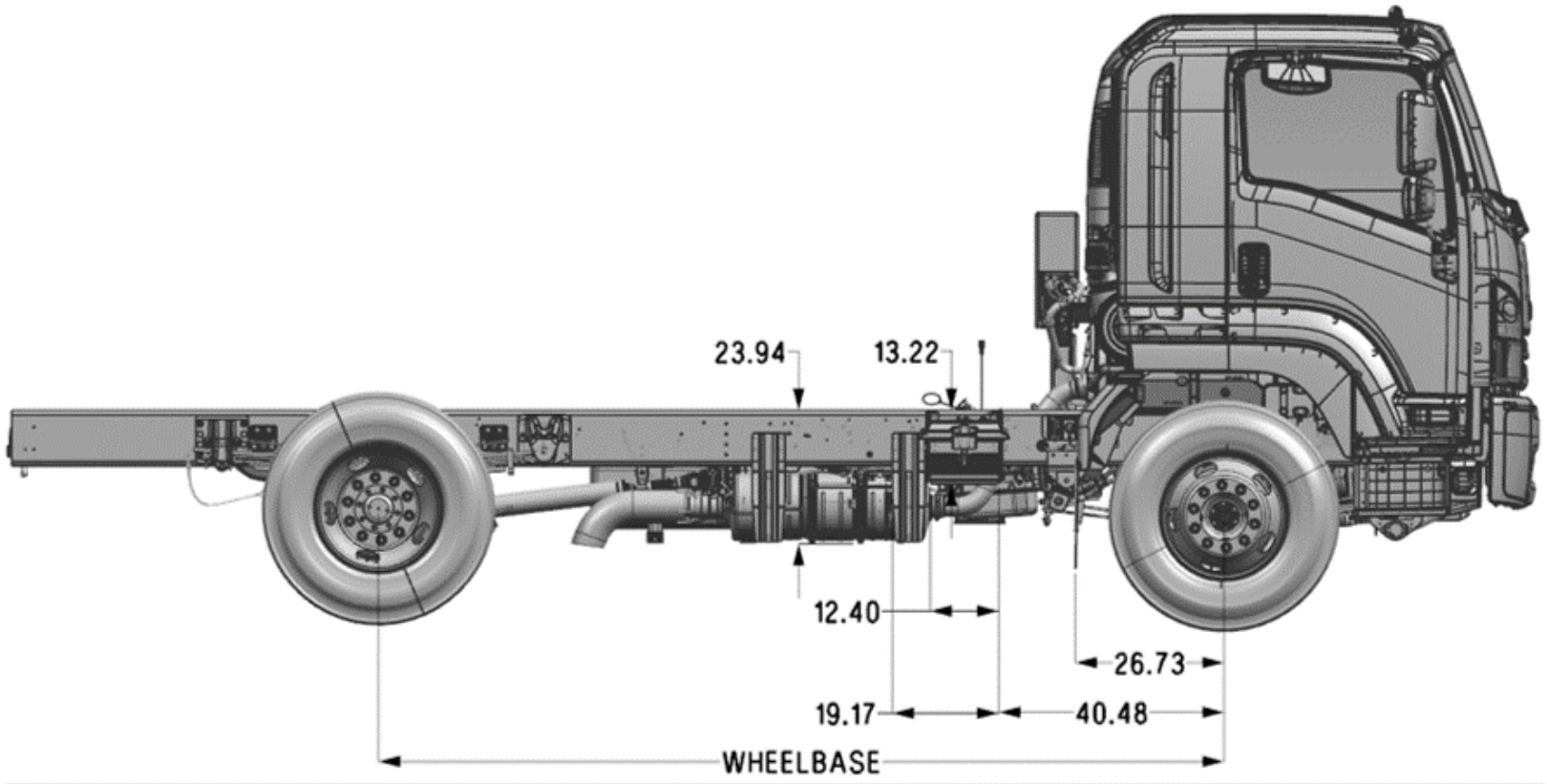



Figure 15

Note: Dimensions in inches

# 2025 Chevrolet Low Cab Forward

## Diesel Air Spring Suspension - Top View

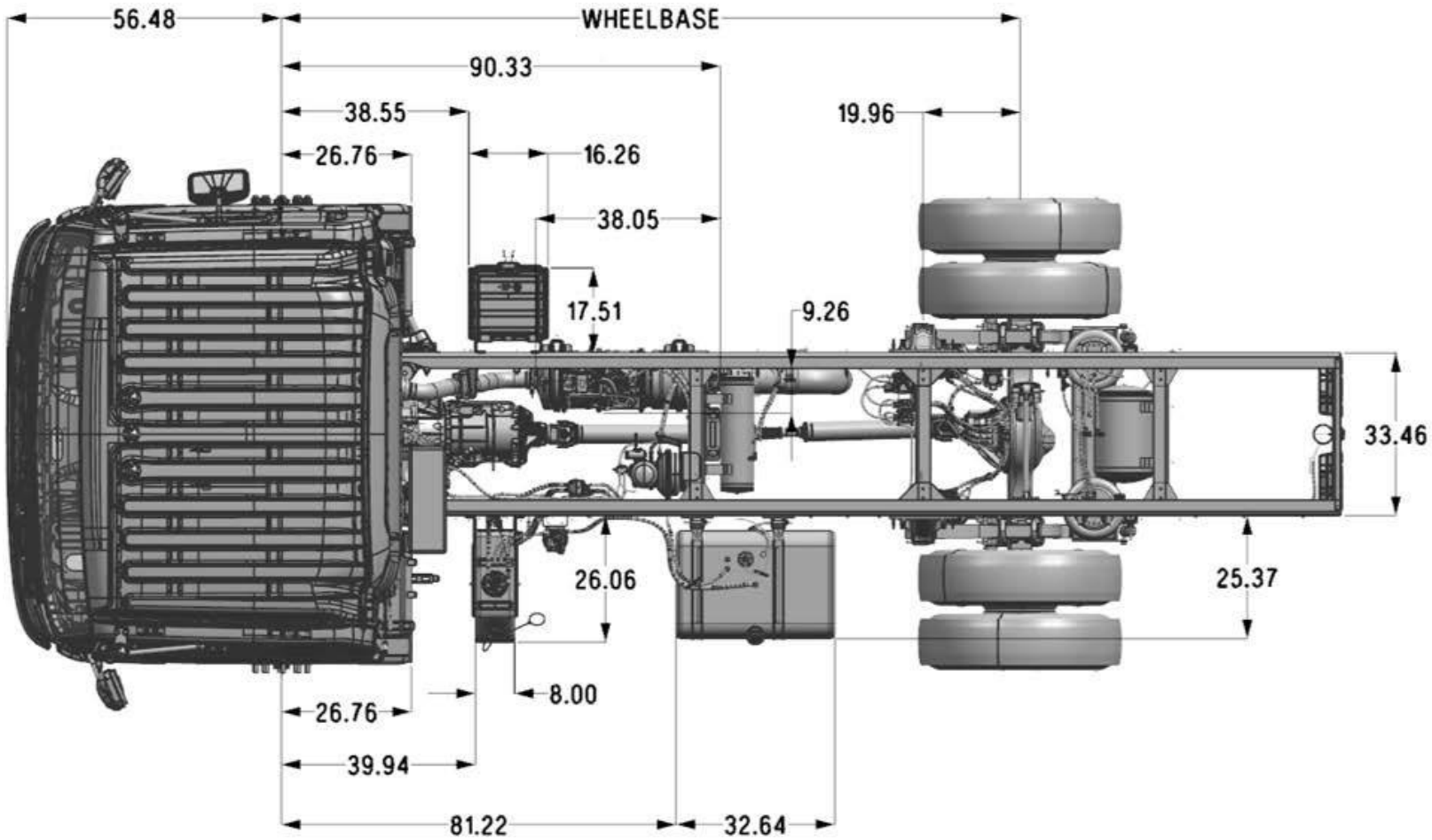



Figure 16

# 2025 Chevrolet Low Cab Forward

## Diesel Air Spring Suspension - Driver Side View

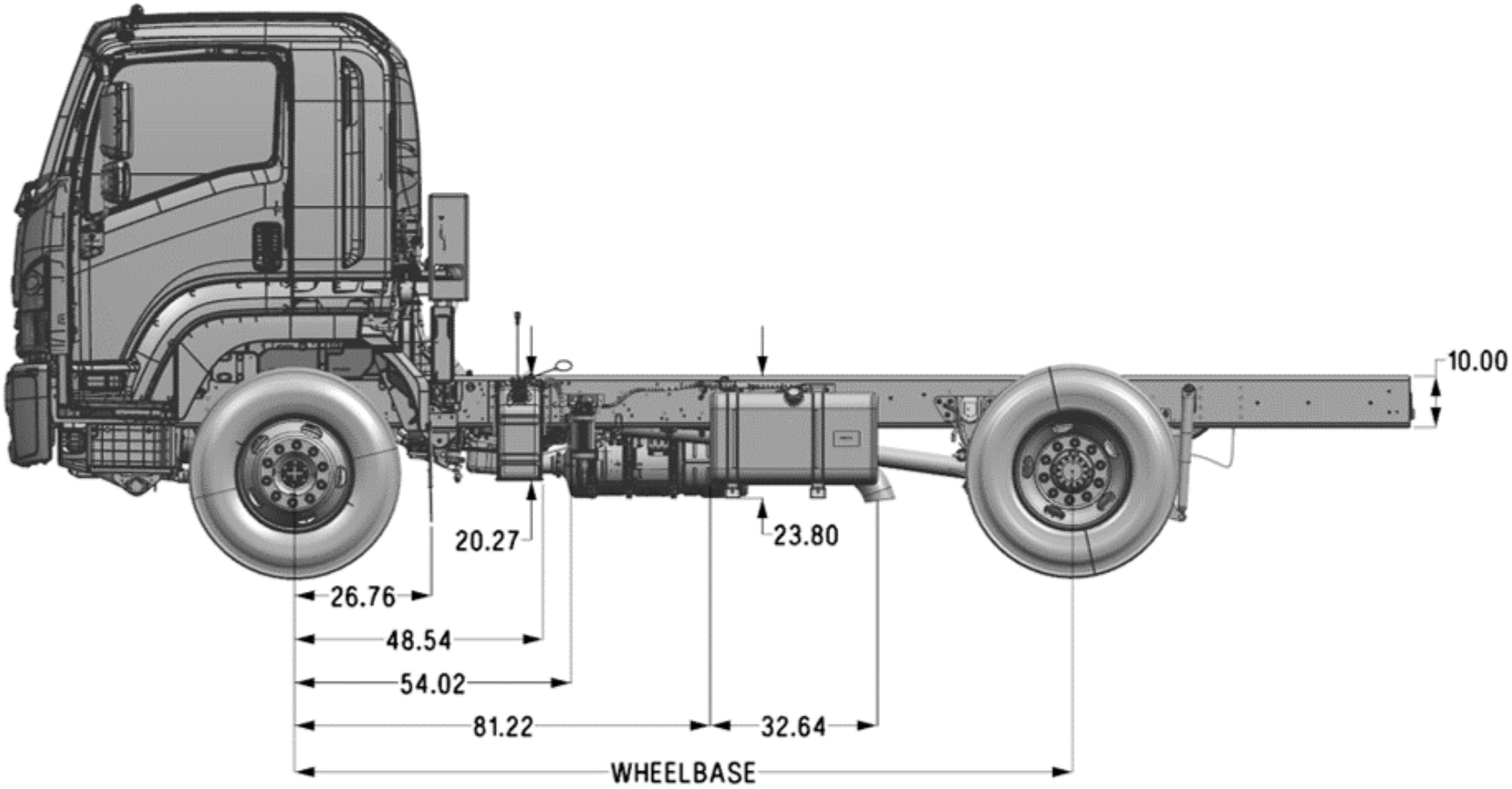
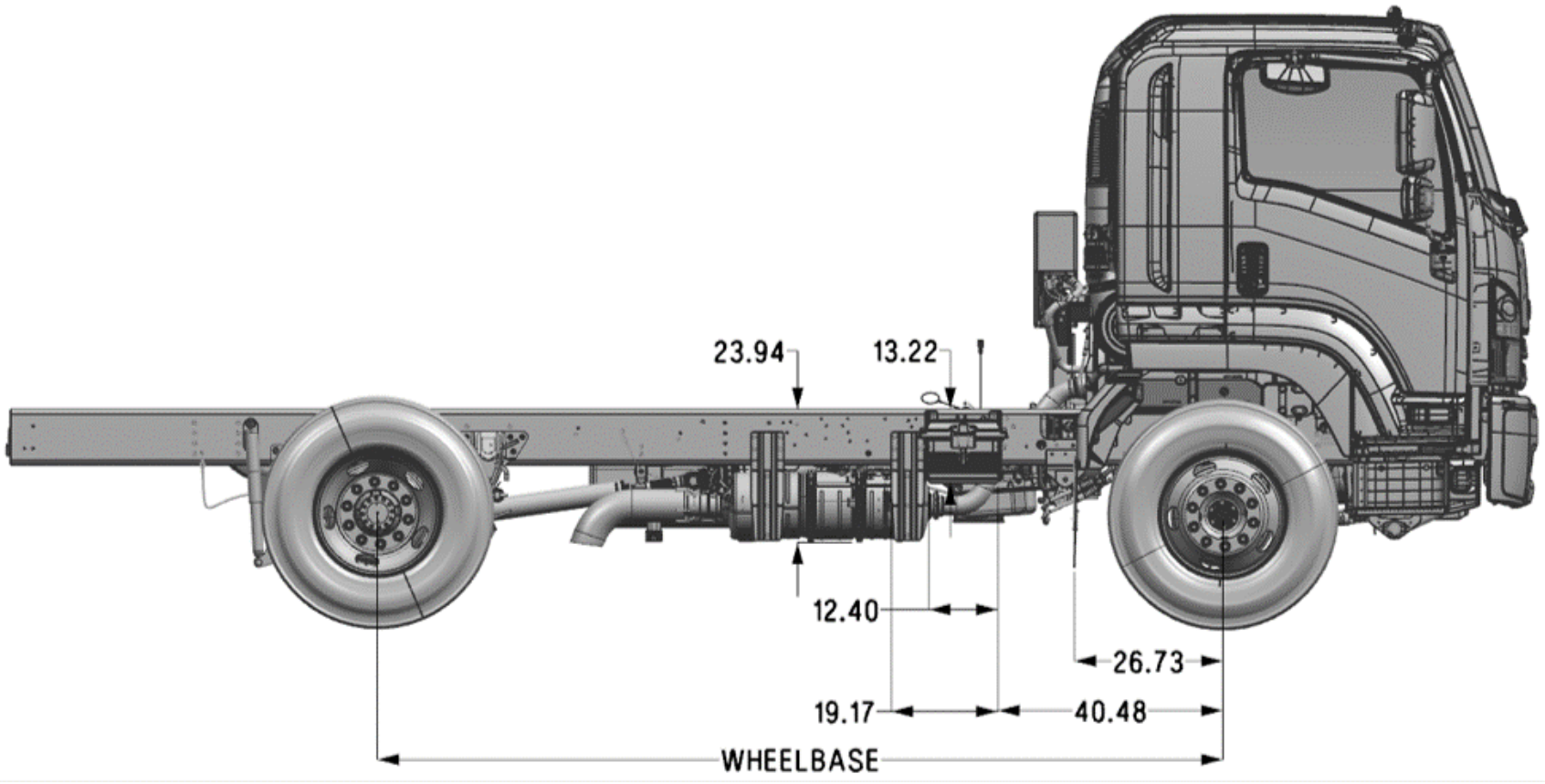



Figure 17

# 2025 Chevrolet Low Cab Forward

## Diesel Air Spring Suspension - Passenger Side View

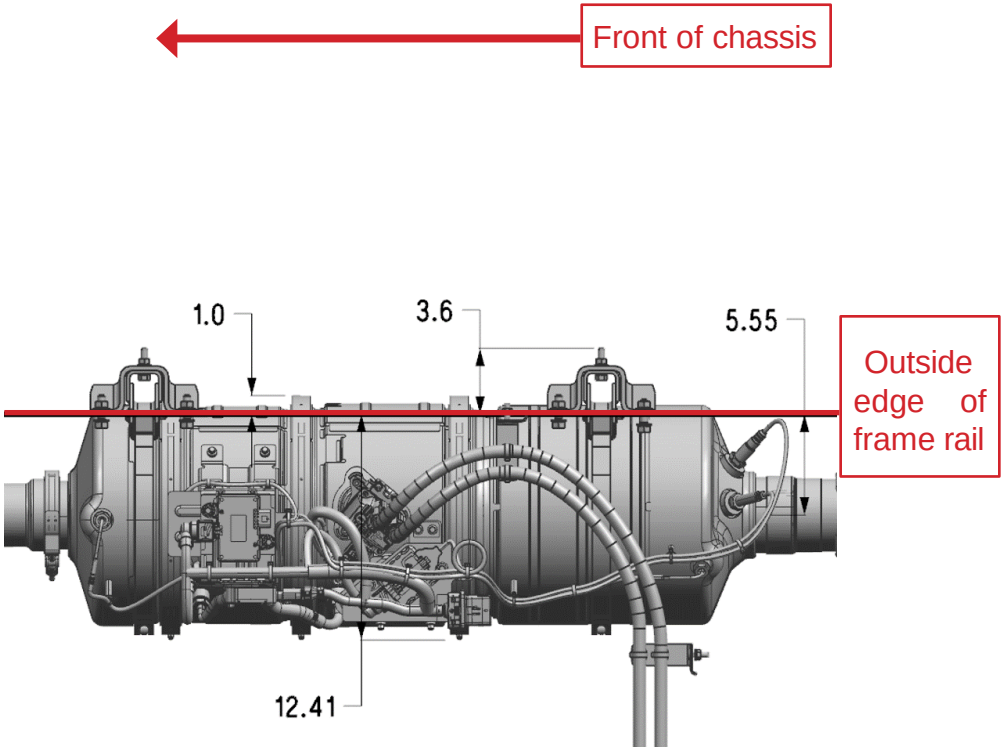



Note: Chassis shown with 255/70R22.5H tires

Figure 18

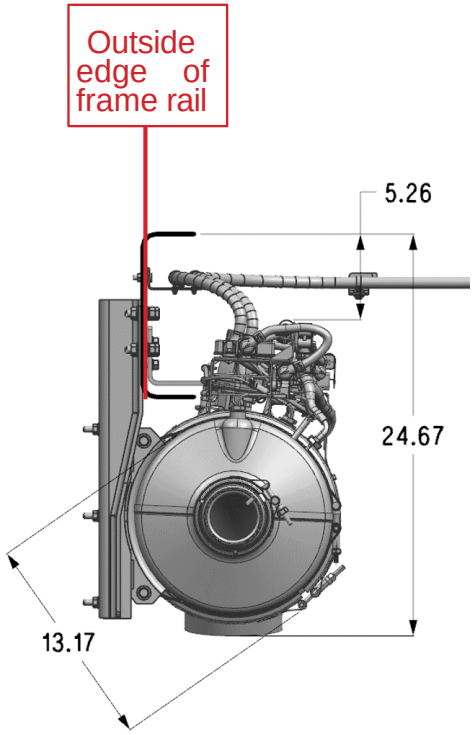
# 2025 Chevrolet Low Cab Forward

## Exhaust System Dimensions
## SCR / DPF 4HK1-TC




Note: As viewed from top

Figure 19

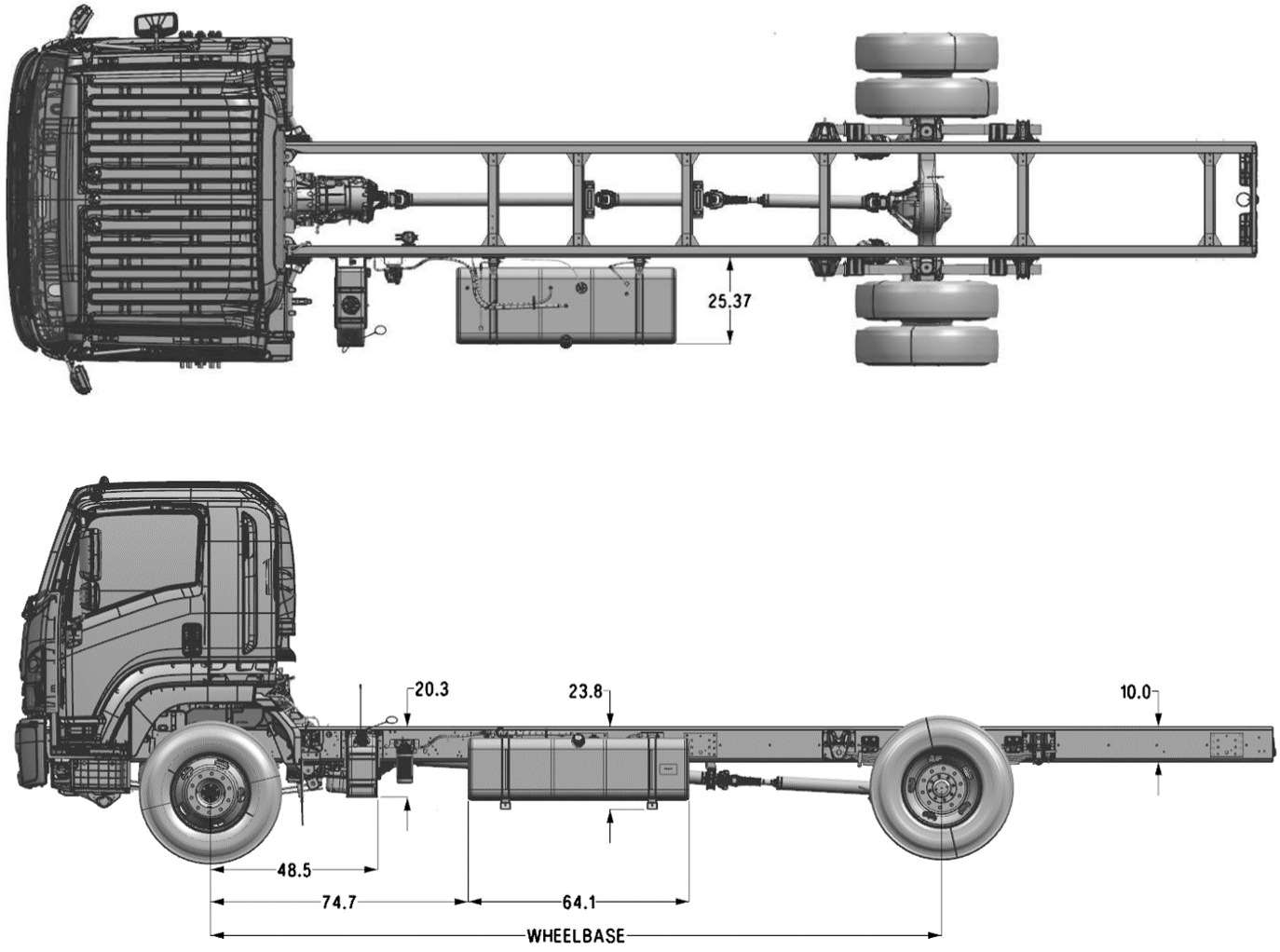



Note: As viewed from front

Figure 20

Note: Dimensions in inches

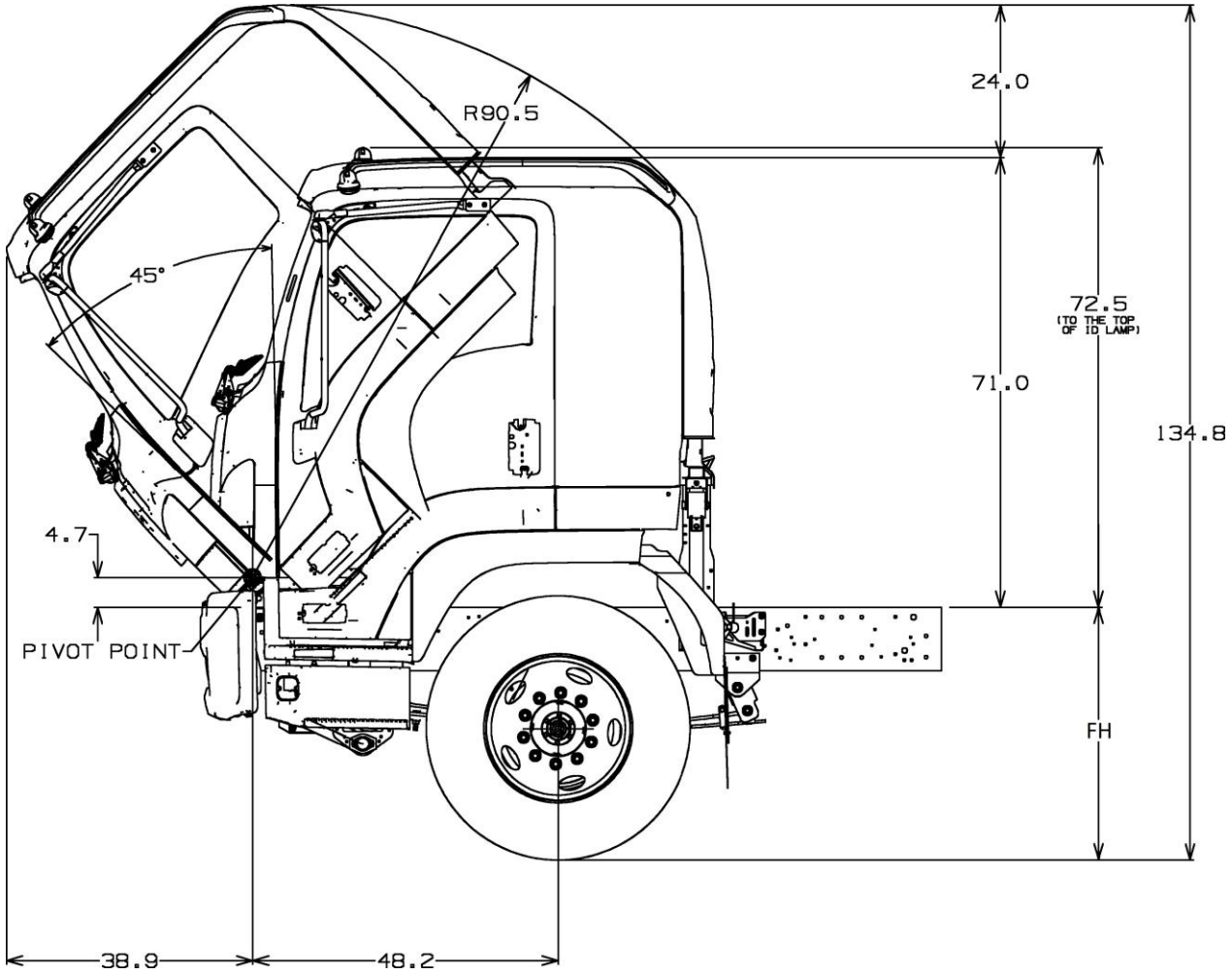
## Fuel Tank Dimensions - 100 Gallon Tank




Note: Dimensions in inches

Figure 21

## Cab Tilt




Note: Dimensions in inches

Figure 22

## *Turning Diameter*

The 6500 XD & 7500 XD Diesel steering features degree inside wheel cut angle.

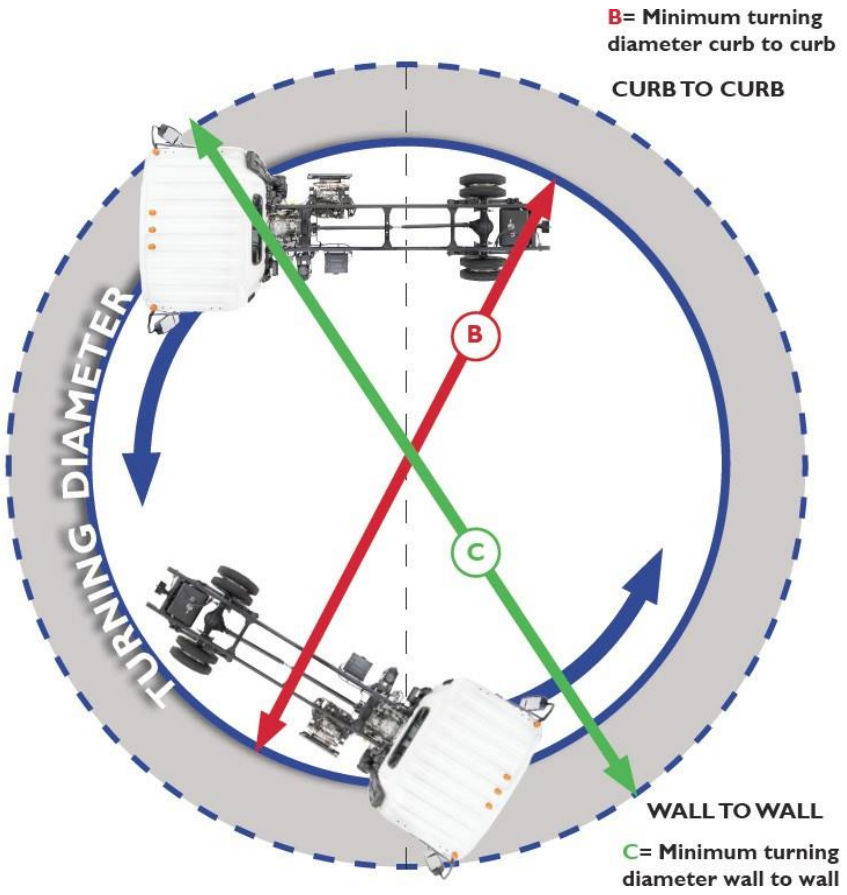


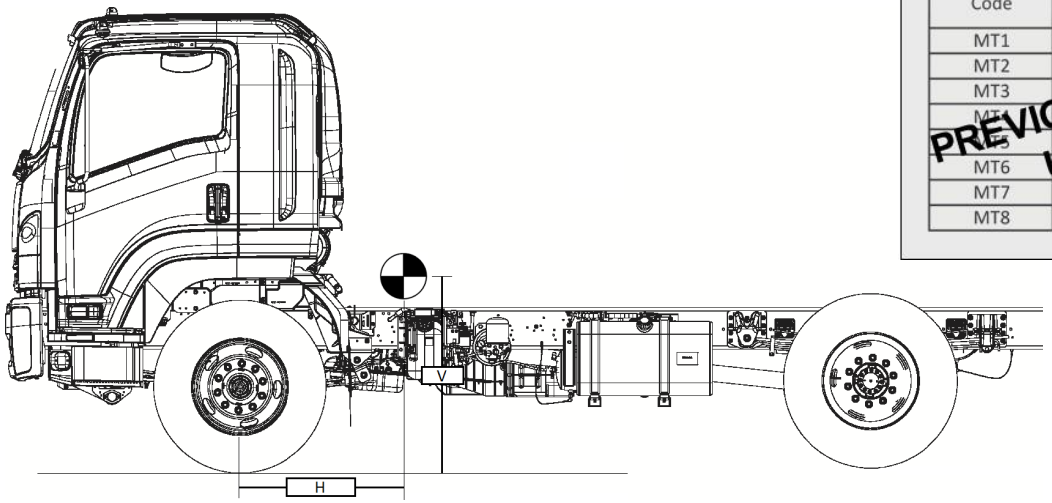

Figure 23

| Wheelbase | in | 152 | 170 | 188 | 200 | 212 | 224 | 236 | 248 |
|---|---|---|---|---|---|---|---|---|---|
| Curb---to---Curb | ft | 43.7 | 47.4 | 51.8 | 54.7 | 56.5 | 59.3 | 62.2 | 65.0 |
| WALL---TO---WALL (Bumper) | ft | 48.7 | 52.5 | 56.9 | 59.9 | 61.7 | 64.6 | 67.5 | 70.3 |
| WALL---TO---WALL (96" Mirrors) | ft | 48.6 | 52.5 | 56.9 | 59.8 | 61.6 | 64.5 | 67.3 | 70.2 |
| WALL---TO---WALL (102" Mirrors) | ft | 49.0 | 52.9 | 57.2 | 60.2 | 62.0 | 64.8 | 67.7 | 70.6 |

# 2025 Chevrolet Low Cab Forward

## Center of Gravity

PREVIOUS MODEL YEAR DATA SHOWN - UPDATE COMING SOON




| Horizontal and Vertical Center of Gravity of Chassis | | | |
|---|---|---|---|
| Model Code | Wheelbase (in) | Vertical CG - V - (in) | Horizontal - H - (in) |
| MT1 | 152 | 31.0 (laden at GVWR) | 55.3 |
| MT2 | 170 | | 61.9 |
| MT3 | 188 | | 69.2 |
| MT4 | 200 | | 73.6 |
| MT5 | 212 | | 78.1 |
| MT6 | 224 | | 82.5 |
| MT7 | 236 | | 87.0 |
| MT8 | 248 | | 91.5 |

PREVIOUS MODEL'S DATA SHOWN
UPDATE COMING SOON

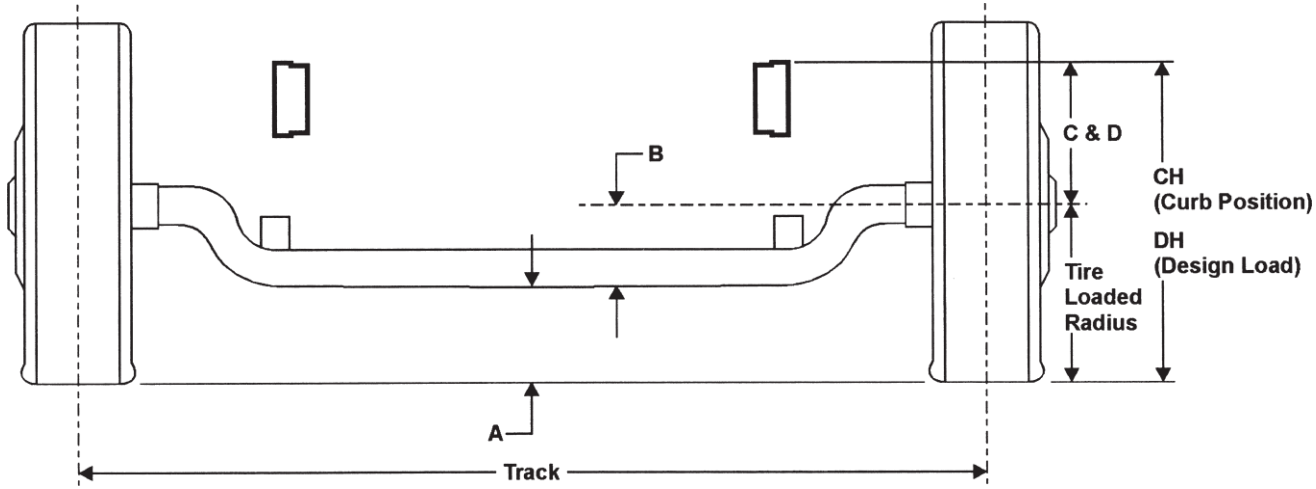
Figure 24

NOTE: The Final Manufacturer must ensure that the combined vertical center of gravity of the chassis, body, and available payload at full GVW does not exceed the maximum vertical center of gravity outlined in the Incomplete Vehicle Document (IVD).

The maximum vertical center of gravity of the total vehicle at maximum GVWR is not to exceed 70 inches (1778 mm) above the ground. If a higher completed vehicle vertical center of gravity is required, please contact GM Upfitter.

Note: Dimensions in inches

# Front Axle Chart




Formulas for calculating height dimensions:

A = Tire Loaded Radius – B
C = Centerline of Axle to Top of Frame Rail at Curb Position
D = Centerline of Axle to Top of Frame Rail at Design Load
CH = C + Tire Unloaded Radius
DH = D + Tire Loaded Radius

| TIRE | GVWR | GAWR | A | B | C | D | CH | DH | TRACK |
|---|---|---|---|---|---|---|---|---|---|
| 11R22.5G | 25,950 lb. | 12,000 lb. | 10.0 | 9.4 | 20.0 | 18.6 | 40.8 | 38.0 | 81.4 |
| 255/70R22.5H | 25,950 lb. | 11,000 lb. | 7.7 | 9.4 | 20.0 | 18.6 | 38.3 | 35.7 | 81.4 |
| 11R22.5G | 33,000 lb. | 12,000 lb. | 10.0 | 9.4 | 20.0 | 18.6 | 40.8 | 38.0 | 81.4 |

Figure 25

Note: Dimensions in inches

# Rear Axle Chart

| Definitions | |
|---|---|
| A | Centerline of axle to bottom of axle bowl. |
| B | Centerline of axle to top of frame rail at metal-to-metal position. |
| C | Centerline of axle to top of frame rail at curb position. |
| D | Centerline of axle to top of frame rail at design load. |
| E | Rear Tire Clearance: Minimum clearance required for tires measured from the top of the frame at the vehicle centerline of the rear axle, when rear wheels on one side ride over a high spot. |
| CH | Rear Frame Height (Curb Load): Vertical distance between the normal top of frame rail and the ground-line through the centerline of the rear axle at curb position. |
| DH | Rear Frame Height (Design Load): Vertical distance between the normal top of frame rail and the ground-line through the centerline of the rear axle at design position. |
| DW | Minimum distance between the inner surfaces of the rear tires. |
| EW | Minimum Rear Width: Overall width of the vehicle measured at the outermost surfaces of the rear tires. |
| HH | Rear Tire Clearance: Minimum clearance between the rear axle and the ground-line. |
| HW | Dual Tire Spacing: Distance between the centerlines of the tires in a set of dual tires. |
| KH | Tire Bounce Clearance: Minimum distance required for tire bounce as measured from the centerline of the rear axle and the top of the rear tire when one wheel rides over a high spot. |
| CW | Track Dual Rear Wheel Vehicle: Distance between the centerlines of the dual wheels measured at the ground-line. |
| KW | Clearance between body and tires. |
| **Equations** | |
| CH | = Tire loaded radius + C |
| DH | = Tire loaded radius + D |
| DW | = CW + 2 tire sections - tire clearance |
| EW | = CW + 2 tire sections + tire clearance |
| HH | = Tire loaded radius - A |
| JH | = KH - B |
| KH | = Tire radius + 3.0 inches |
| KW | = DW - 5.0 inches |
| LW | = 1.0 inch minimum clearance between tires and springs |

| SUSPENSION TYPE | TIRE SIZE | CW | A | B | C | D | E[1] |
|---|---|---|---|---|---|---|---|
| MULTI-LEAF | 11R22.5G | 72.1 | 8.1 | 13.8 | 20.8 | 17.9 | 11.4 |
| | 255/70R22.5H | | | | | | 10.8 |
| AIR SPRING | 11R22.5G | | | 15.7 | 18.6 | 18.6 | 5.0 |
| | 255/70R22.5H | | | | | | 3.2 |

Notes:

[1] Includes 2.5" of tire chain clearance.

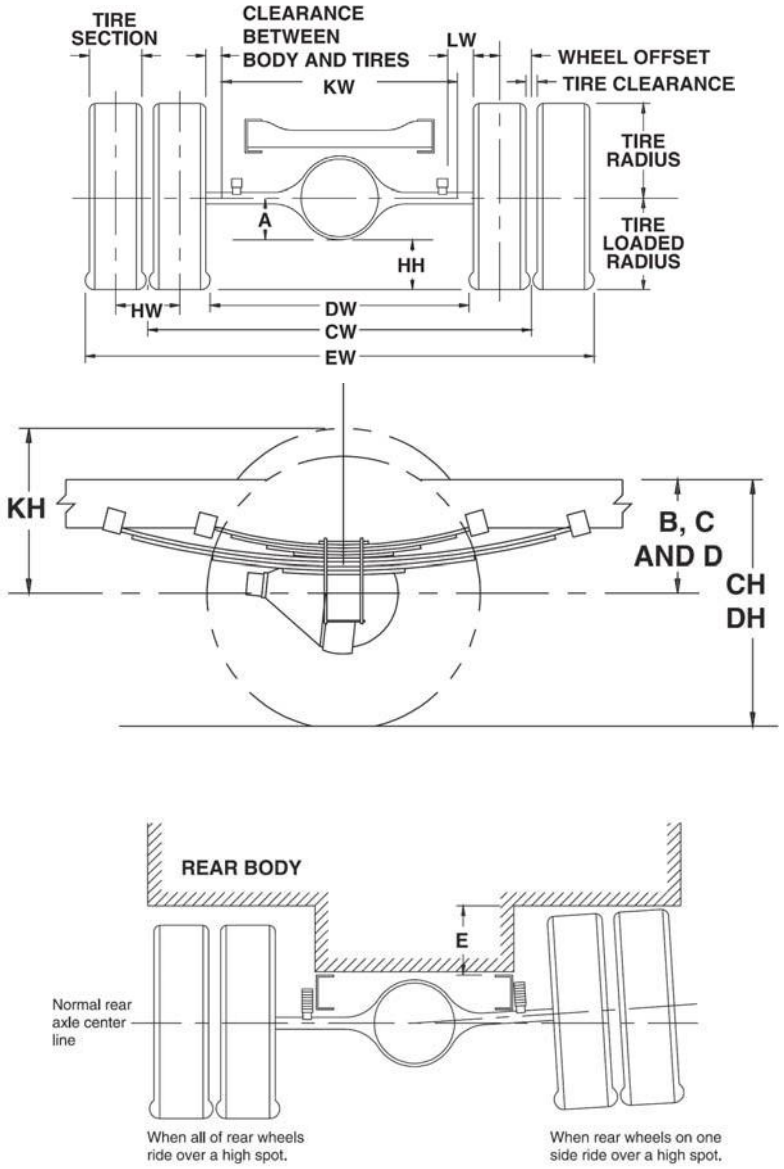



FIGURE 26

*Multi-leaf Spring Suspension Deflection Charts*

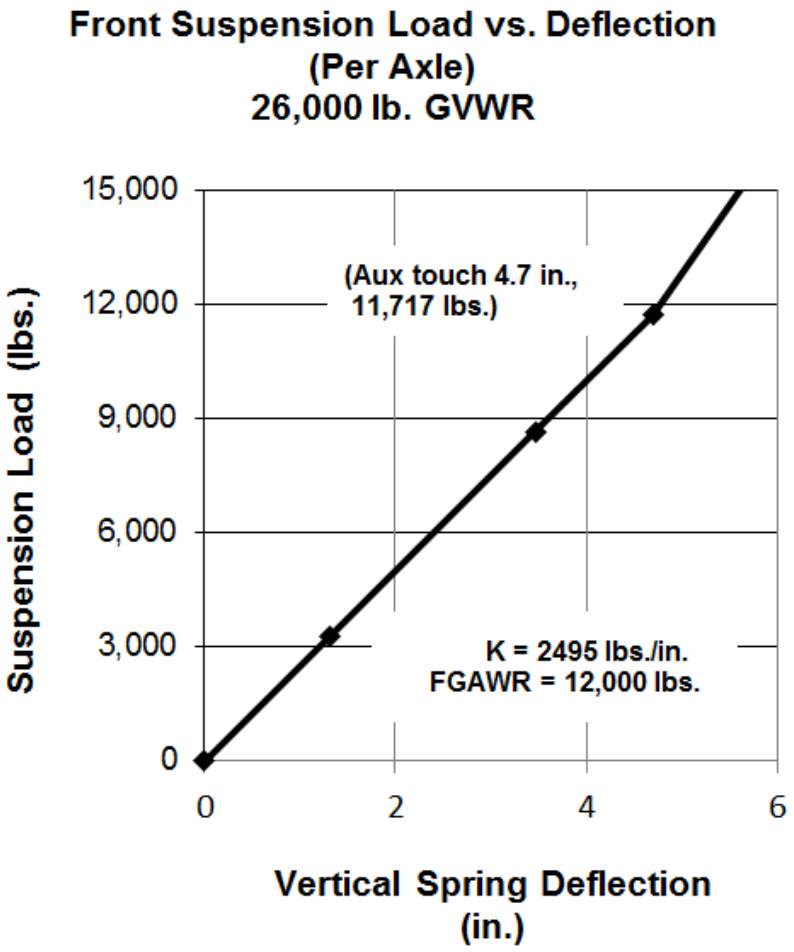



Figure 27

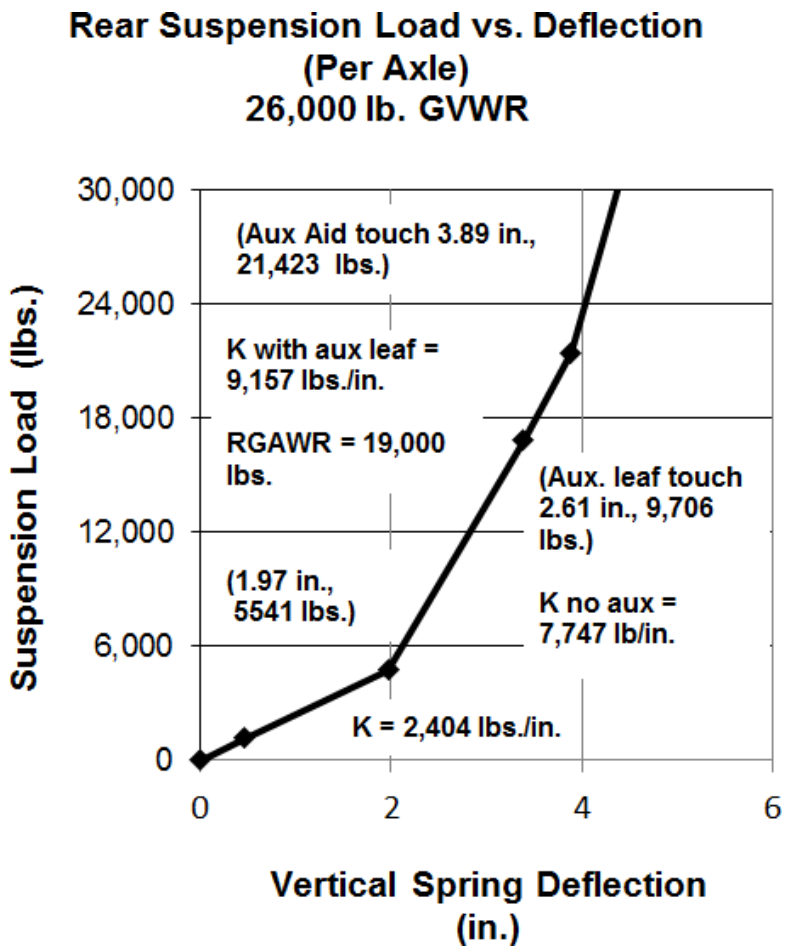



Figure 28

# 2025 Chevrolet Low Cab Forward

*Multi-leaf Spring Suspension Deflection Charts*

**Front Suspension Load vs. Deflection**
**(Per Axle)**
**33,000 lb. GVWR**

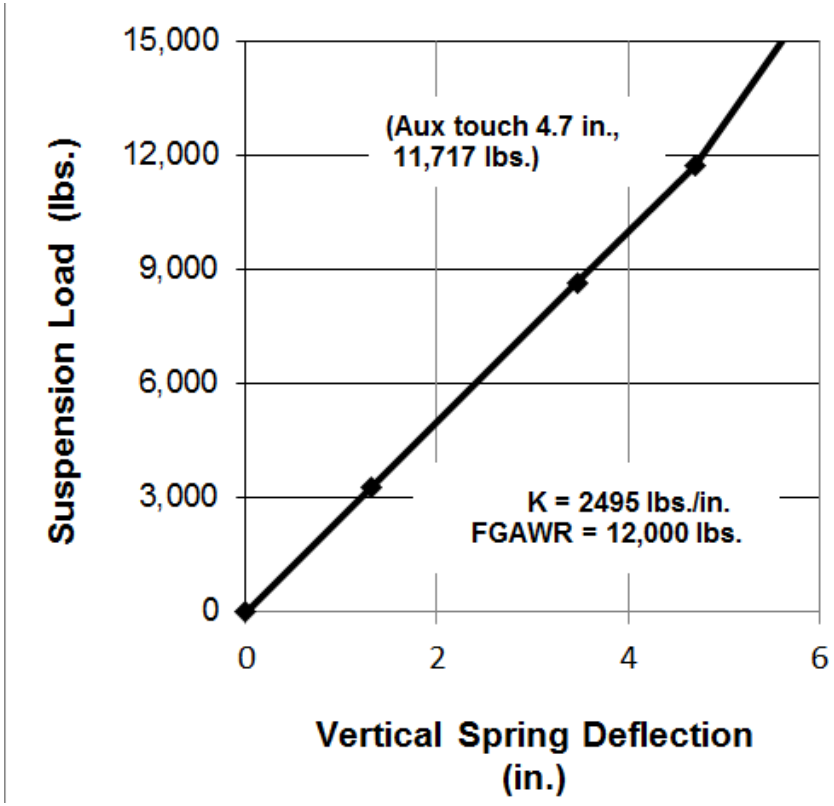



Figure 29

**Rear Suspension Load vs. Deflection**
**(Per Axle)**
**33,000 lb. GVWR**

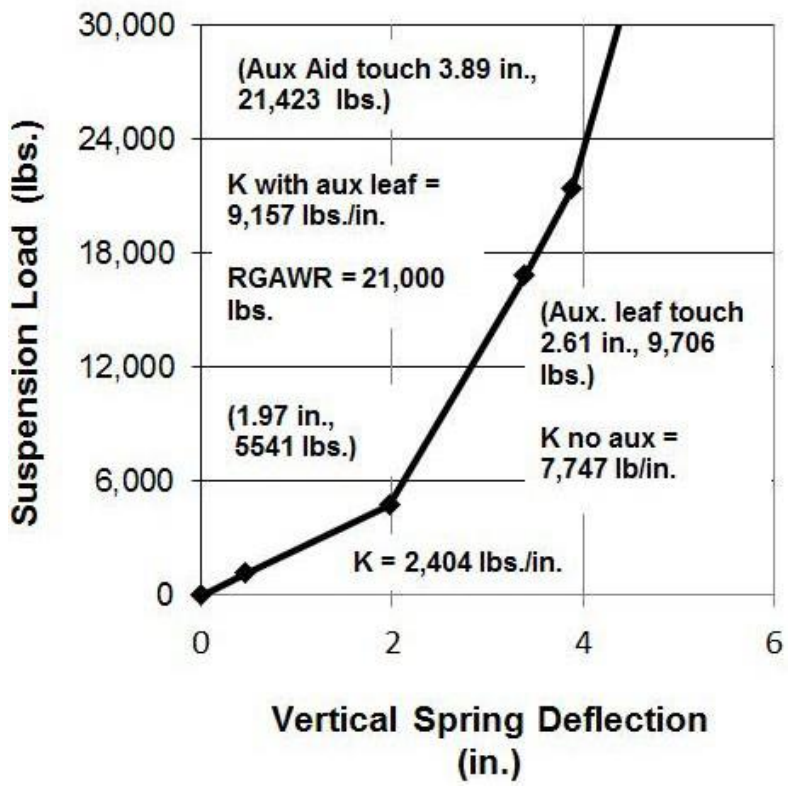



Figure 30

## Tire and Disc Wheel Chart

***Tire***

| Brand | Size | Revolutions Per Mile | Max Load Per Tire (lb) | | Cold Inflation Pressure (psi) | GVWR (lb) | Radius (in) | | Loaded Section Width (in) | Tire Clearance (in) | Design Rim Width (in) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Single | Dual | | | Loaded | Unloaded | | | |
| Bridgestone | 11R22.5G | 500 | 6175 | 5840 | 105 | 25,950 | 19.4 | 20.8 | 12.3 | 0.92 | 8.25 |
| Continental | 11R22.5G | 498 | 6175 | 5840 | 105 | 25,950 | 19.4 | 20.8 | 12.0 | 0.20 | 8.25 |
| Yokohama RY023 (Front Tire) | 255/70R22.5 | 570 | 5510 | 5070 | 120 | 25,950[1] | 17.1 | 18.25 | 10 | 2.83 | 7.5 |
| Yokohama TY303 (Drive Tire) | 255/70R22.5 | 563 | 5510 | 5070 | 120 | 25,950 | 17.3 | 18.5 | 10 | 2.83 | 7.5 |

***Disc Wheel***

| Brand | Size (in.) | Material | Rim Type | Bolt Holes | Bolt Circle Diameter (in) | Front & Rear Nut Size[2] | Front & Rear Stud Size | Nut/Stud Torque Specs (ft-lb) | Inner Circle (in) | Wheel Outside Offset (in) | Disc Thickness (in) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Accuride | 22.5 x 8.25 | 2-piece welded steel | Hub-piloted, dual-mounting, 15º tubeless | 10-Hole | 11.25 | 33mm Hex | M22 x 1.5 | 475 (644 N-m) | 8.66 | 6.60 | 0.437 |
| Alcoa[3] | 22.5 x 8.25 | 1-piece aluminum | Hub-piloted, dual-mounting, 15º tubeless | 10-Hole | 11.25 | 33mm Hex | M22 x 1.5 | 475 (644 N-m) | 8.66 | 6.60 | 0.748 |

NOTES:

[1] Front GAWR is reduced to 11,000 lb. with 255/70R22.5H tires equipped.

[2] Outside dimension wrench size.

[3] Aluminum wheel options will include (4) wheel spacers to prevent dissimilar metal corrosion.

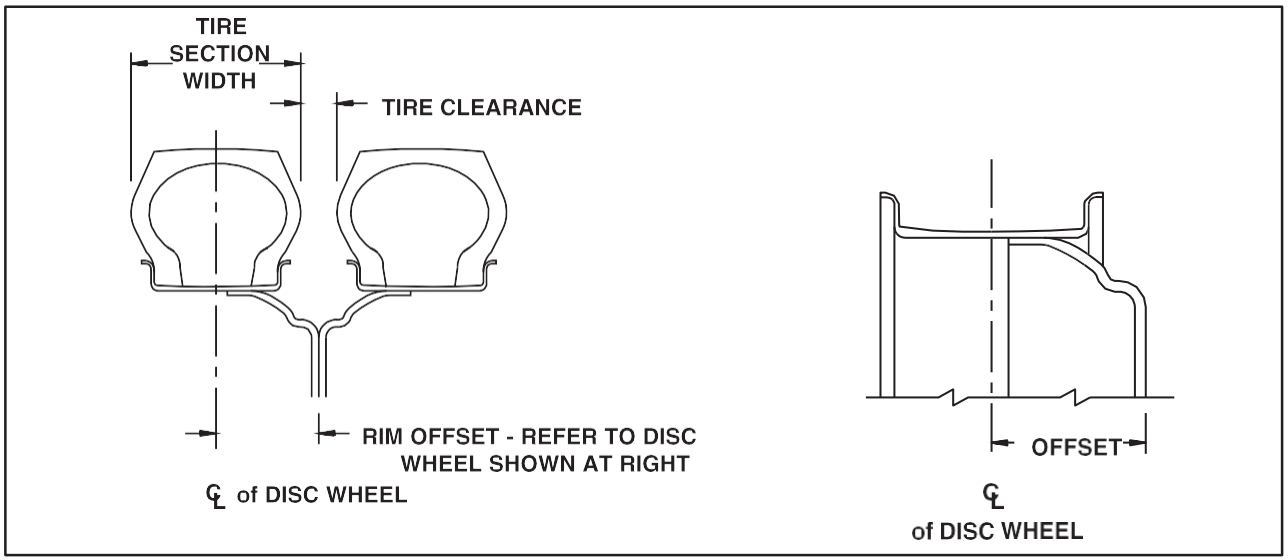



Figure 31

# 2025 Chevrolet Low Cab Forward

## Propeller Shaft Angles

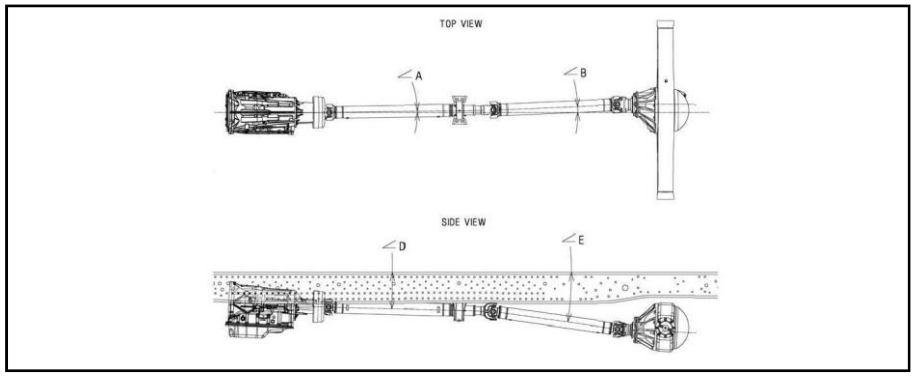



Figure 32

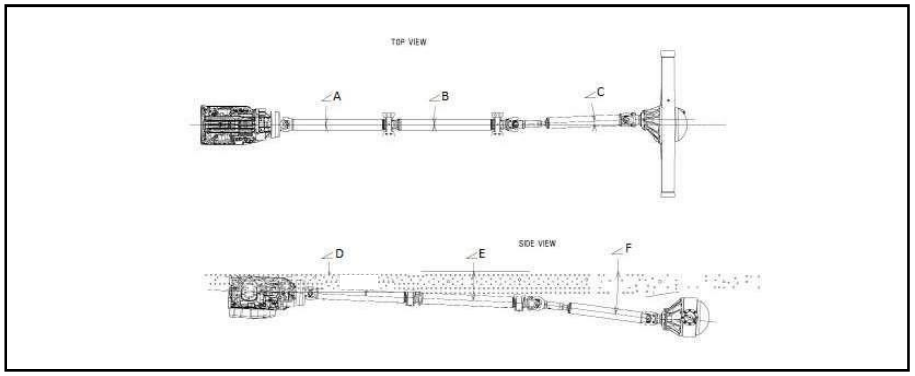



Figure 33

| Wheel Base (in.) | Top View | | | Side View | | | | |
|---|---|---|---|---|---|---|---|---|
| | ∠A | ∠B | ∠C | ∠D | ∠E | ∠F | ∠Trans. | ∠Rear Axle |
| 152 | 0 | 1.7 | n/a | 5.52 | 8.89 | n/a | 4 | 5.42 |
| 170 | 0 | 1.2 | n/a | 5.52 | 6.30 | n/a | 4 | 5.42 |
| 188 | 0 | 1.4 | n/a | 5.85 | 4.24 | n/a | 4 | 5.42 |
| 200 | 0 | 0 | 0.8 | 5.52 | 3.87 | 4.97 | 4 | 5.42 |
| 212 | 0 | 0 | 1.0 | 3.24 | 4.94 | 4.96 | 4 | 5.42 |
| 224 | 0 | 0 | 0.8 | 3.24 | 4.93 | 3.61 | 4 | 5.42 |
| 236 | 0 | 0 | 0.7 | 3.24 | 3.76 | 3.84 | 4 | 5.42 |
| 248 | 0 | 0 | 0.7 | 3.24 | 4.49 | 2.13 | 4 | 5.42 |

**Note:** 1. Angles provided in table are relative to the frame angle. Please take this into consideration for service measurements.
2. Driveline angles are based on the chassis curb weight which includes standard fuel but no driver, body, or payload.

# 2025 Chevrolet Low Cab Forward

## Propeller Shaft Lengths

| Wheelbase | 152 | 170 | 188 | 200 | 212 | 224 | 236 | 248 |
|---|---|---|---|---|---|---|---|---|
| No. of Shafts | 2 | 2 | 2 | 3 | 3 | 3 | 3 | 3 |
| Shaft #1 O.D. | 4.00 | 4.00 | 4.00 | 4.00 | 4.00 | 4.00 | 4.00 | 4.00 |
| Thickness | 0.095 | 0.095 | 0.095 | 0.095 | 0.095 | 0.095 | 0.095 | 0.095 |
| Length | 35.4 | 35.4 | 60.5 | 35.4 | 60.3 | 60.3 | 60.3 | 60.3 |
| Type | A | A | A | A | A | A | A | A |
| Shaft #2 O.D. | 4.00 | 4.00 | 4.00 | 4.00 | 4.00 | 4.00 | 4.00 | 4.00 |
| Thickness | 0.095 | 0.095 | 0.095 | 0.095 | 0.095 | 0.095 | 0.095 | 0.095 |
| Length | 44.1 | 62.0 | 54.8 | 31.8 | 31.9 | 43.8 | 41.1 | 53.0 |
| Type | B | B | B | A | A | A | A | A |
| Shaft #3 O.D. | N/A | N/A | N/A | 4.00 | 4.00 | 4.00 | 4.00 | 4.00 |
| Thickness | N/A | N/A | N/A | 0.095 | 0.095 | 0.095 | 0.095 | 0.095 |
| Length | N/A | N/A | N/A | 60.0 | 47.1 | 47.2 | 61.8 | 61.9 |
| Type | N/A | N/A | N/A | B | B | B | B | B |

Figure 34

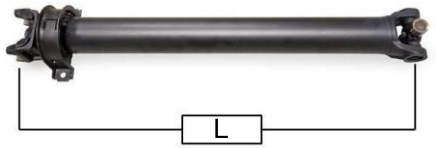
| Type | Description | Illustration |
|---|---|---|
| Type **A** | 1st shaft in 2 or 3-Piece Driveline<br>2nd shaft in 3-Piece Driveline |  |
| Type **B** | 2nd shaft in 2-piece Driveline<br>3rd shaft in 3-Piece Driveline |  |

Figure 35

Note: Dimensions in inches

## Brake System Diagram

*Legend FTR Brake System*

*(1) Wheel Speed Sensors (WSS)*
*(2) Speed Sensor Rotor*
*(3) Right Front Brake Pressure Modulator Valve*
*(4) Electronic Brake Control Module (EBCM)*
*(5) Right Rear Brake Pressure Modulator Valve*
*(6) Left Front Brake Pressure Modulator Valve*
*(7) Left Rear Brake Pressure Modulator Valve*

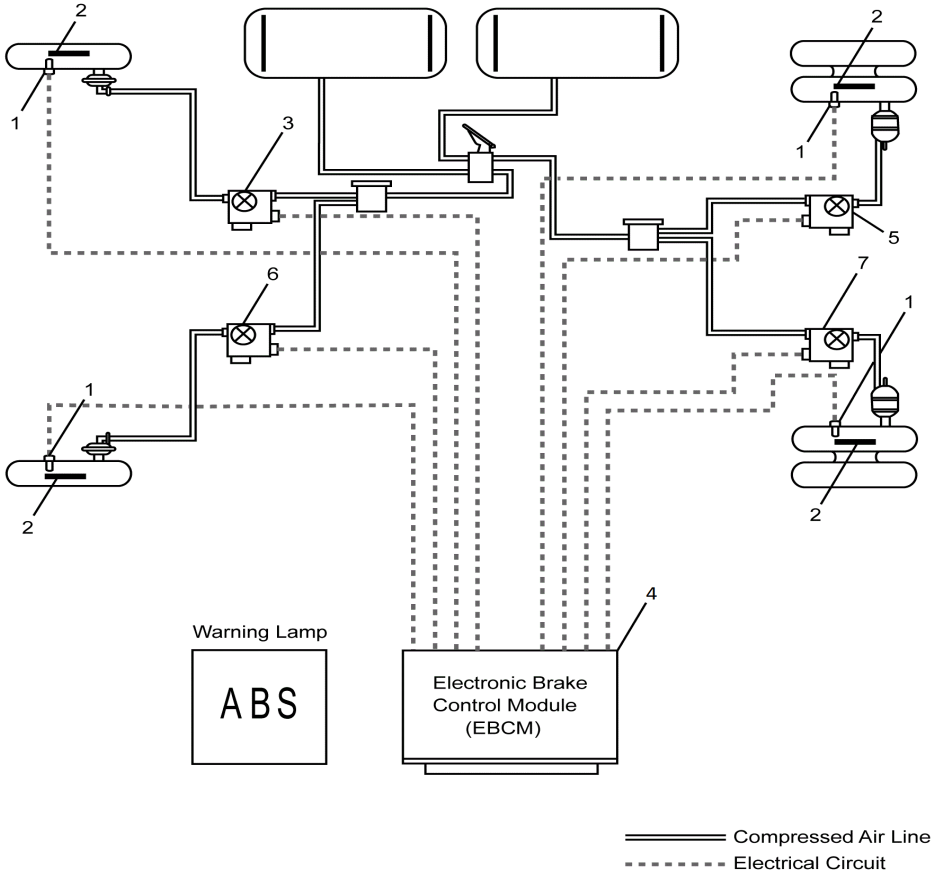



Figure 36

# 2025 Chevrolet Low Cab Forward

## 4500 XD & 5500 XD In-Frame Diesel Fuel Fill Installation Instructions

1. Disconnect battery.
2. Loosen hose from the tie downs. Remove caps from plate on rail.
3. Install hoses onto the plate.
4. Extend hose out from the driver side of the rail to body rail.
5. The filler neck must be mounted to allow the fill plate bracket to be parallel to the frame horizontal.
6. Cover with protector wrap and secure with tie wraps.
7. Filler hose is set for 102 inches outside width body.
8. Filler neck (Figure 9 or 14 - Dimension A) must be between 6.85 inches and 8.5 inches above frame.
9. Secure the filler plate to the bottom of the body and check for leaks.
10. Ensure that fill hose does not sag, creating an area where the fuel could pool in the fill hose.
11. Reconnect battery.

## Fuel Tank Cautions

1. **Fuel fill kit must be installed on cab chassis if it will be driven for an extended distance.**
2. **Fuel tank kit provides venting for the fuel tank.**
3. **DO NOT RESTRICT OR KINK THE FUEL TANK VENT HOSE. Operating this vehicle with a restricted or kinked fuel tank vent hose may cause serious damage to the fuel tank and/or fuel injection pump. Continued operation may cause engine failure.**

# 2025 Chevrolet Low Cab Forward

## 4500 XD & 5500 XD Diesel Ultra Low Sulfur Diesel Label

**Per EPA Title 40, Part 86, 86:007—35(c),**
**The decal illustrated below must be installed on the vehicle.**
**The decal is included in the fuel fill parts box.**


**INSTRUCTIONS FOR DECAL PLACEMENT:**

1. The decal must be placed as close as possible to the fuel inlet and be **clearly visible.**
2. The decal should be placed above or to the side of the fuel cap to avoid corrosion by possible contact with fuel.
3. The decal may be placed on aerodynamic fairings, bodies, etc. as long as the decal is clearly visible and in close proximity to the fuel inlet.
4. For installed bodies that have a fuel door , the decal should be placed above or to the side of the fuel door.

Thoroughly clean the area of all grease, dirt, etc. before application of the decal. Apply the decal at room temperature, 65° to 75° F.

Figure 1

# 2025 Chevrolet Low Cab Forward

## 4500 XD & 5500 XD Diesel Through the Rail Fuel Fill Frame Hole

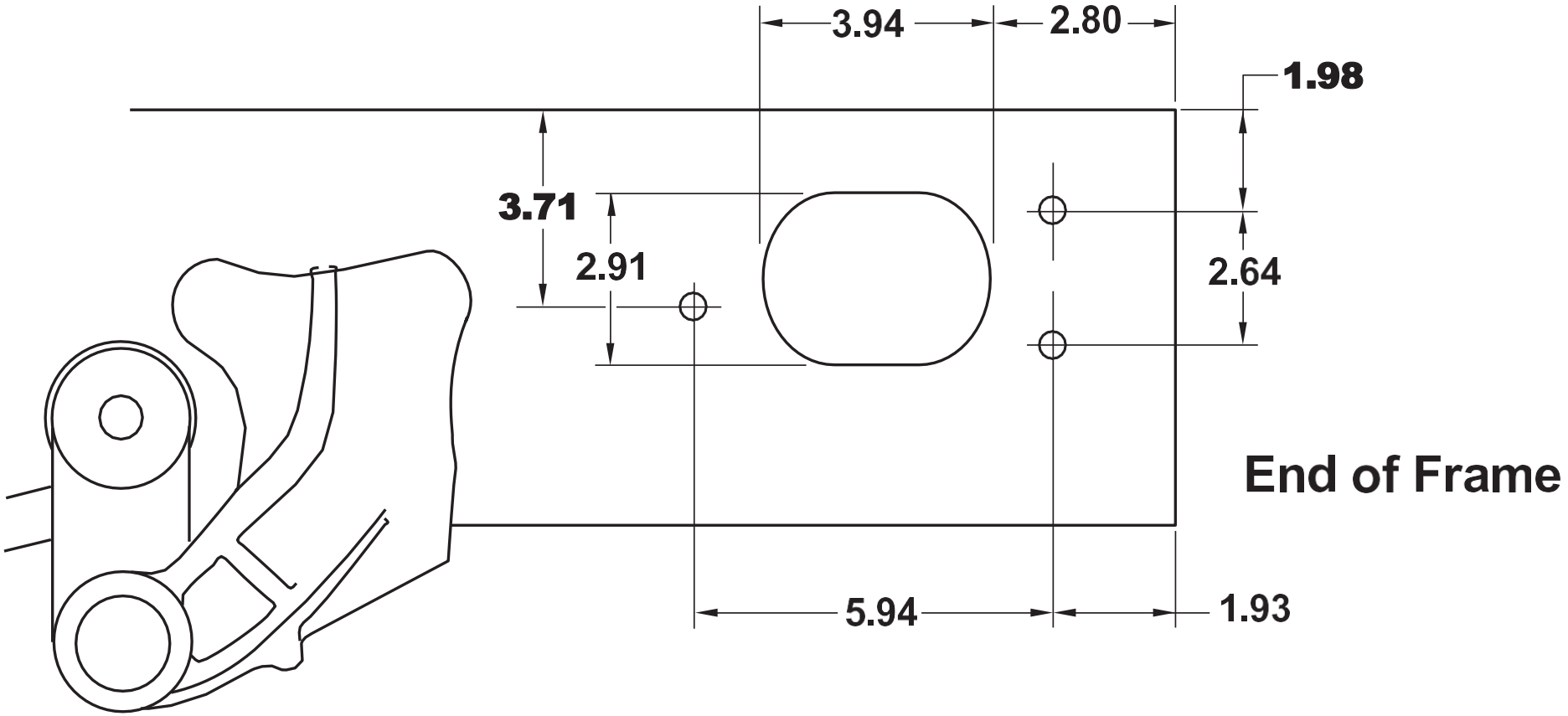



Figure 2

Note: Dimensions in inches

# 2025 Chevrolet Low Cab Forward

## 4500 XD & 5500 XD Series Diesel Installation Instructions and Considerations

The fuel tank shutter valve was a new component for 2011 model year. This component is meant to improve fuel splash-back performance of the fuel system. In the 2012 model year a running change was made, and this valve was relocated from the fuel tank inlet to the inlet (outboard side) of the fuel filler neck bulkhead assemble that is bolted to the left hand frame rail as shown in Figure 3. This plastic valve snaps into place in the inlet of the frame mounted fuel pipe. The valve should be installed so that the plastic clip is at the top of the valve, so that the flap door opens up, as shown in Figure 4.

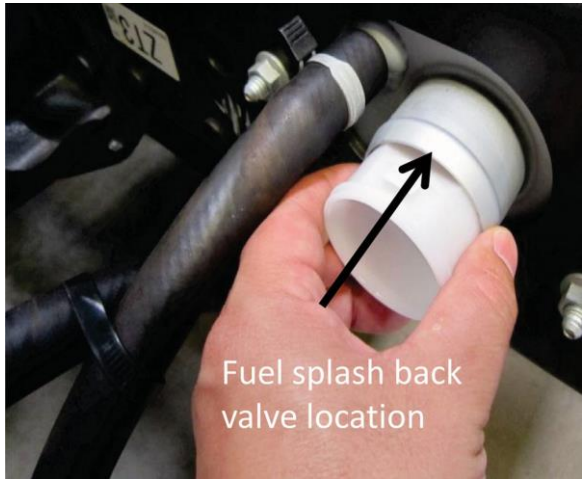



Figure 3

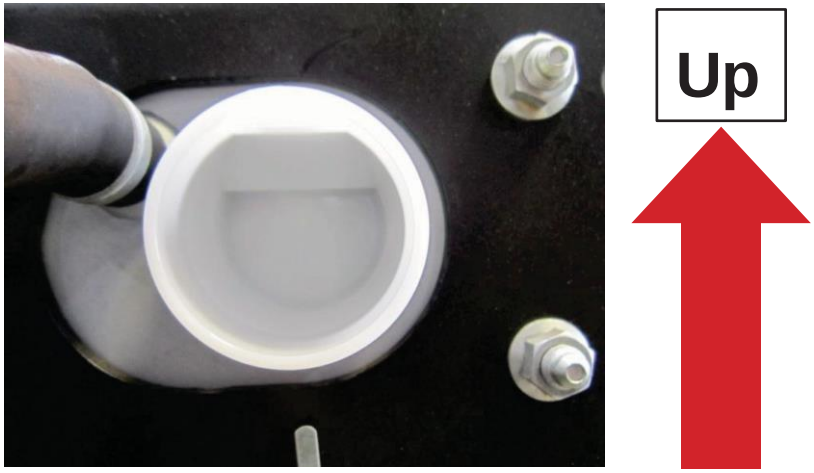



Figure 4

The fuel filler hose should be installed flush against the tank. The clamp should be installed between 1/16” and 3/8” from the tank. As shown in Figure 10 below.

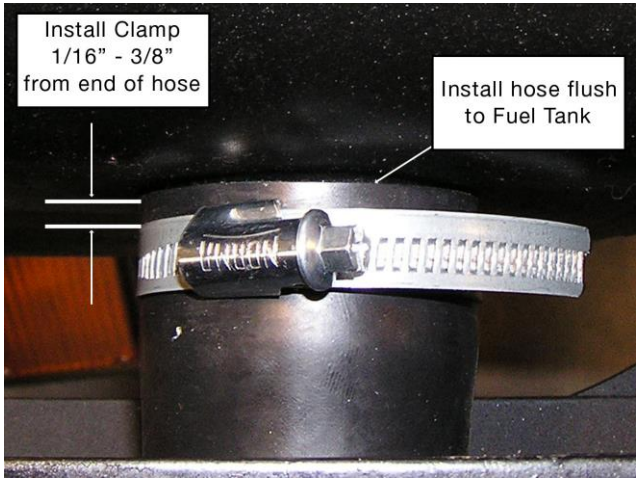



Figure 5

# 2025 Chevrolet Low Cab Forward

## 4500 XD & 5500 XD Diesel Roll-Over Valve Tubing

The roll-over valve has a hose attachment that will make this valve less sensitive to water intrusion. In order for the valve to work properly, it is critical for the hose to be installed to the rollover valve. The proper assembly of the outer hose is shown below in Figure 6.

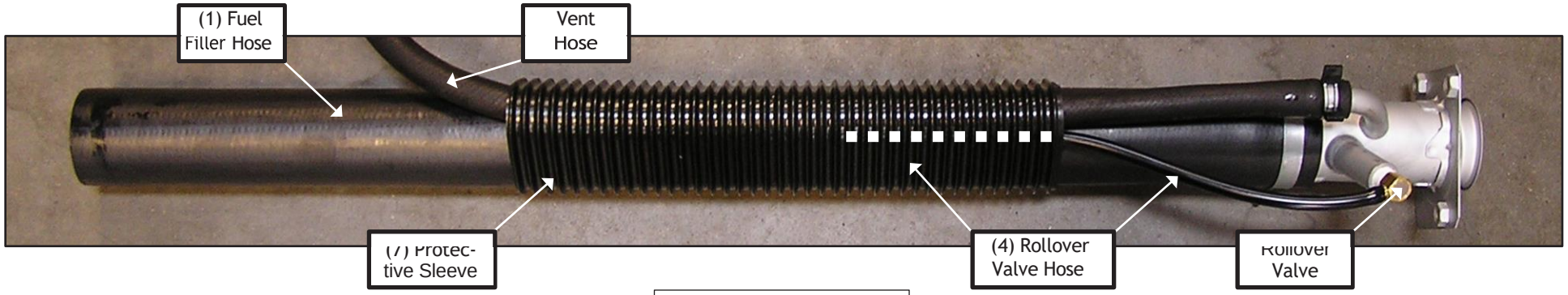



Figure 6

## Filler Neck Installation

The fuel filler neck must be installed with the proper orientation on the body. The neck should be installed with the roll-over valve pointing upward, with the bottom edge of the filler neck oriented parallel to the ground, plus 33 to minus 7 degrees. See Figure 7 below for the proper orientation.

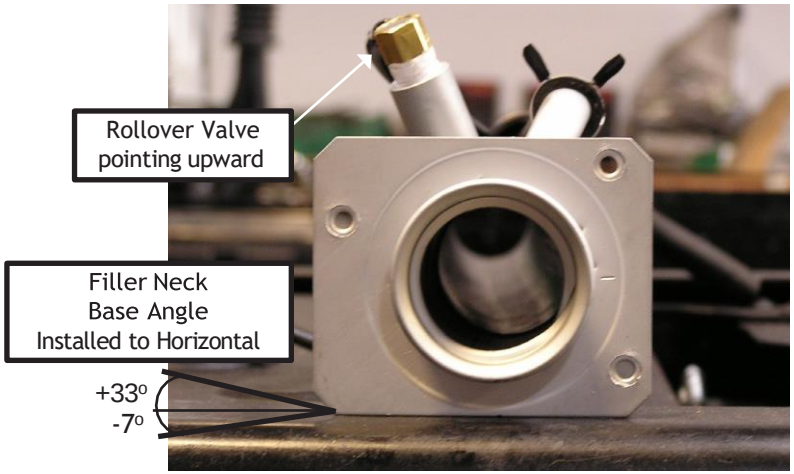



Figure 7

# 2025 Chevrolet Low Cab Forward

## 2025MY 4500 XD & 5500 XD Diesel Fuel Fill Kit Parts List

Please review these instructions prior to installation of the fuel filler kit.

**Parts Kit:** There are two separate parts kits used for the 2011 and later model year LCF diesel products. See parts list below.


| FUEL FILLER KIT, 4500 XD and 5500 XD See Dealer | | | |
|---|---|---|---|
| **ITEM #** | **PART NAME** | **PART #** | **QTY** |
| 1 | HOSE: FUEL FILLER NECK | See Dealer | 1 |
| 2 | HOSE: FUEL FILLER | See Dealer | 1 |
| 3 | CAP: FILLER | See Dealer | 1 |
| 4 | HOSE: ROLL-OVER VALVE | See Dealer | 1 |
| 5 | NECK ASM: FUEL FILLER | See Dealer | 1 |
| 6 | CLIP: JOINT | See Dealer | 4 |
| 7 | PROTECTOR: FILLER HOSE | See Dealer | 1 |
| 8 | CLIP: BAND, HOSE FIXING | See Dealer | 2 |
| 9 | CLIP: RUBBER, HOSE | See Dealer | 1 |
| 10 | BRACKET: FILLER NECK | See Dealer | 1 |
| 11 | SCREW: FILLER NECK | See Dealer | 3 |
| 12 | CAUTION PLATE | See Dealer | 1 |
| 13 | SHUTTER: FUEL TANK | See Dealer | 1 |

Figure 8

## 2025MY 4500 XD & 5500 XD Diesel Rear View Fuel Fill

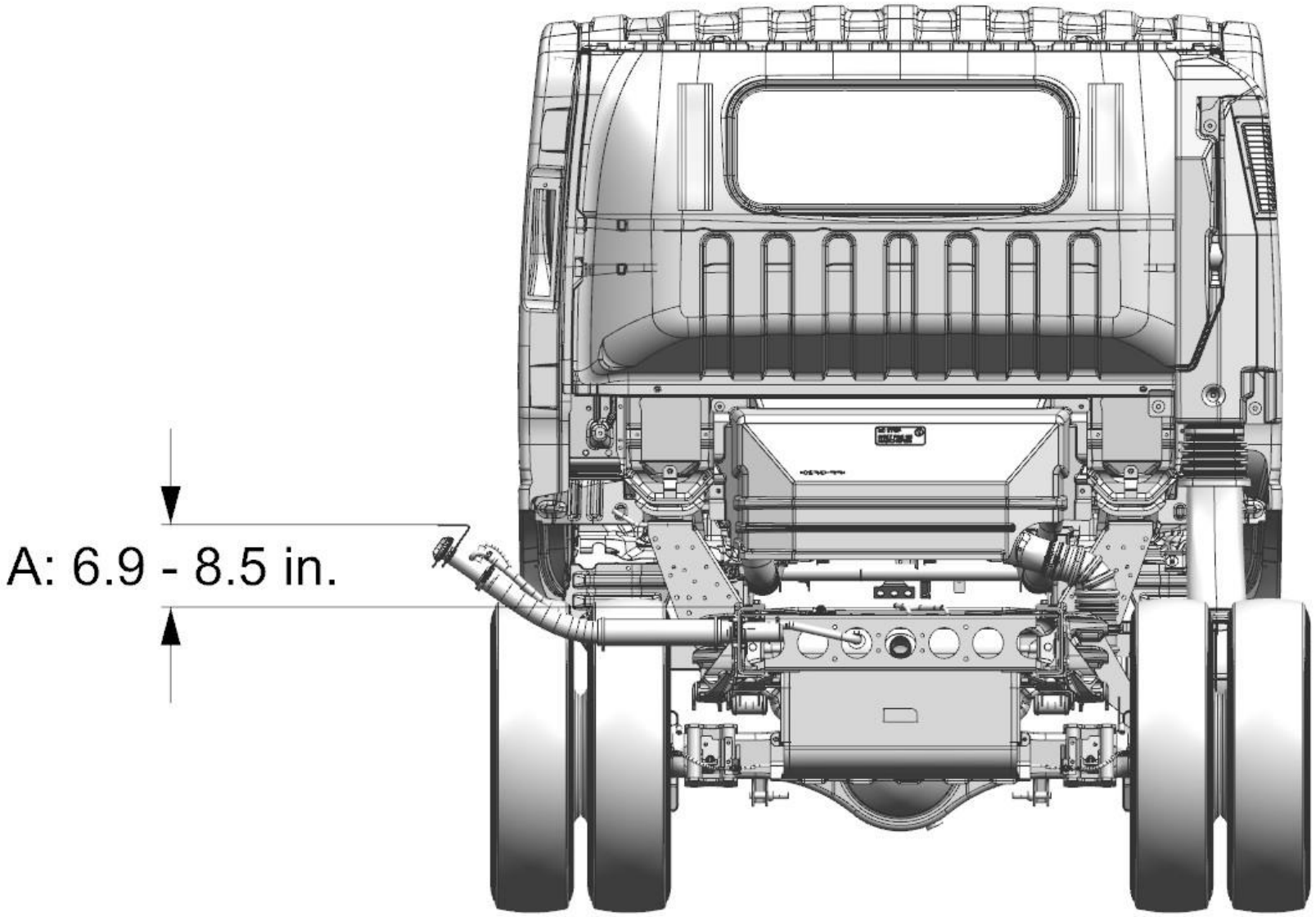



Figure 9

## 2025MY 4500 XD & 5500 XD Diesel Top View Fuel Fill

**Dimensions:**
B = 29.75 inches (756 mm)
C = 34.00 inches (863 mm)
D = 39.29 inches (998 mm)
E = 33.86 inches (860 mm)
F = 50.60 inches (1,285 mm)

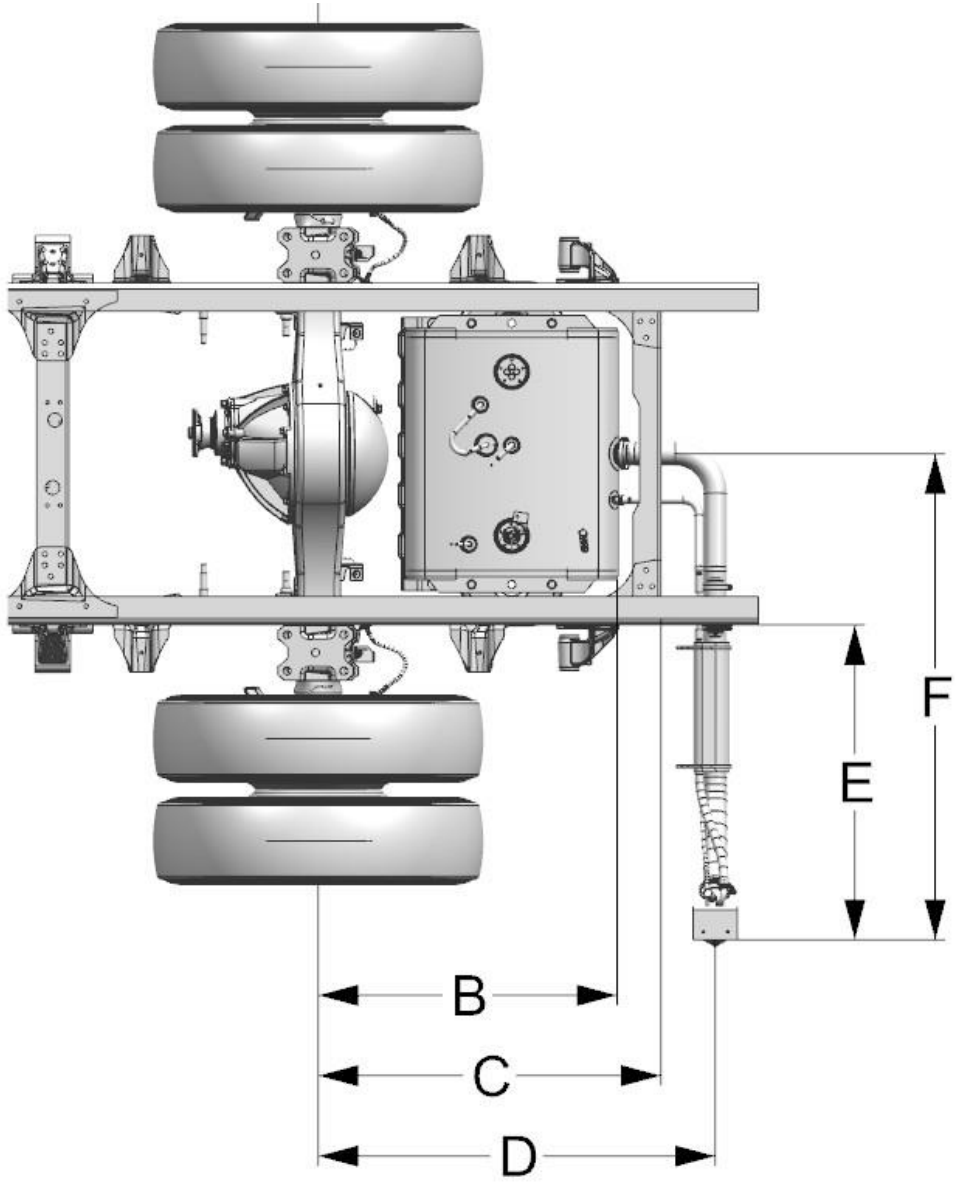
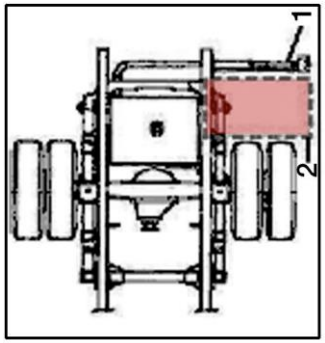



Figure 10

## 2025MY 4500 XD & 5500 XD Diesel Hose Modification for Various Width Bodies and Fuel Fill Vent Protection



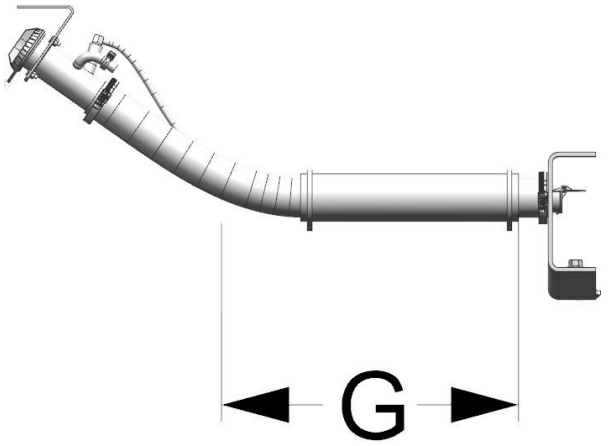

Fuel fill vent and neck should be protected from road spray

1. FUEL FILLER NECK
2. RECOMMENDED MUD FLAP MOUNTING AREA (RED ZONE).

Figure 11

**Dimension: G**

102 inch wide body remove 0 inches
96 inch wide body remove 3 inches
90 inch wide body remove 5 inches
86 inch wide body remove 8 inches
80 inch wide body remove 8 inches




**NOTE: Shorten hose by dimension "G" based on chart at left.**

Figure 12

# 2025 Chevrolet Low Cab Forward

## 3500, 4500 & 5500 Gas In-Frame Fuel Fill Installation Instructions

1. Disconnect battery.
2. Remove the short filler hose and the short breather hose from the breather and fuel filler pipes and the filler neck bracket assembly.
3. Filler kit hoses are designed for the 102 inch wide body width. Modify the hoses as required to fit the desired body width (Figure 20 - Dimension D).
4. Install flexible filler hose (Item 1) to fuel filler pipe and filler neck bracket assembly using existing screw clamps.
5. Install flexible breather hose (Item 2) to fuel breather pipe and filler neck bracket assembly using new clamps (item 3)
6. The filler neck must be mounted to allow the filler neck bracket to be parallel to the frame horizontal.
7. Filler neck (Figure 14 - Dimension A) must be between 6.85 inches and 8.5 inches above frame.
8. Secure the filler plate and ground strap to the bottom of the body and check for leaks. Ground straps should be connected to brackets or flanges, not the fuel filler hose or breather hose. Ground straps should have a minimum of 10mm clearance, in all deflected positions, from any metallic portions of the fuel filler hose or breather hose assembly.
9. Ensure that fill hose does not sag, creating an area where the fuel could pool in the fill hose.
10. Reconnect battery.

## Fuel Type

Use regular unleaded gasoline rated at 87 octane or higher that meets specification ASTMD4814 in the U.S. Blended gasoline is suitable for use in the Chevrolet LCF Gas Chassis.

**Ethanol is ethyl or grain alcohol. Properly-blended fuel that is no more than 10% ethanol is fine for your vehicle.**

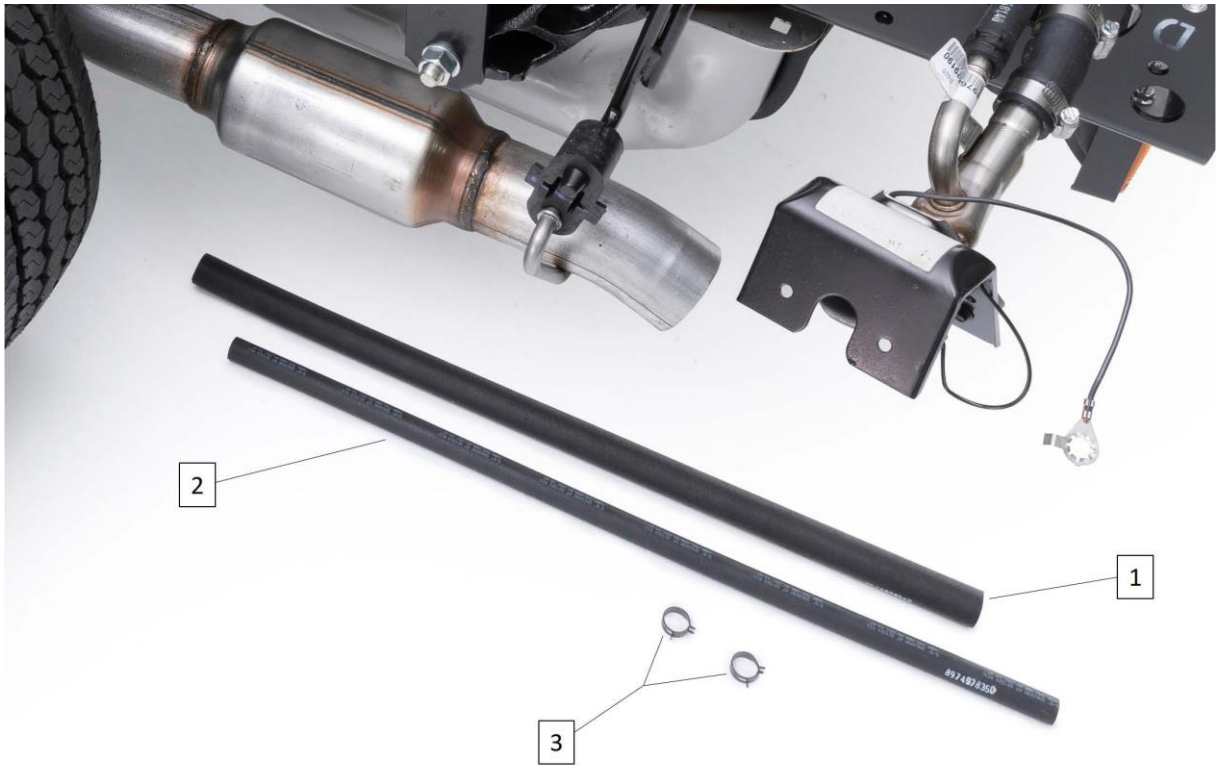
NOTICE: Fuel that is 15% Ethanol is not suitable for your vehicle. Fuel that is than 85% Ethanol is not suitable for your vehicle.

**Methanol is methyl or wood alcohol.**

NOTICE:

- 6.6L Engine: Fuel that is more than 5% methanol is bad for your vehicle. And even at 5% or less, there must be “co-solvents” and corrosion preventives in this fuel to help avoid damage to the fuel system from methanol.
- 6.0L Engine: Methanol-Gasoline mixtures are not suitable for your vehicle.

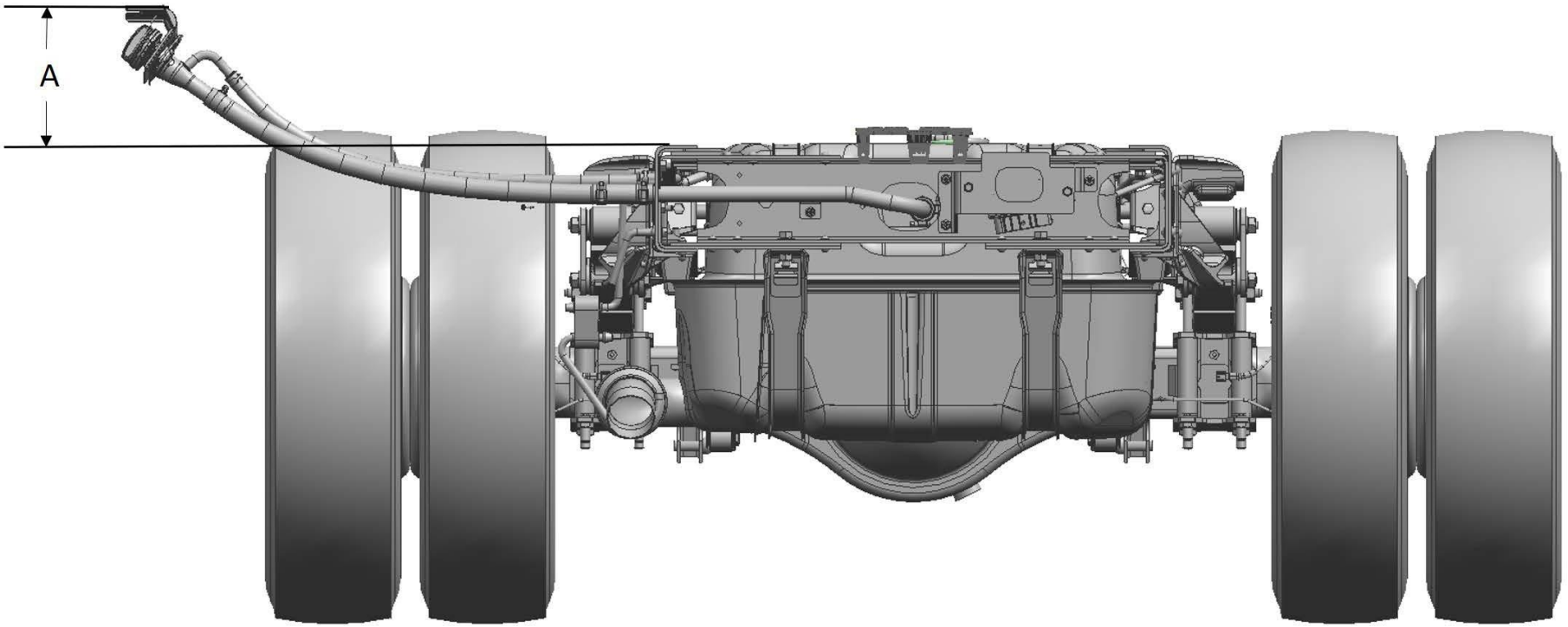
## 3500, 4500 & 5500 Gas Fuel Fill Parts Illustration




| FUEL FILLER KIT – 3500 HG & 4500 HG GAS | | |
|---|---|---|
| PN: See Dealer | | |
| Number | Description | Quantity |
| 1 | Hose, Fuel Filler | 1 |
| 2 | Hose, Breather | 1 |
| 3 | Clamp, Rubber Hose | 2 |

Figure 13

## 3500, 4500 & 5500 Gas Rear View Fuel Fill




**Dimension A** = 6.85-8.5 inches (174-216 mm)

*6.6L 3500, 4500 & 5500 Gas shown

Figure 14

## 3500, 4500 & 5500 Gas Top View Fuel Fill

Dimensions:
**B** = 35.85 inches (860 mm)
**C** = 37.79 inches (960 mm)
**D** = 34.25 inches (870 mm)
**E** = 51.61 inches (1311 mm)

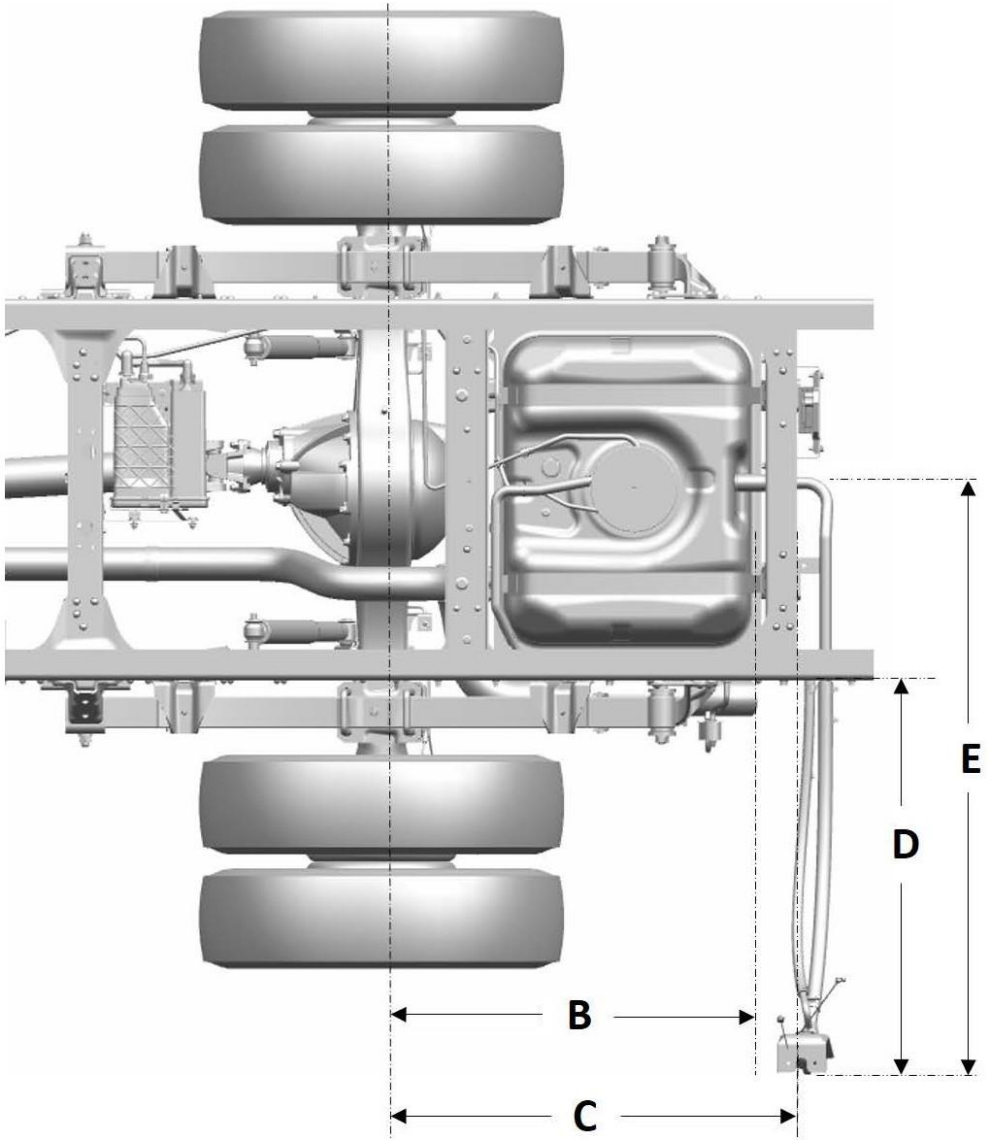



Figure 15

*6.6L 3500, 4500 & 5500 Gas shown

## 3500, 4500 & 5500 Gas 6.6L Installation Considerations

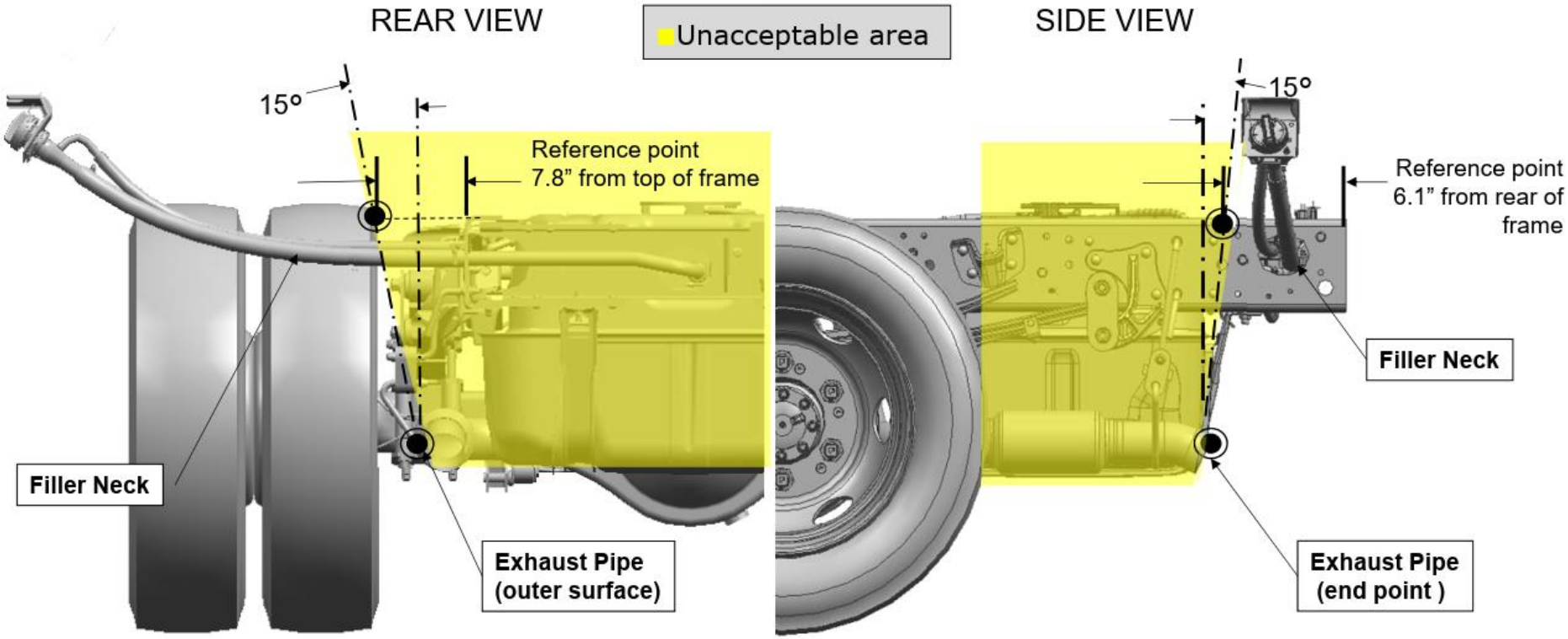
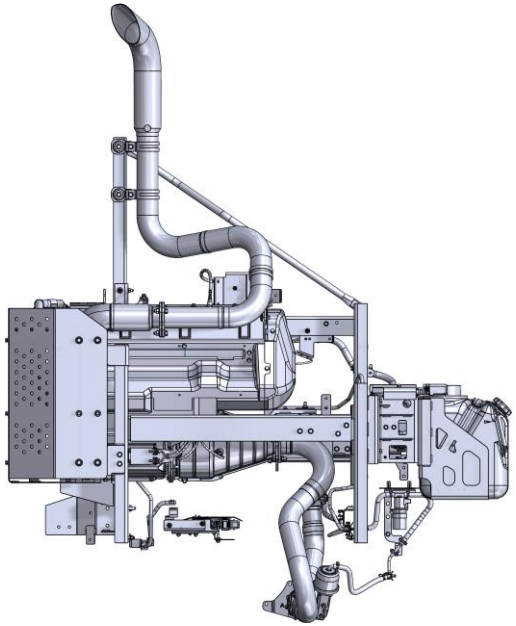


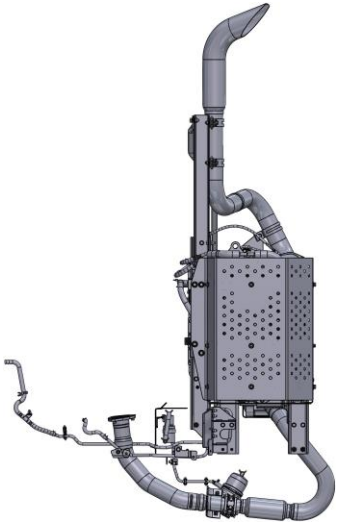

Figure 16

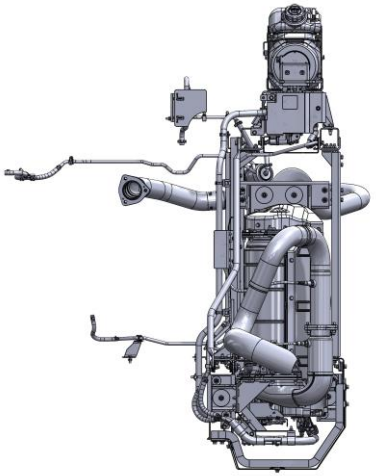
**Notes:**
1. Modification of the filler neck outside the frame rail must comply with FMVSS regulations for avoiding fuel dripping on hot surfaces.
2. Do not install the connection point of Filler neck, pipe and hoses in unacceptable areas shown in the side and rear view above.

# 4500 & 5500 Vertical Exhaust

- Available on 4500 HD 14,500 GVW, 4500 XD 16,000 GVW, 5500 XD DERATE 17,950 GVW & 5500 XD 19,500 GVW
- Vertical exhaust is available on 109, 132.5, 150, 176, 200, and 212 inch wheelbases
- Option Code NPV
- Not available on gas engine models
- Available as a port installed option only
- Available with in rail fuel tank only
- Available with regular cab only

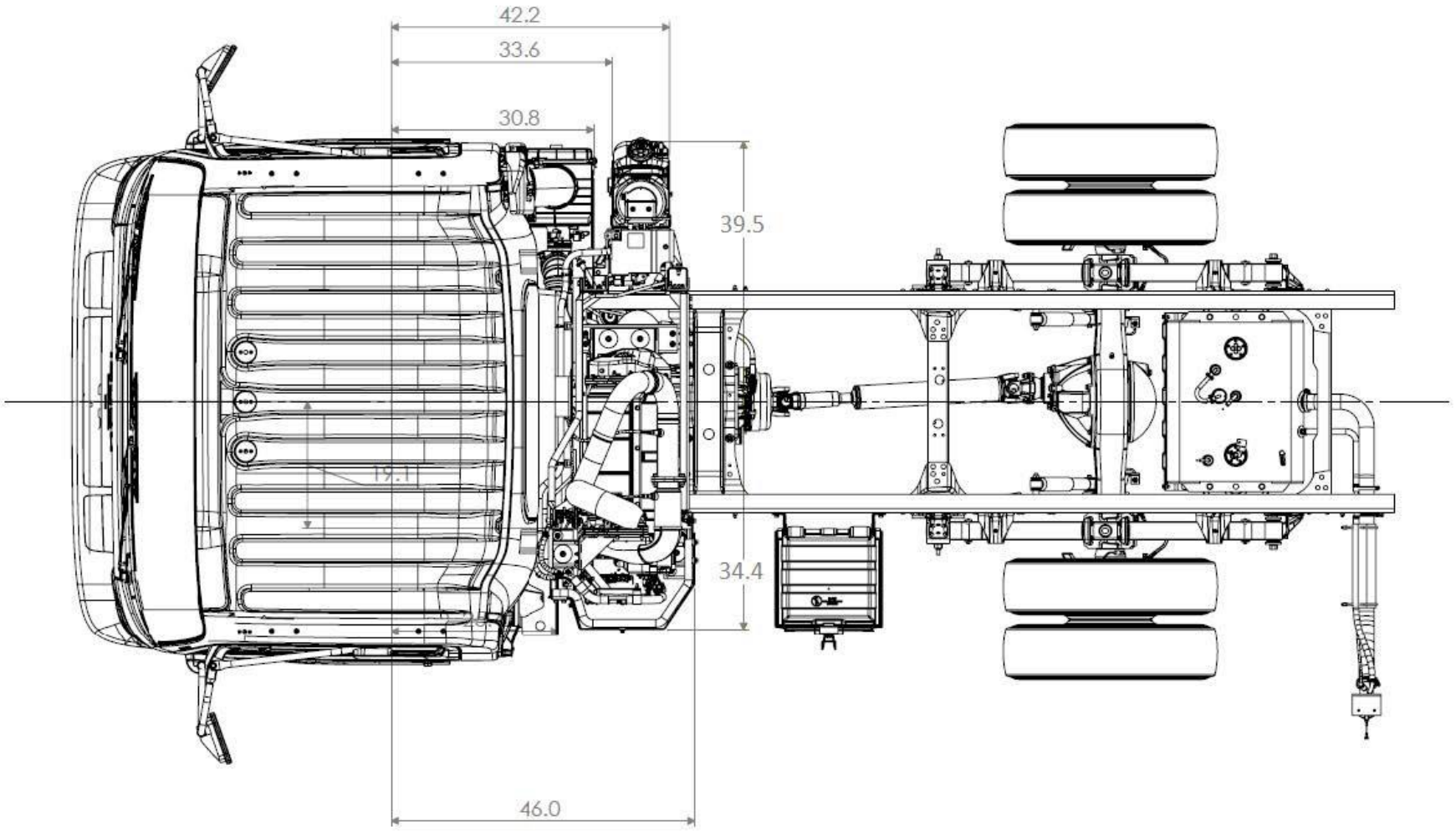






## Vertical Exhaust - Top View

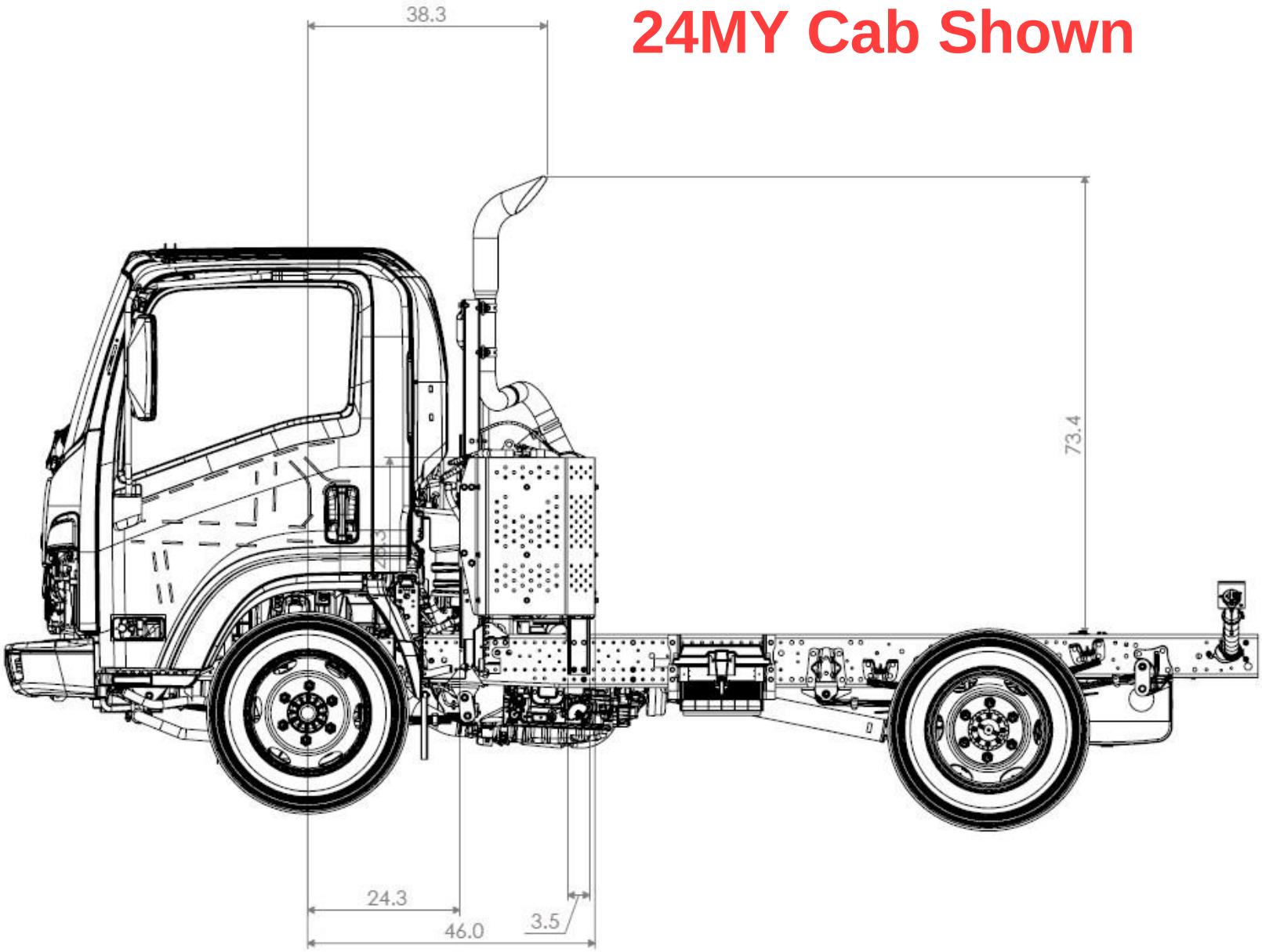
## 24MY Cab Shown



# 2025 Chevrolet Low Cab Forward

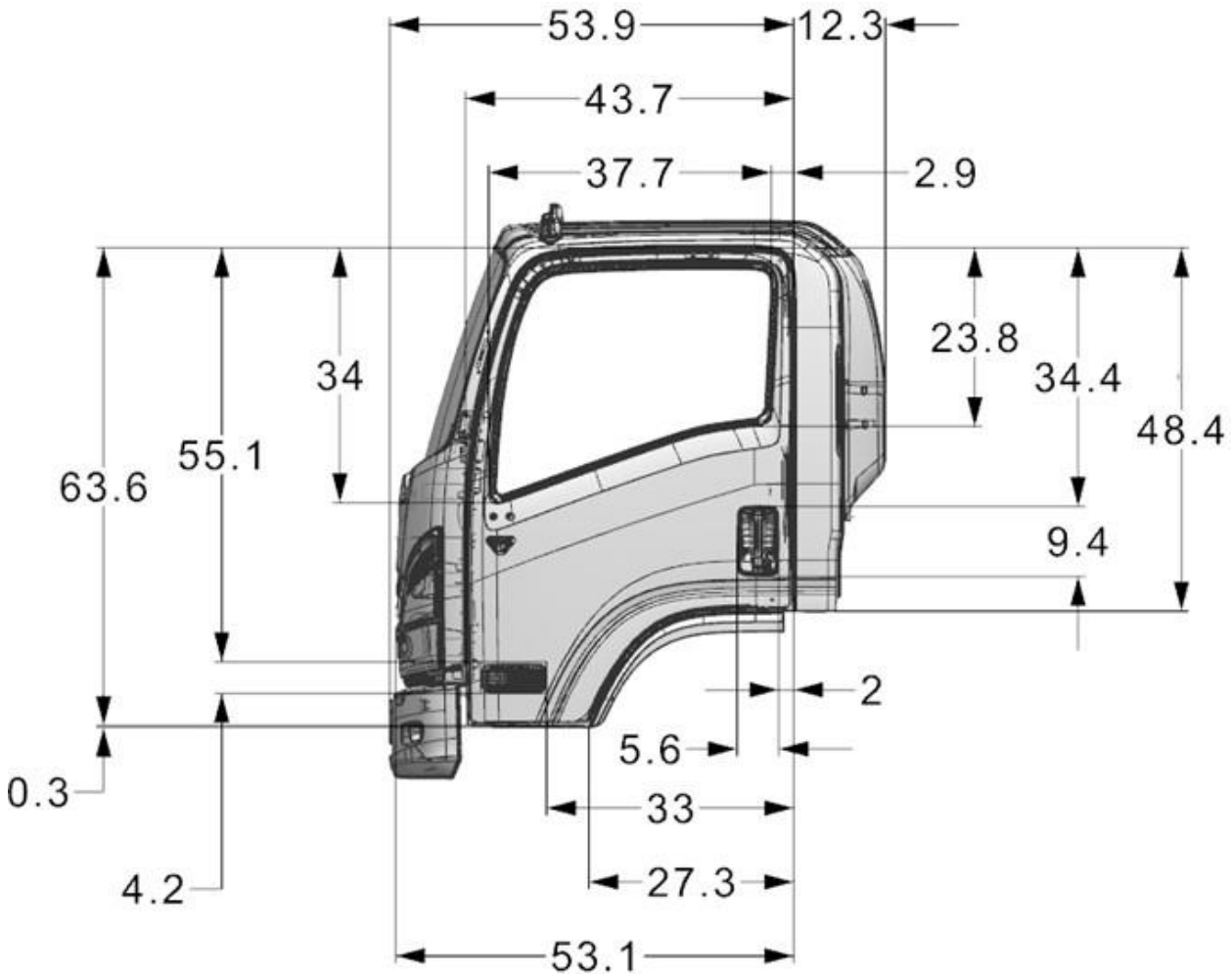
## Vertical Exhaust - Driver Side View

**24MY Cab Shown**



# 2025 Chevrolet Low Cab Forward

## 25MY Diesel Regular Cab - Side View




Dimensions in inches

Figure 1

## 25MY Diesel Regular Cab - Front View

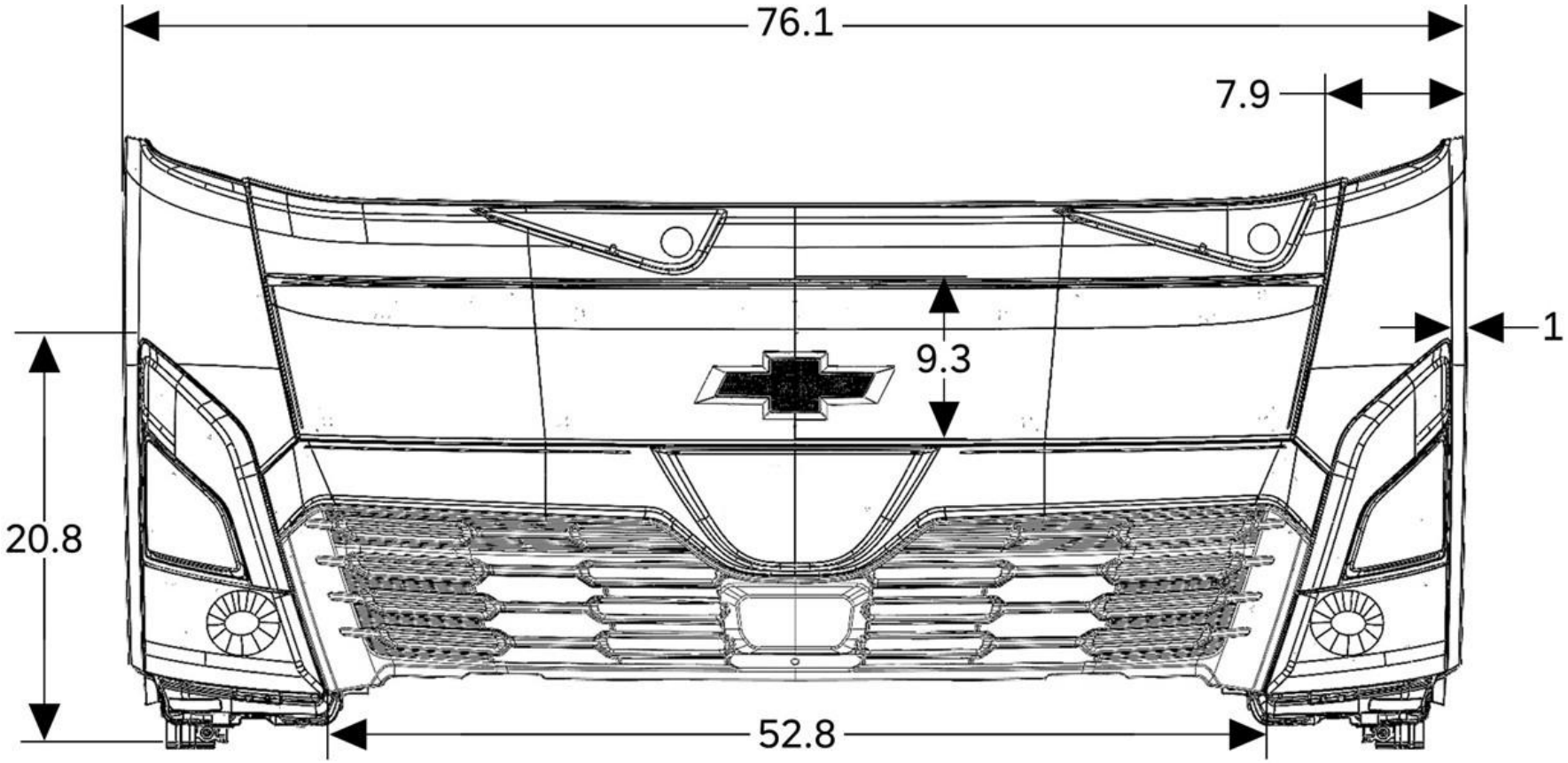



Figure 2

Dimensions in inches

## 25MY Diesel Regular Cab - Rear View

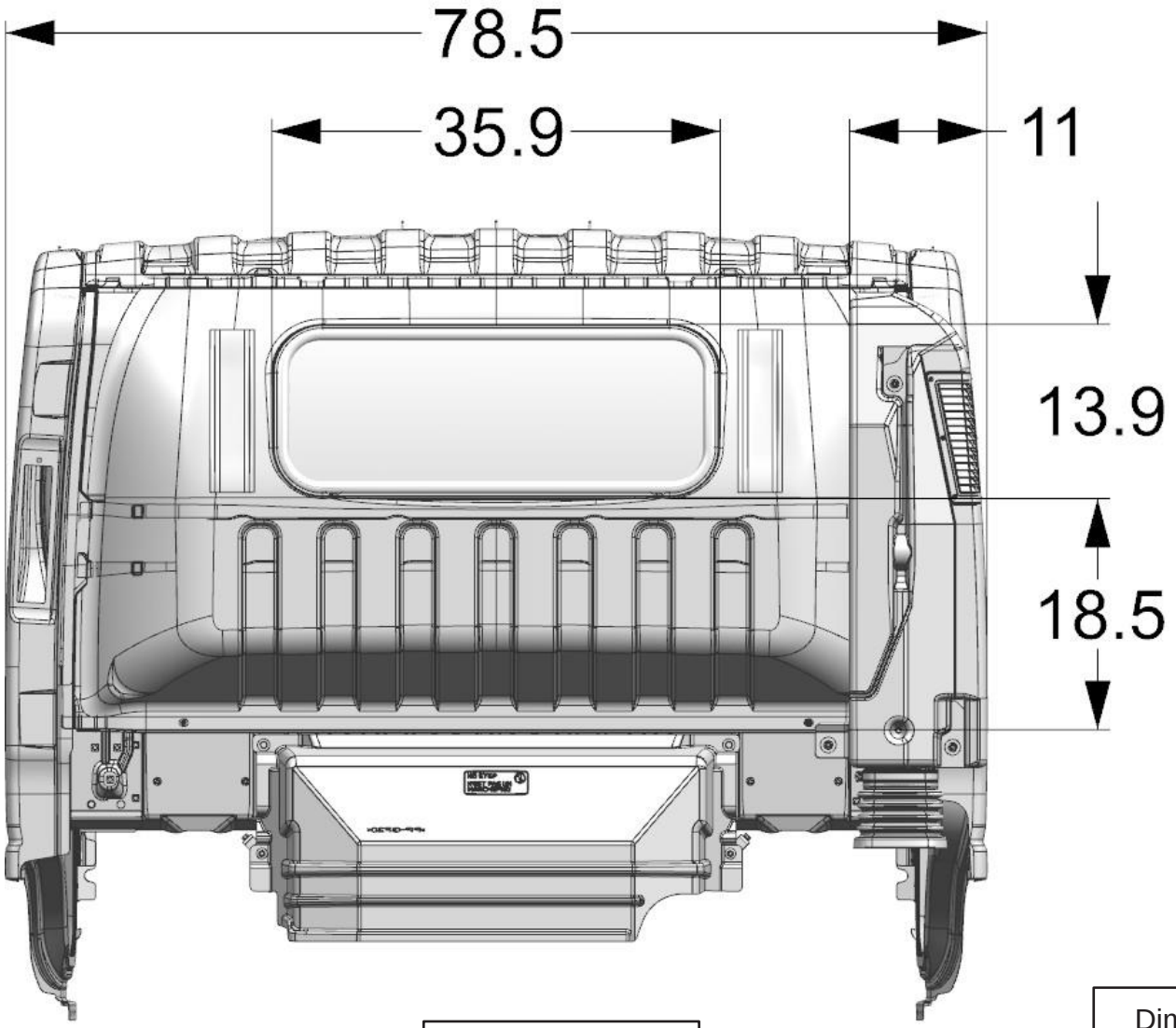



Figure 3

Dimensions in inches

Note:
top of window to top of roof 7.64 inches
top of window to top of cab roof lights 9.64 inches

## 25MY Diesel Crew Cab - Cab Side View

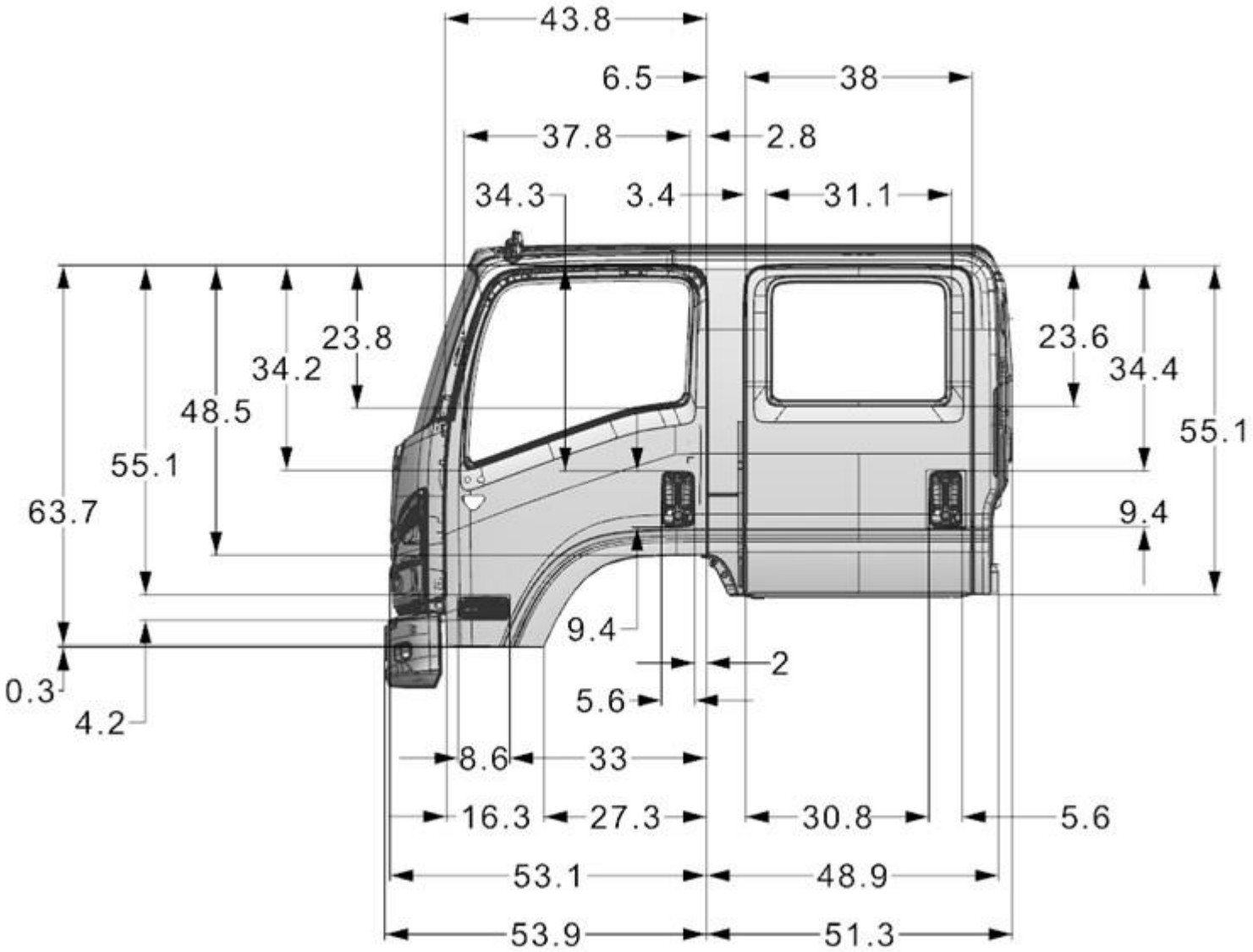



Figure 4

Dimensions in inches

## 25MY Diesel Crew Cab - Front View

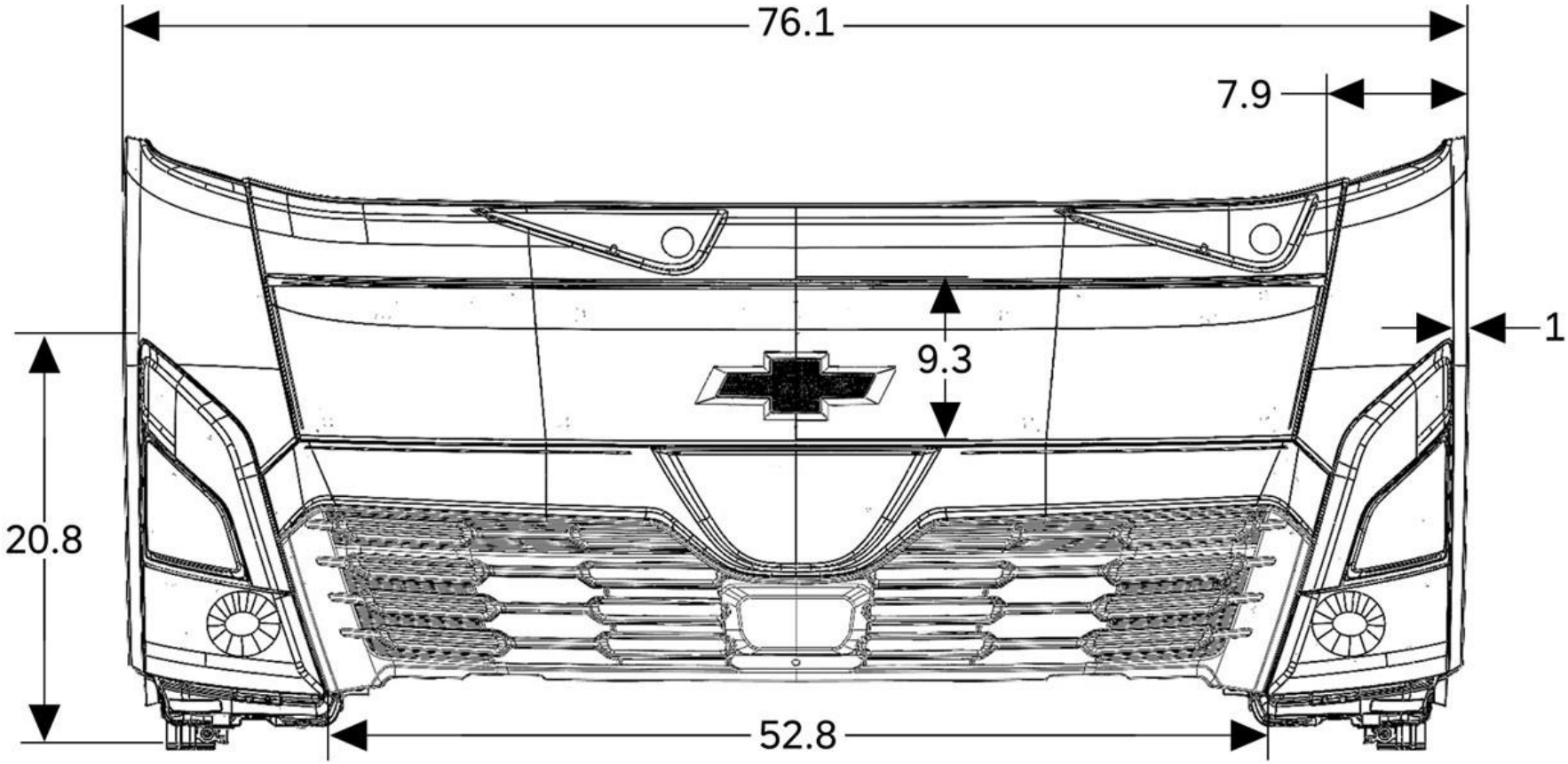



Figure 5

Dimensions in inches

## 25MY Diesel Crew Cab - Rear View

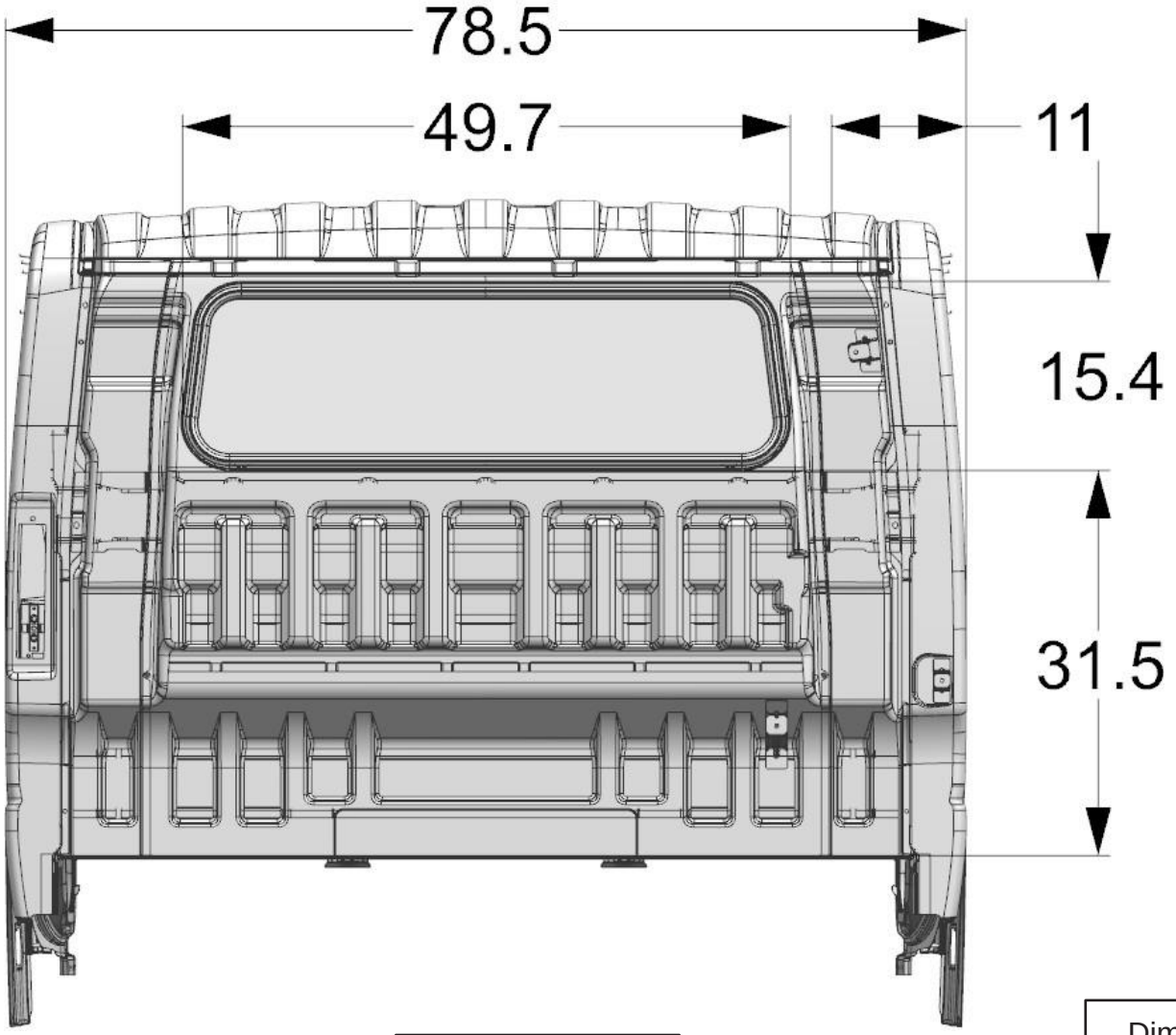
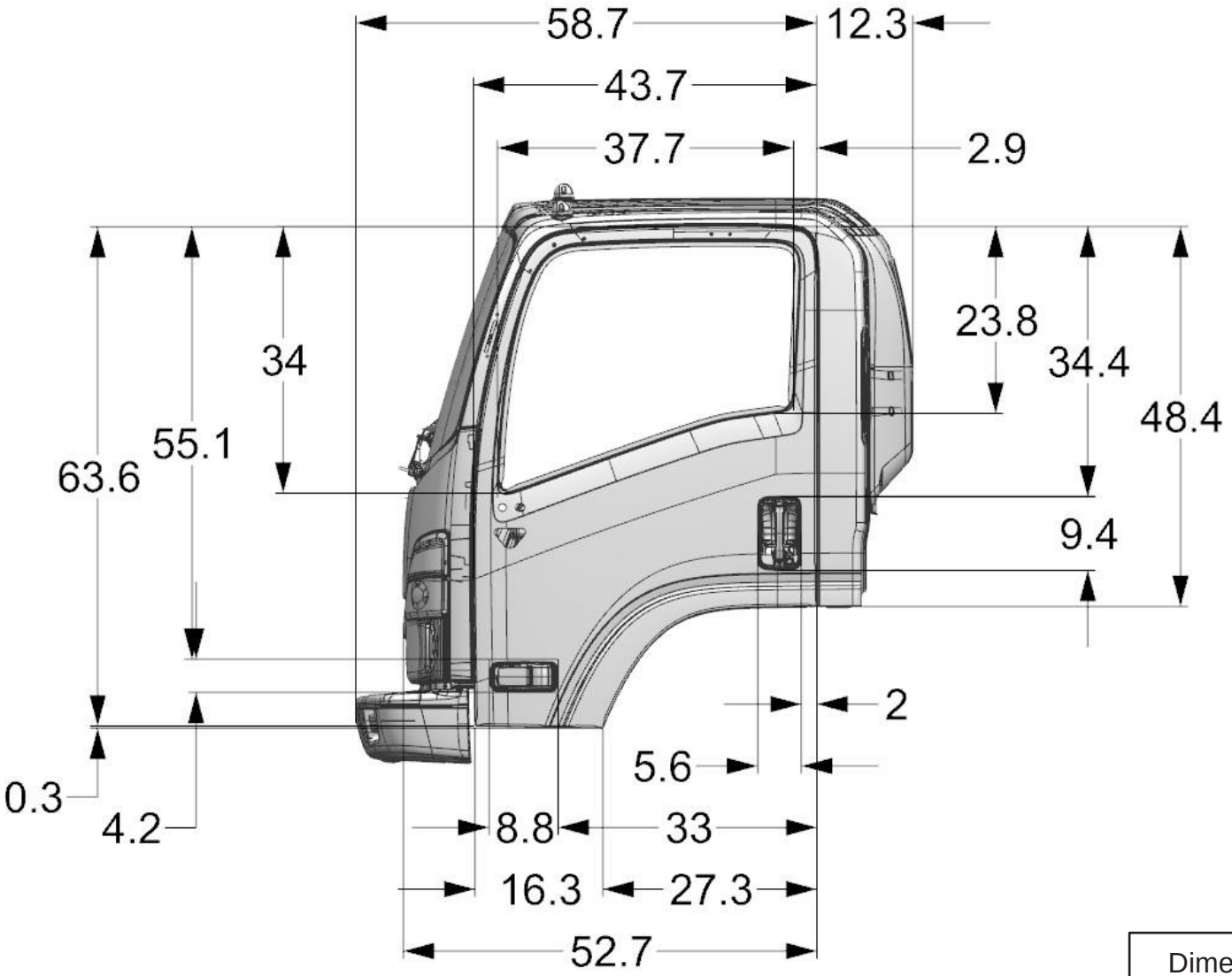



Figure 6

Dimensions in inches

## 25MY Gas Regular Cab - Side View




Dimensions in inches

Figure 7

## 25MY Gas Regular Cab - Front View

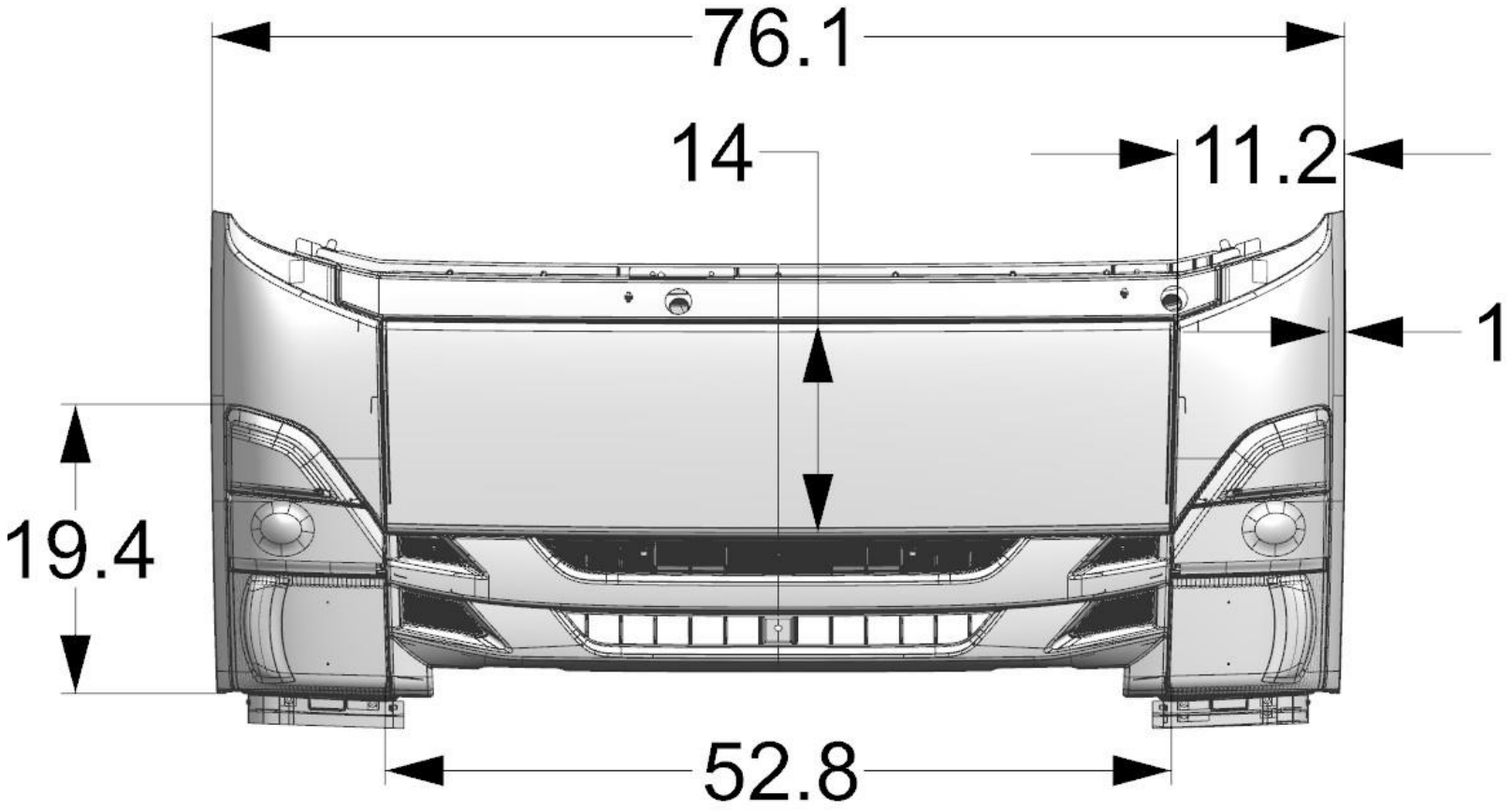



Figure 8

Dimensions in inches

## 25MY Gas Regular Cab - Rear View

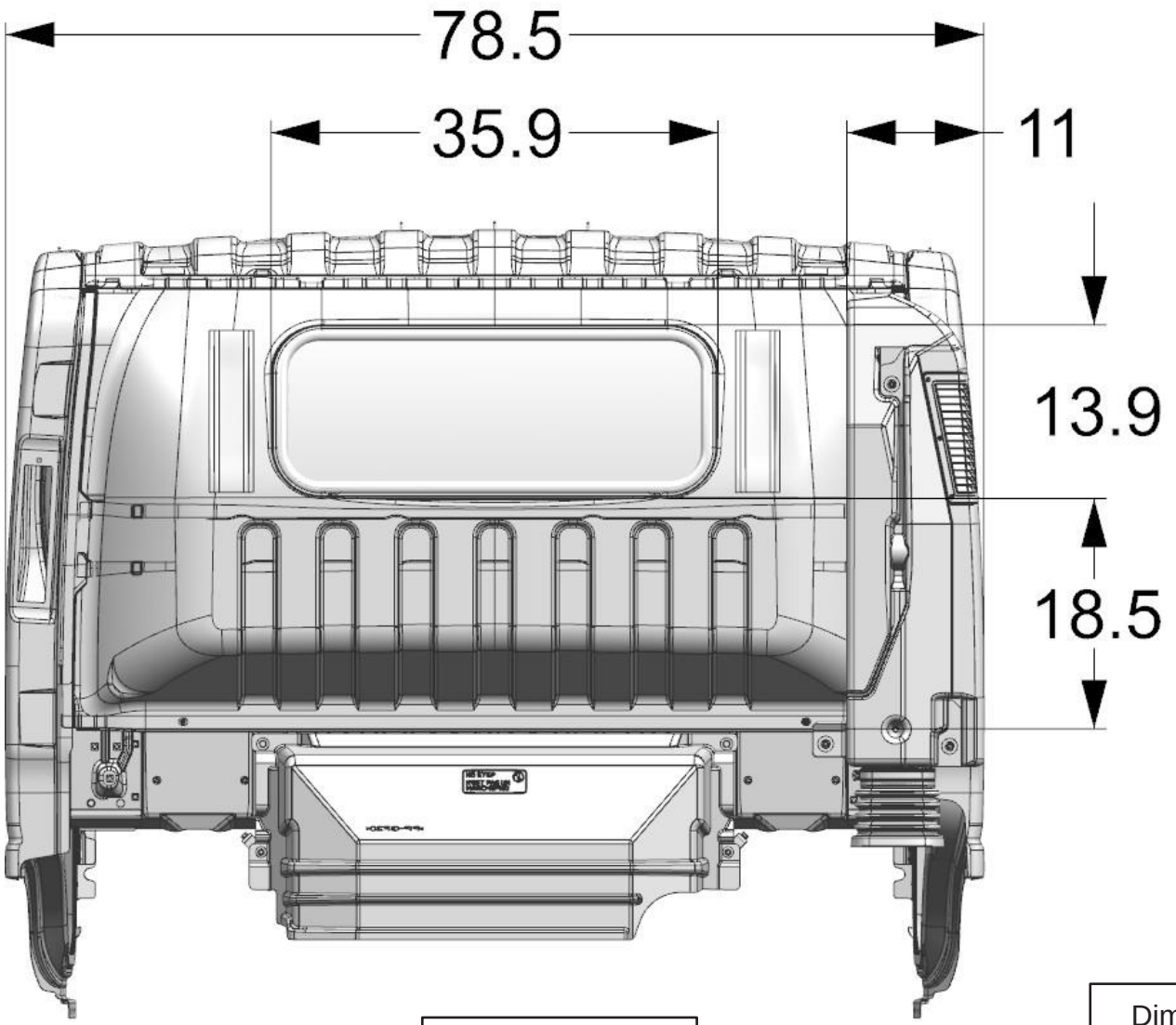



Figure 9

Dimensions in inches

Note:
top of window to top of roof 7.64 inches
top of window to top of cab roof lights 9.64 inches

## 25MY Gas Crew Cab - Cab Side View

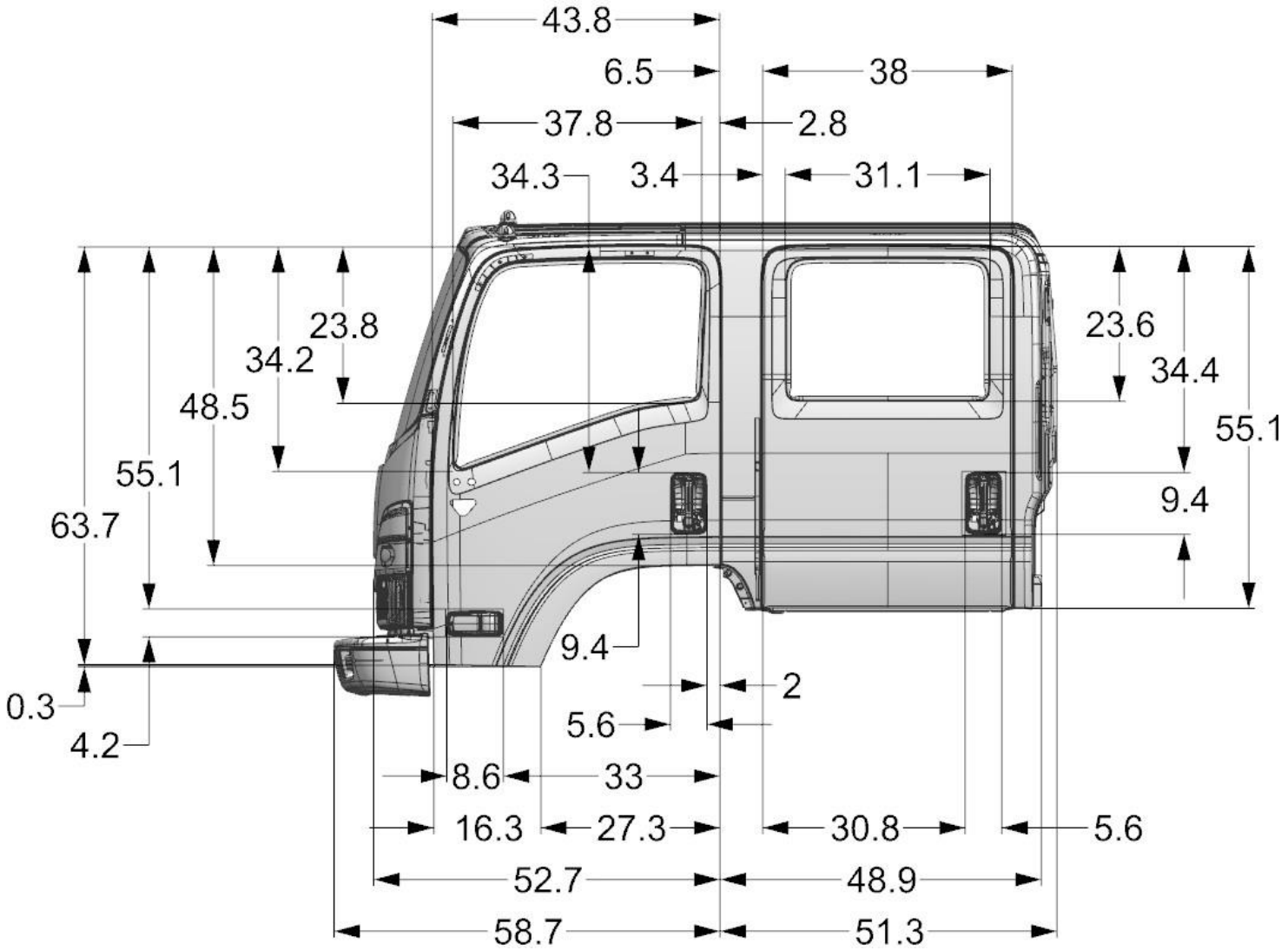



Figure 10

Dimensions in inches

## 25MY Gas Crew Cab - Front View

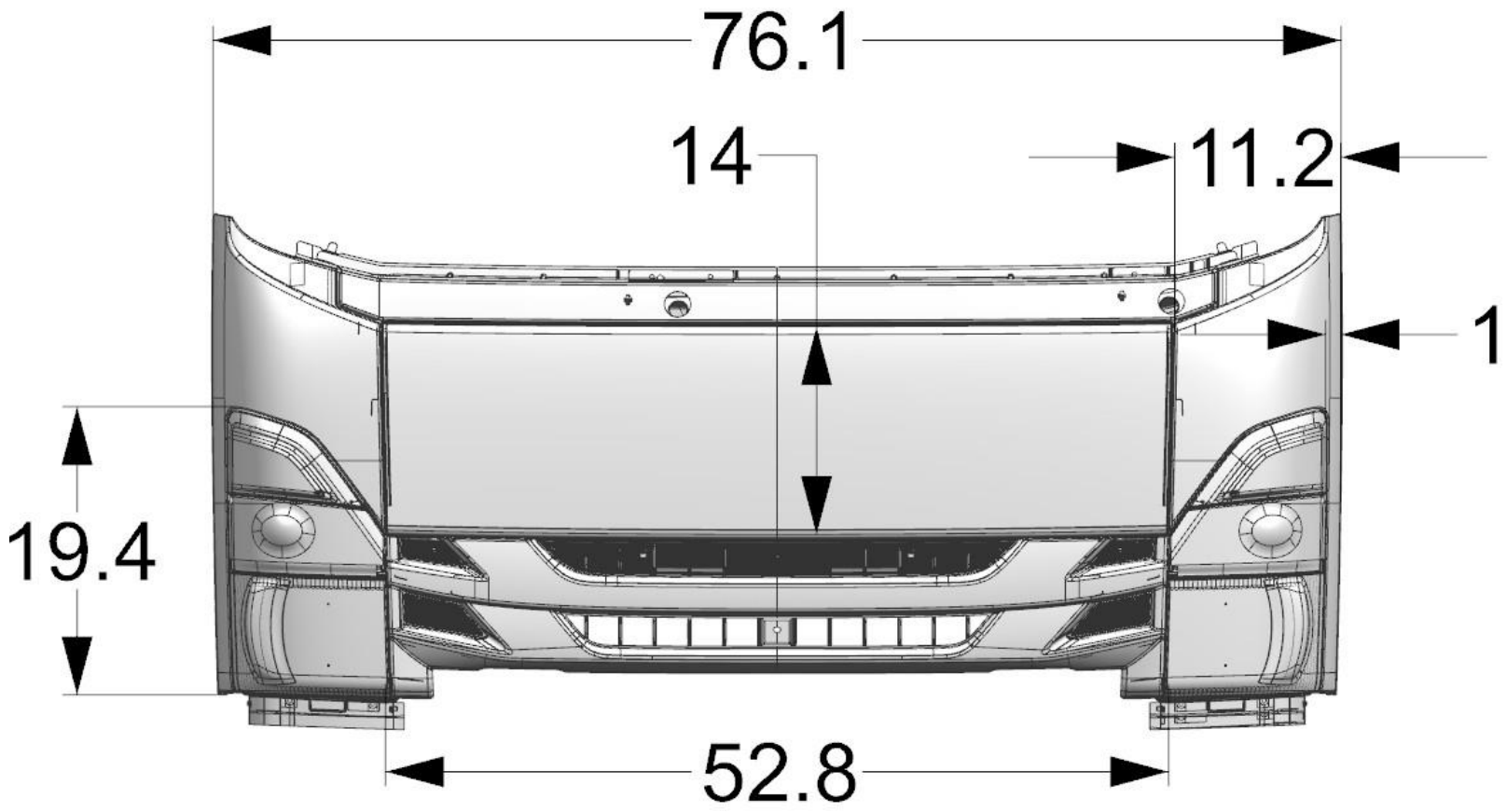



Figure 11

Dimensions in inches

## 25MY Gas Crew Cab - Rear View

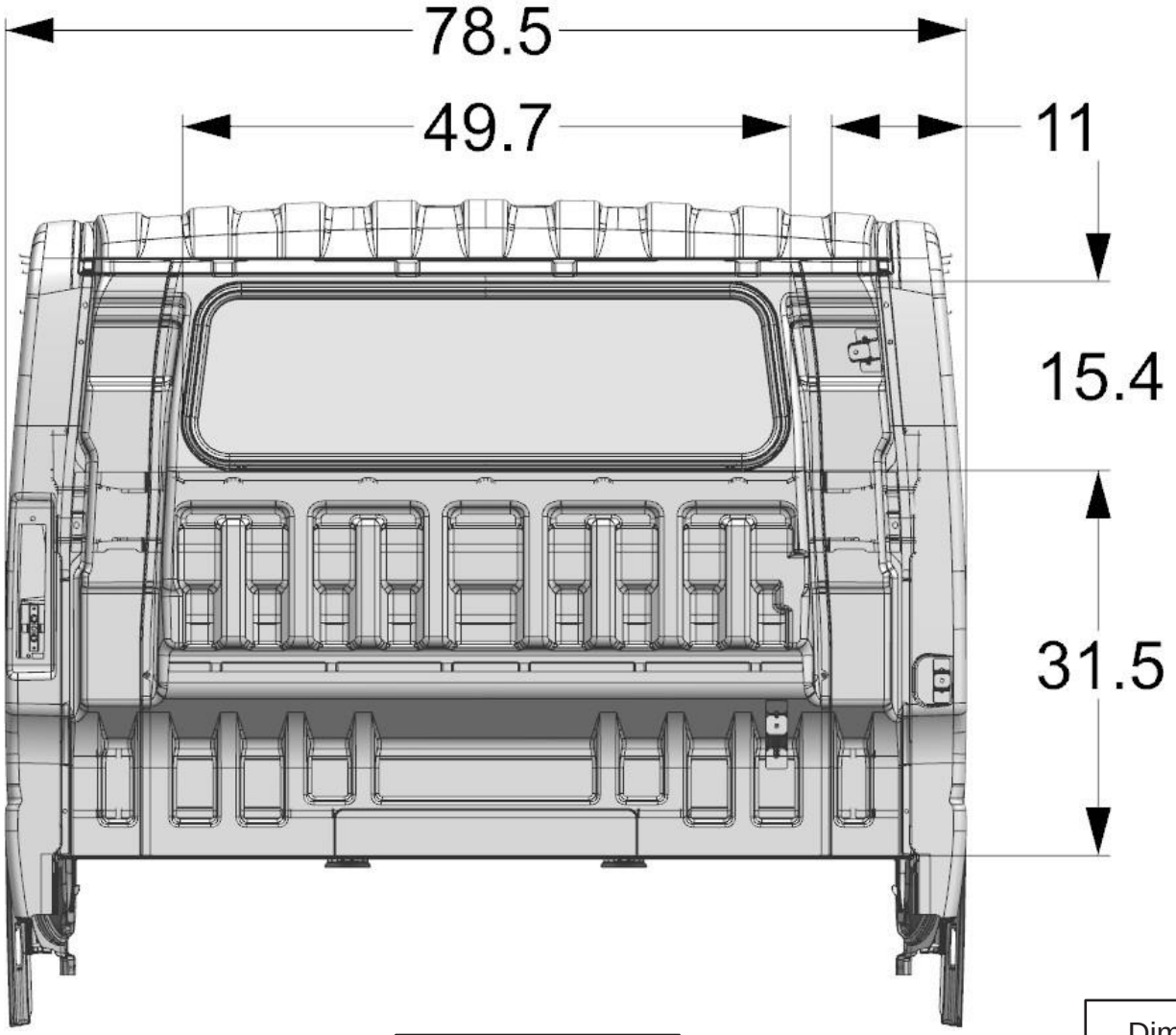
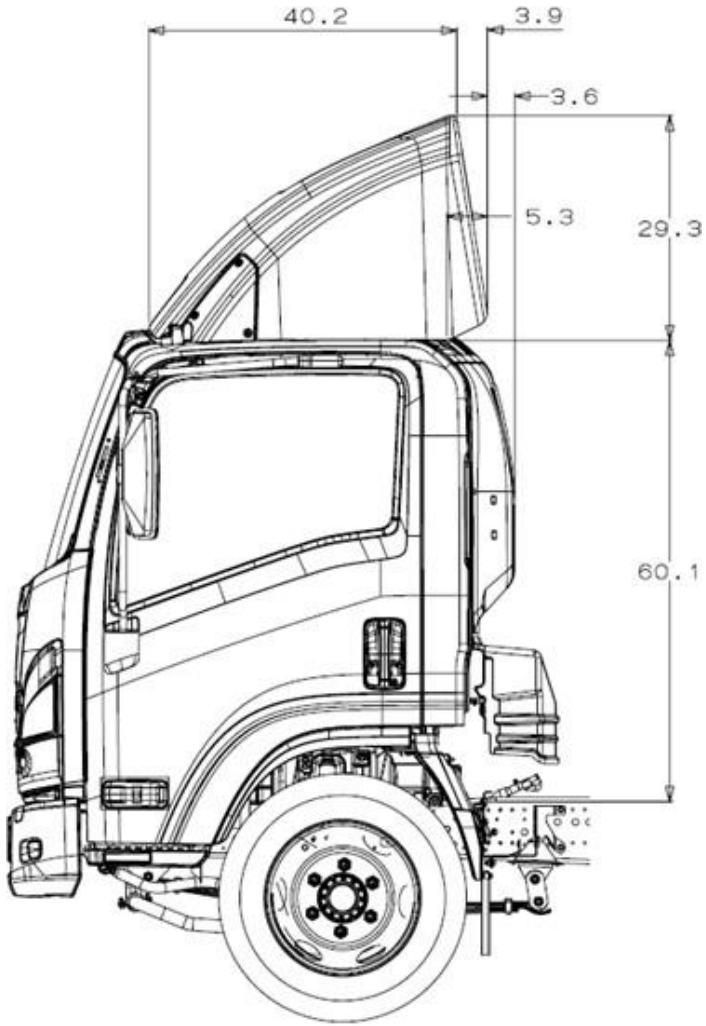



Figure 12

Dimensions in inches

## Regular Cab - Front and Side View (Air Shield on Regular Cab only)



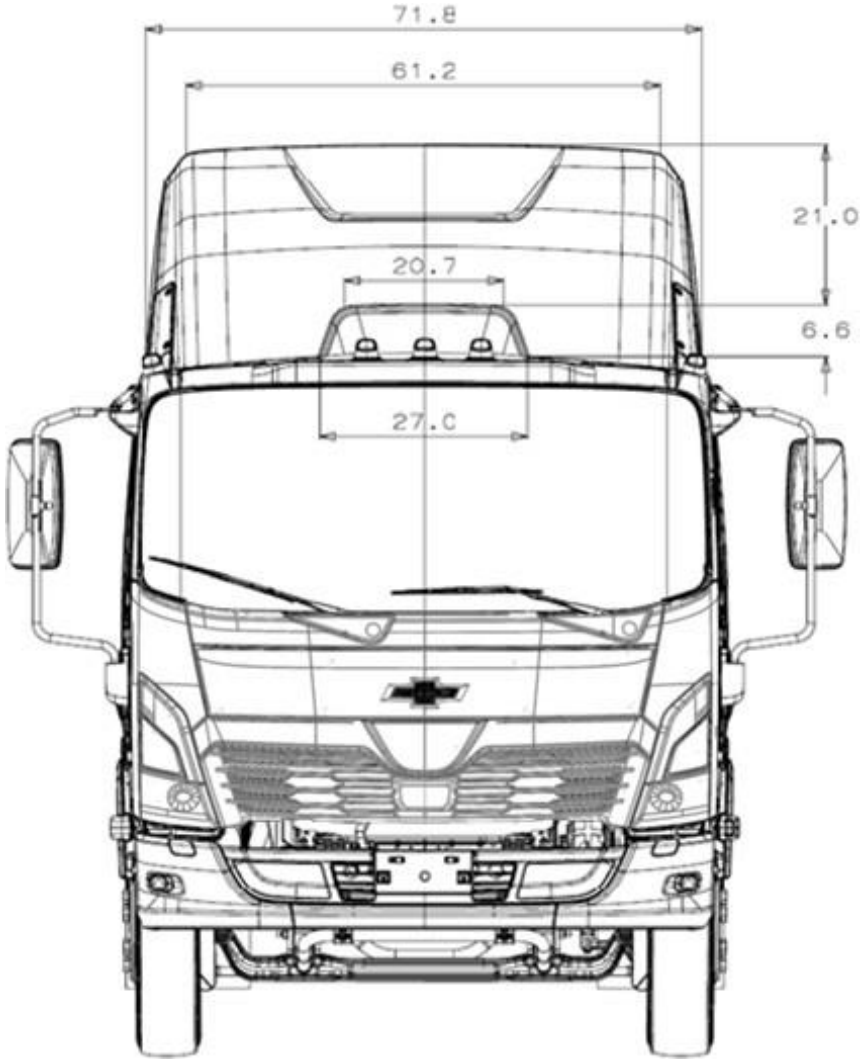




Figure 13

Dimensions in inches

# 2025 Chevrolet Low Cab Forward

## 6500 XD & 7500 XD Regular Cab - Side View

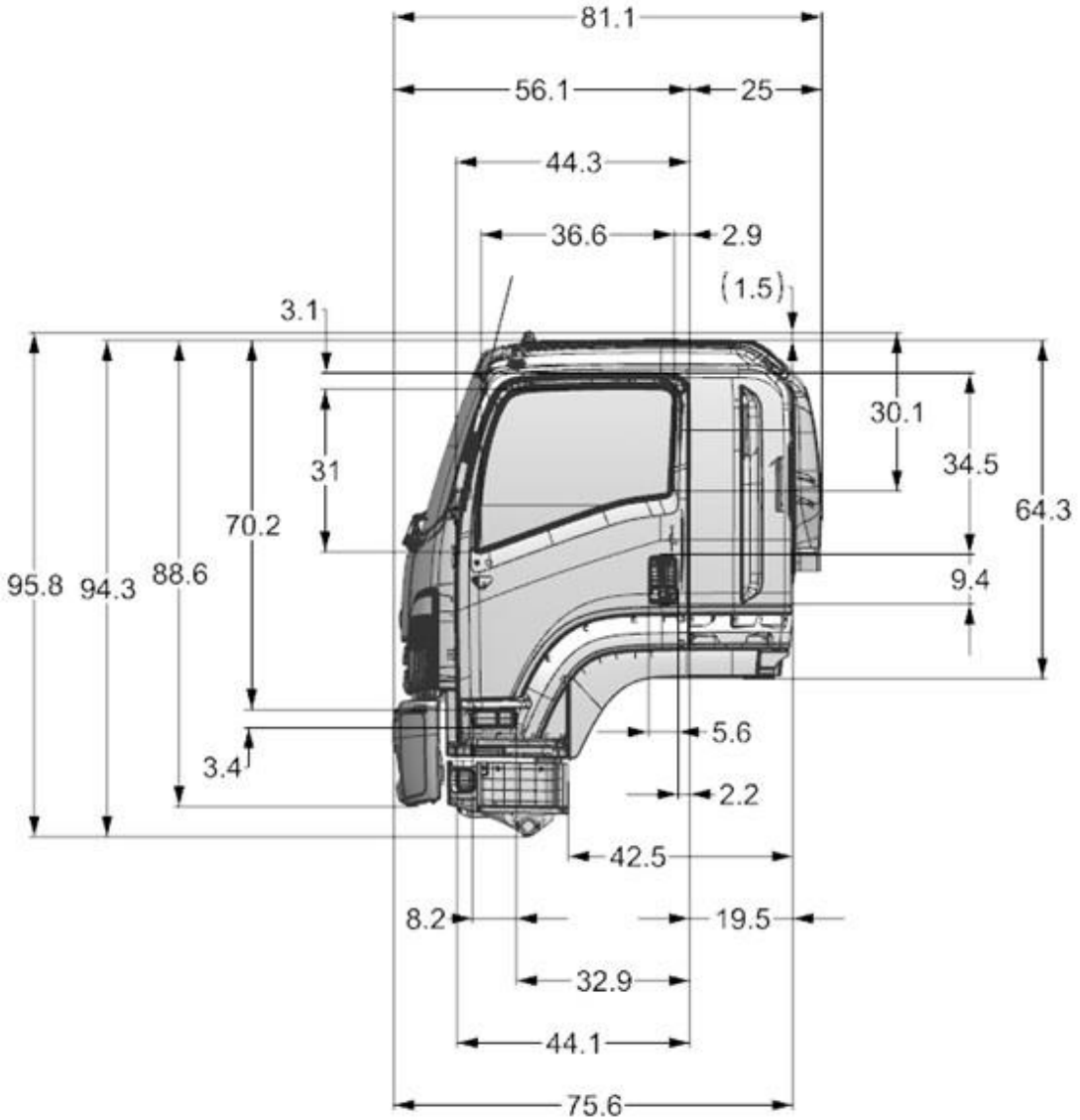
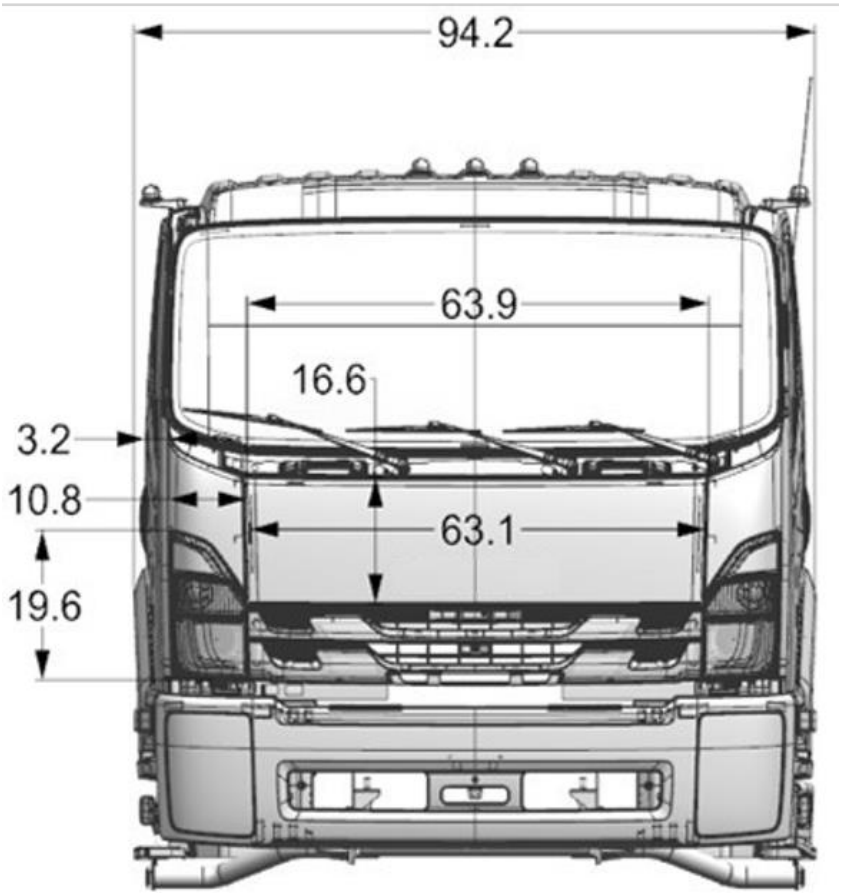



Figure 1

Dimensions in inches

## 6500 XD & 7500 XD Regular Cab - Front View




Dimensions in inches

Figure 2

## 6500 XD & 7500 XD Regular Cab - Rear View

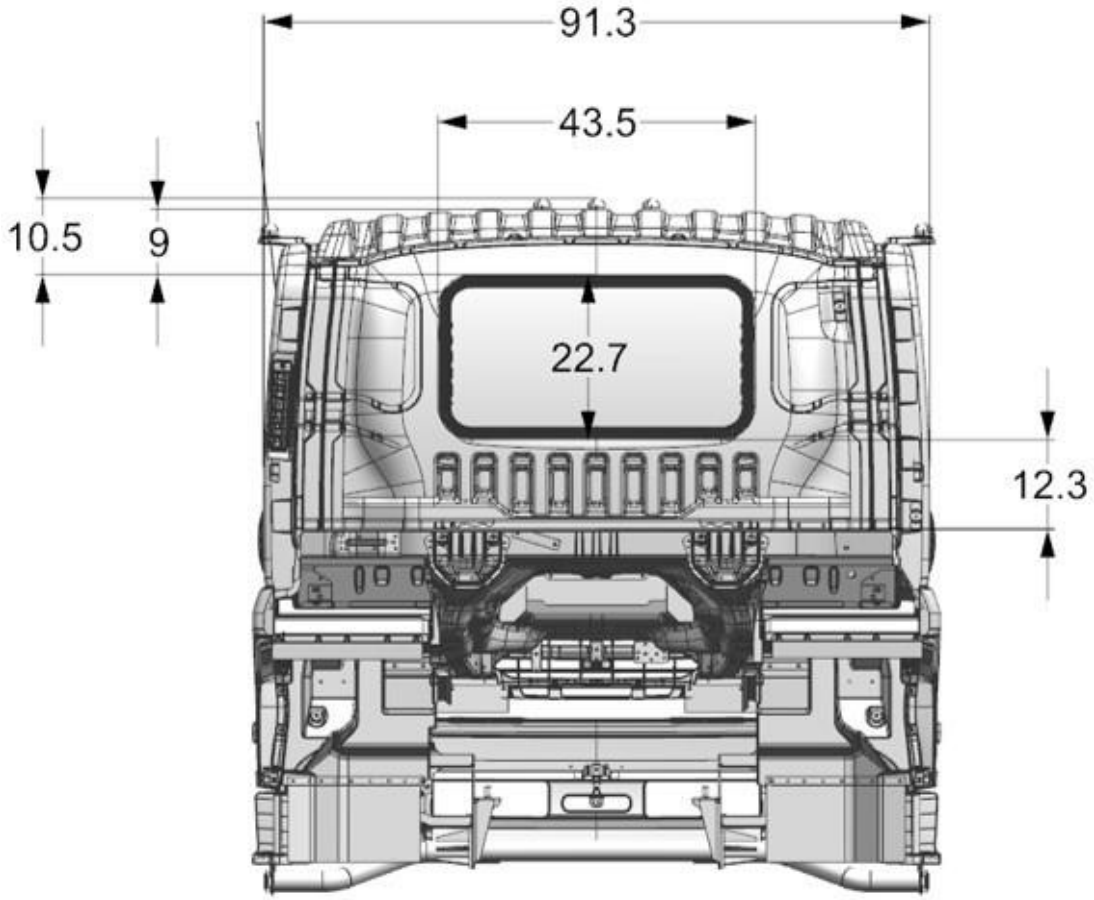



Figure 3

Dimensions in inches

## Understanding DPF Regeneration

### Understanding SCR (Selective Catalyst Reduction) and Diesel Exhaust Fluid (DEF)

The Selective Catalyst Reduction (SCR) system reduces nitrogen oxide (NOx) emissions emitted from a diesel engine. The SCR system reduces NOx by adding (injecting) Diesel Exhaust Fluid (DEF) into the exhaust system and inducing a reaction converting NOx into water vapor and nitrogen. This reaction takes place without any driver involvement. In addition, as long as the DEF tank is regularly filled with good quality DEF and at a satisfactory level above empty, the driver may never notice the SCR system.

It is the driver's responsibility to keep a good supply of quality DEF in the DEF tank for the proper operation of the SCR system. The SCR system will continuously monitor itself and the NOx reduction performance for any condition that will reduce or stop this emission reduction. The information provided in the remainder of this bulletin will outline the SCR system functions, common characteristics of the SCR system, DEF quality requirements and indicator and warning lights should the SCR system detect an incorrect fluid or if the DEF level in the DEF tank becomes too low.

### SCR System Operation and The Driver

The SCR system requires good quality DEF for proper operation. The system is equipped with various sensors to detect the proper fluid is added to the DEF tank. The driver's only responsibility is to add good quality DEF to the DEF tank as necessary. The DEF level gauge on the instrument cluster shows the amount of DEF remaining. In addition, the Mutli Information Display (MID) will provide additional notice to encourage the driver to add DEF. In order to keep the SCR system operational and emissions compliant a warning system will activate when the DEF level becomes too low (see DEF Low Level Warning System).

After starting the engine, the SCR control module will pressurize the system and based on various sensor inputs begin to reduce NOx emissions. No driver action is necessary for the SCR system to function. After the engine is turned "OFF" the SCR control module will reduce system pressure and recover all DEF in the system piping back to the DEF tank. This action is taken as cold weather protection.

***Note: Drivers may notice a buzzing noise from the driver side of the vehicle near the DEF tank a few moments after turning "OFF" the engine. This is a function of the SCR system and should be considered normal.***

During cold weather seasons DEF may freeze in the DEF tank. Once the engine is started, engine coolant circulates through the DEF tank to thaw it when frozen and prevent it from freezing while the engine is running. The vehicle can be driven normally when DEF is frozen in the DEF tank.

## *Adding DEF*

Under normal conditions DEF can be added simply by removing the DEF tank fill cap and pouring in DEF. A few points to be aware of when transferring DEF from its original container to the DEF tank are:

1. Be sure the outside of the container is clean from any debris.
2. If using a funnel or pump to transfer DEF, be sure to use equipment exclusively for DEF made from polyethylene resin or stainless steel.
3. Do not overfill the DEF tank.

Take care not to spill DEF. When DEF dries it will leave a crystalline residue. This condition is normal. Wash, with water, or wipe away the residue to prevent it from entering the DEF tank. If DEF is spilled on the body or frame, it may cause the metal to rust, so wipe it off and then rinse it away with water.

***Note: For cold weather climates (ambient temperatures below -11°C/12°F)***

GM does not recommend parking the vehicle for long periods with the refill diesel exhaust fluid (DEF) warning light on in cold weather. The DEF low level warning system may not reset when DEF is added. Take the following actions to avoid this condition in cold weather.

1. Refill the DEF as soon as possible after parked vehicle.
2. Turn the engine control switch to the “ON” position from the “LOCK” position.
3. Wait for the warning buzzers and warning lights to turn off.
4. If the buzzer does not stop, return the engine control switch back to the “LOCK” position and add more DEF, and then start over the step (2) above.
5. Turn the engine control switch to the “LOCK” position. Turn the engine control switch to the “ON” position from the “LOCK” position.
6. Wait for the warning buzzers and warning lights to turn off.
7. If the buzzer does not stop, return the control switch back to the “LOCK” position and add more DEF, and then start over the step (2) above.
8. Turn the engine control switch to the “LOCK” position.

## DEF Low Level Warning System

To avoid running out of DEF the SCR system will turn on warning and indicator lights and reduce engine power in progressive stages to encourage adding DEF. The following is a summary of the diesel exhaust fluid (DEF) low level warning lights, indicator lights and engine power reductions. Continuing to drive for too long after these lights come on will eventually result in a severe vehicle speed limitation. These warning and indicator lights will go out automatically and engine power will be restored to normal after the SCR system detects that the DEF tank is refilled with DEF.

Stage 1: When the remaining level of DEF becomes excessively low the DEF gauge will change color from green to amber. In addition, warning and indicator lights will come on as shown in the table and engine power will be reduced so the vehicle speed will not exceed 55 MPH (89 km/h).

Stage 2: If driving is continued without adding DEF (approximately 200 miles (320 km)) the DEF gauge, warning and indicator lights will begin blinking. Again, engine power will be reduced so the vehicle speed will not exceed 35 MPH (56 km/h).

Stage 3: If driving is continued until the DEF tank is empty, the DEF gauge will change color from amber to red and the warning and indicator lights will begin to blink faster. Engine power will still be reduced so the vehicle speed will not exceed 35 MPH (56 km/h). The vehicle speed will be limited to 5 MPH (8 km/h) either when the vehicle is stopped after driving further on (approximately 35 miles (56 km)) or when the engine is restarted.

Stage 4: The DEF gauge is red, the indicator light is blinking, and the buzzer is beeping continuously indicates the vehicle speed is limited to 5 MPH (8 km/h).

## DEF Quality and Storage

Diesel Exhaust Fluid is a urea-based chemical reactant designed specifically for use in SCR systems to reduce NOx emissions. The raw materials used to produce DEF include natural gas, coal or other petroleum products. DEF is prepared by combining high purity urea with deionized water to create a 32.5% solution. DEF and similar urea-based products are widely used today for a variety of agricultural and industrial needs. Chevrolet LCF DEF is API certified and meets ISO22241 specifications for purity and composition, while being:

- Non-toxic and non-polluting
- Non-flammable
- Stable and colorless
- Non-hazardous

DEF should be stored in an indoor place with good ventilation avoiding direct sunlight, if possible. Be sure containers are sealed properly to avoid contamination and evaporation. To maximize shelf life, ideal storage temperature is below 30°C/86°F and above -11°C/12°F to prevent freezing. If frozen DEF can be thawed and used without any concerns.

## DEF Safety

Though it should be harmless for physical contact, there may be a rare case to induce inflammation depending on the body constitution, so make sure to take following actions.

– In the event that the fluid does come into contact with your skin, wash it off with water. Although it is rare, a person with sensitive skin may suffer from irritation. If you come into contact with DEF, flush the affected area with soap and/or water. If irritation or redness develops or persists, seek medical attention.
– If it is accidentally swallowed, drink 1- 2 glasses of water or milk and seek immediate medical attention.
– If it does come into contact with the eyes, immediately rinse it off with a large amount of water for at least 15 minutes, and then seek medical attention.

## Customer Assistance in locating DEF

DEF is available from all authorized GM dealers. In addition, the U.S. Department of Energy has created an on-line DEF locator that can be accessed at www.afdc.energy.gov/afdc/locator/def/ . The American Petroleum Institute (API) also maintains a list of API-certified distributors of DEF on their web page at http://www.apidef.org/

## *Preparation of New Chevrolet LCF Vehicles for Storage Beyond 30-days*

In the event new Chevrolet LCF vehicles are to be stored for extended periods beyond thirty (30) days, the following additional maintenance items are suggested:

**NOTE**: When new Chevrolet LCF vehicles are stored outside, particularly along coastal areas, paint and bright metal deterioration will be more rapid due to prevailing salt- water atmosphere and high humidity. For this reason, it may be necessary to wash each vehicle and wax the chrome and stainless-steel metal parts at least once a month.

**NOTE**: To prevent the possibility of a build-up of mildew, open the doors to air out each vehicle at least once a month depending upon climatic condition. If there is condensation, wipe the condensation dry with a clean cloth and air out the vehicles.

A. "Block out" mechanical clutches by holding the clutch pedal partially depressed (approximately 1/2 way) with wooden blocks or bracing. This will prevent clutch plates from rusting to the flywheel and clutch pressure plate.
B. Remove windshield wiper arms and blades and store in the vehicle.

**In addition, the following procedures are to be carried out at thirty (30)-day intervals and instituted after the first thirty (30) days of vehicle storage.**

A. Check the battery water level and specific gravity. **If voltage is under 12.20 volts, recharge the battery**.
B. Connect the battery ground cable. Start engine in P range and let idle for at least twenty (20) seconds.
C. Raise the idle up to 2,000 rpm for fifteen (15) minutes. Be sure there is sufficient fuel in tank. Each new Chevrolet LCF vehicle is supplied with approximately 1.5 gallons of fuel. Do not let the tank run dry.
D. Shift the transmission lever to all positions while the engine is running.
E. Move the vehicle for a distance of at least thirty (30) feet to lubricate the wheel bearings.
   **NOTE**: The vehicle should be re-parked so that a different area of the tires is in contact with the ground to reduce the possibility of tire damage.
F. Turn the steering wheel lock-to-lock while the vehicle is moving slowly.
G. Apply and release the service and parking brakes several times (do not apply the parking brake when the vehicle is moving).
H. Stop the engine.
I. After warm-up operation, check under the vehicle to make sure there is no oil or fluid leakage.
J. Disconnect the battery ground cable.
K. Drain the brake air reservoirs (if appropriate) and close the drain cocks.

## *New GM Vehicles Stored Beyond One Year*

In the event new GM vehicles are to be stored for extended periods beyond one (1) year, the following additional maintenance is required every twelve (12) months:

A. Replace engine oil, coolant, brake fluid, transmission oil, differential gear oil and all other fluids.
B. Drain and refill diesel exhaust fluid (DEF).
C. Drain and refill fuel (diesel and gasoline).
D. Replace fuel filters (diesel only).

### *Limited Slip Differential Fluid*

Should it become necessary to add fluid to the rear axle of a chassis equipped with a limited slip differential please consult the GM Upfitter team for the appropriate selection of lubricants to be used.

| Axle Ratio | Housing Stand Axle | Stamp LSD Axle |
|---|---|---|
| 4.300 | SO | HO |
| 4.555 | C9 | D9 |
| 4.777 | S9 | H9 |
| 5.125 | C8 | D8 |
| 5.375 | S8 | H8 |
| 5.571 | A7 | B7 |
| 5.857 | C7 | D7 |