INTERSTATE Assembly Systems









CHASSIS REQUIREMENTS

MECHANIC TRUCKS







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IMPORTANT NOTE:

Customer must provide chassis layout drawing and/or detailed photos and confirm measurements before body will be released into production.

1. CHASSIS LENGTH – CAB TO AXLE (CA)

- CA is the distance from the back for the cab to the center of the rear axle. See reference photos on pages 6-7.
- Specific CA by body type and length:
 - CA for IMT Dominator 1: 84"
 - CA for IMT Dominator 2 or 3 11': 84-86" (86" preferred)
 - CA for IMT Dominator 2 or 3 14': 120-122" (122" preferred)
 - CA for IMT Dominator 4 14': 122"
 - Cab to Trunnion (CT) for IMT Dominator 4 19': 152"

See FUEL TANKS section below for CA recommendations if a larger chassis fuel tank is desired. Any chassis reinforcements should be inner liners. Outer reinforcements beyond standard chassis widths will incur an additional cost. (The F750 double rail is outer "C" and not compatible without excessive rework.)

2. CLEAN CA REQUIRED

- "Clean CA Required" means the sides of the frame must be clean or clear from any items mounted outside the frame rail. See reference photos on pages 6-7.
- When working with your chassis supplier, make sure the following equipment is inside the frame rails or located under the cab.
 - Air dryer
 - Air tanks
 - DEF tank (locate under the cab or mount as far forward as possible)

Note: There will be an additional cost for relocating items mounted outside of the frame rails.

3. AFTER FRAME (AF) REQUIRED

- The After Frame (AF) is the distance from the center of the rear axle (or trunnions) to the rear of the frame.
- There is a minimum amount of AF required for mounting the body. The following are the minimum AF lengths:
 - AF for IMT Dominator 1: 47.2"
 - AF for IMT Dominator 2 or 3 11': 52"







- AF for IMT Dominator 2 or 3 14': 52"
- AF for IMT Dominator 4 14': 58"
- AF for IMT Dominator 4 19': 88"

4. FUEL TANKS

- Fuel tanks should be either mounted under/along the cab or between the frame rails (Class 5 only). See reference photos on pages 6-7.
- For Peterbilt 536/537 or Kenworth T280/380, the 56-gallon tank works well with the body configuration. If a 75-gallon tank is used, the CA must be increased by an additional 5" from the minimum CA listed. Please confirm this requirement with Interstate before ordering the chassis.

5. DIESEL EXHAUST FUEL (DEF) TANK

- The DEF tank should be mounted either under the cab or immediately behind the cab. See reference photos on pages 6-7.
- If the DEF tank protrudes any amount behind the cab back wall, this may interfere with the body and/or front stabilizers. We must have this information and layout prior to the body arriving to determine if installation is possible or if modification will be required.

6. AIR TANK

• The air tanks should be mounted between or under the frame rails. See reference photos on pages 6-7.

7. EXHAUST

- IMT Dominator 1 Horizontal exhaust exiting behind curbside rear tires is recommended to avoid additional costs for relocation.
- IMT Dominator 2 and larger Vertical exhaust mounted next to passenger door preferred to avoid additional cost for relocation.

The "Clean CA" includes the exhaust location. If the exhaust extends behind the cab. that is where the "clean" measurement starts.

8. BATTERY LOCATION

- The preferred location for the batteries is under the passenger seat or mounted along the cab side. The batteries can be remote mounted in one of the boxes on the mechanic body if either of the other locations are not available.
- For Remote Mounting Only The batteries will typically ship from the Original Equipment Manufacturer (OEM) mounted on plywood secured on the frame rails for remote mounting.



9. POWER TAKE-OFF (PTO) REQUIREMENT

• Unless the unit will be self-powered (e.g., Enpak, Vanair, engine-driven compressor and/or electric-over-hydraulic crane), the chassis must come with a PTO provision for installation of a hydraulic pump. The PTO provision must include an accessible PTO mounting flange capable of 20 HP for single function (typically a Dominator 1 configuration) or 38HP for dual simultaneous function with standard 40-45 cfm compressors (typical Dominator 2 or 3 configuration). For larger compressors and/ or other special requirements, confirm the chassis requirements with Interstate prior to ordering the chassis. Chevrolet 5500/6500 and International CV with rear air suspension not compatible with Dominator 1 body

10. CAB CONFIGURATION

• Cab Switches – Be sure to include a PTO switch. We recommend you order the chassis with additional switches when possible for use with lighting, strobes or other body functions. There is an extra charge for switch installation, so ordering extra switches from the OEM/dealer is recommended.

11. CAB STROBE LIGHTS

· Order cab mounted strobes if you want them or at least include strobe prewire in the chassis configuration from the OEM/dealer.

12. SUSPENSION

- Spring or air suspension are both acceptable for mechanic truck configurations.
- If air suspension, add the dual leveling valve option if available.

13. REAR VIEW CAMERA

 If a rear view camera or pre-wire is available, include in the chassis configuration from the OEM/dealer.

14. TRAILER TOWING

• If you plan to tow a trailer, order the chassis from the dealer with the necessary air and electrical hookups to the rear of the frame from the OEM/dealer.

15. RECOMMENDED AXLE RATINGS

- IMT Dominator 1 chassis (18-26k GVW): Standard axles vary by OEM
- IMT Dominator 2 or 3 (26k GVW) chassis: 10k front / 21k rear
- IMT Dominator 2 or 3 (33k GVW) chassis: 12k front / 21k rear
- IMT Dominator 4 chassis: Consult Interstate sales representative



86" Chassis Layout Per Requirements

Mechanic Trucks













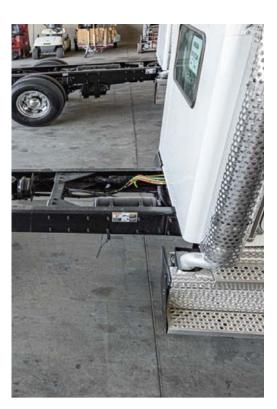
122" Chassis Layout Per Requirements

Mechanic Trucks













GLOSSARY

TRUCK TERMINOLOGY

AF After Frame - CL (center line) of axle(s) to the end of Frame

- sometimes called Overhang

EOF End of Frame

BA Bumper to Axle - Front axle

CA Cab to Axle

CT Cab to Trunnion

BOC Back of Cab

WB Wheelbase - Center to Center

BBC Bumper to Back of Cab

SFFA Set Forward Front Axle

SBFA Set Back Front Axle

FET Federal Excise Tax

GVWR Gross Vehicle Weight Rating

GCVR Gross Combination Weight Rating

GVWR (Gross Vehicle Weight Rating) is the maximum allowable weight of the fully loaded vehicle (including passengers and cargo). This number (along with other weight limits, as well as tire, rim size and inflation data) is shown on the vehicle's Safety compliance Certification Label, located on the left front door facing or the door latch post pillar. (The GVW, the actual total weight of the vehicle and payload, must never exceed the GVWR.)

GCWR (Gross Combination Weight Rating) is the maximum allowable weight of the towing vehicle and loaded trailer - including all cargo and passengers. (The measured GCW must never exceed the GCWR.)







