# 2014 Light Commercial Vehicle Body Application Guide











# 2014

# GENERAL MOTORS LIGHT COMMERCIAL VEHICLE BODY APPLICATION GUIDE

# HOW DO I USE THIS GUIDE?

This guide is designed for your convenience. Because you likely have a specific vocation in mind for a new vehicle, we've organized the guide to help you match your intended tasks to the vehicle. Whether you need a platform bed, stake bed, van body, dump bed — name the type — you can look up the body style you need to see which GM vehicle fits the bill.

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# HOW DO I BUY A COMMERCIAL VEHICLE?

Start by providing your Sales Consultant with detailed answers to these questions:

- What set of tasks do you have in mind for the vehicle?
- What kind of body (platform, stake, van, etc.) do you want on the vehicle?
- Do you know what length this specialty body needs to be? Did you have a previous vehicle used for this job? Was its capacity sufficient? Was it too long or too short? How would you improve on it now?
- What is the weight of the specialty body that you'll be using?
- Can you provide other specifications for your existing specialty body? Who is the manufacturer? What's the model number?
- Do you need a recommendation for a new, GM-approved specialty body supplier?
- What is the maximum payload weight that you'll be hauling?
- Will you add a rear liftgate, snow plow or other significant equipment that will affect payload capacity and weight distribution?
- If applicable, do you prefer a Regular Cab, Extended Cab or Crew Cab chassis?
- Will you choose a gas or diesel engine?
- Do you have a top-heavy application or severe duty application such as a dump, tanker or high-capacity crane?

Answering these questions will put you and your Sales Consultant on the right track to selecting the GM vehicle that's a perfect fit for the job. If you don't understand a term, be sure to look it up in the Glossary of Truck Terms near the end of this guide.

# **About This Guide**

General Motors reserves the right to discontinue or change at any time without notice any prices, colors, parts, materials, standard equipment, optional equipment, special equipment, specifications and/or body types and models. This material is not legally approved for use in any advertising. Copyright © 2013 by General Motors.

# An Important Note About Alterations and Warranties

Installations or alterations to the original equipment vehicle (or chassis) as distributed by General Motors are not covered by the General Motors New Vehicle Limited Warranty. The specialty body company, assembler, equipment installer, or upfitter is solely responsible for warranties on the body or equipment and any alterations (or any effect of the alterations) to any of the parts, components, systems, or assemblies installed by GM. General Motors is not responsible for the safety or quality of design features, materials, or workmanship of any alterations by such suppliers.

# Online Order Guide

This document makes frequent reference to the Online Order Guide. To access this quide:

Go to **gmfleet.com** and click on the "RESOURCES" menu item.

- Under Reference Guides, select "Online Order Guide"
- Select "View the Online Order Guide now"
- Select the model year, then "Cars/Light Trucks"
- Select the desired GM Division
- Select the desired vehicle model.

You can also access it directly from gmfleetorderguide.com.

# Special Equipment Options (SEO)

Special equipment options and special paint are available on select models at an additional cost. Availability and required minimums for special paint, pricing and ordering instructions are available through your dealer, or you can contact our GM Fleet and Commercial Action Center for assistance. Telephone Monday–Friday, 8 a.m.–6 p.m. (EST), 1-800-FLEETOP (1-800-353-3867) or use this email form: https://www.gmfleet.com/contact-us/local-request-contact.html

Examples of Special Equipment Options (may not apply to all models)

include:

- Individual vinyl seats
- Rear seat delete
- Power windows, locks and mirrors
- Backup alarm
- Matching spare wheel and tire
- 12-volt power supply
- Spare tire delete

# Ship-Thru Codes

To save time, ship-thru codes can be specified at the time of order, to ship direct from the factory to a particular GM-approved body company for upfitting (eliminating an unnecessary shipment to the dealer).

Sample codes are shown below:

VCB Ship-thru code to Monroe Truck Equipment — Flint, MI

VEW Ship-thru code to Canfield Equipment — Flint, MI

VFW Ship-thru code to NBC Truck Equipment — Roseville, MI

VUD Ship-thru code to Knapheide Truck Equipment — Flint, MI

VHR Ship-thru code to Reading Equipment — Pontiac, MI

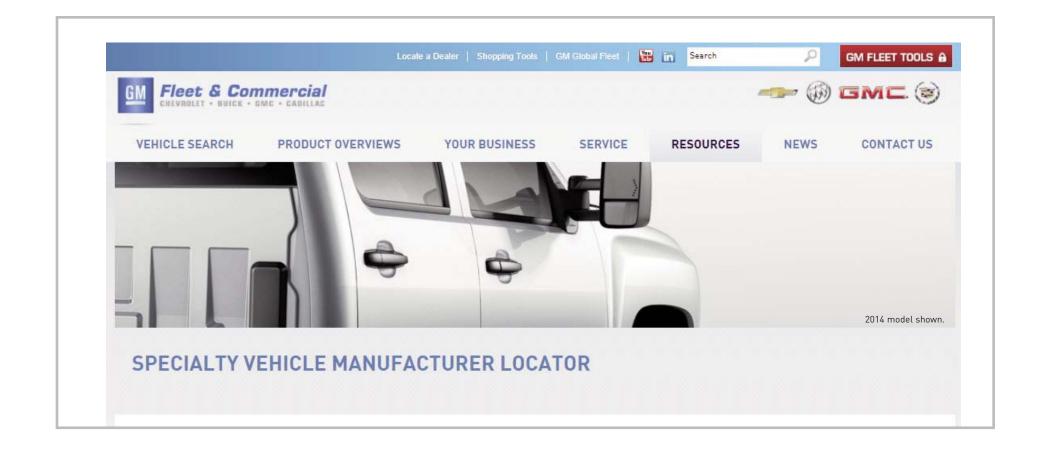
VUI Ship-thru code to Ft. Wayne Fleet — Roanoke, IN

Ship-thru codes can be accessed through the Online Order Guide.



General Motors Special Vehicle Manufacturers provide a quality upfit product that will enhance GM chassis and van vehicles. SVMs are selected on the merit of their upfit/conversion, financial stability, and adherence to governmental and trade association requirements.

Visit our online Special Vehicle Manufacturer Locator at:
<a href="http://www.gmfleet.com/specialty-vehicles/locate-manufacturer.html">http://www.gmfleet.com/specialty-vehicles/locate-manufacturer.html</a>
Search by state or service type to find the GM upfitter that's right for you.



#### **Covered and Comprehensive**

Chevrolet and GMC models:

- 100,000-mile/5-year (whichever comes first) Powertrain Limited Warranty
- 36,000-mile/3-year Bumper to Bumper Limited Warranty



#### Buick and Cadillac models:

- 70,000-mile/6-year (whichever comes first) Powertrain Limited Warranty
- 50,000-mile/4-year Bumper to Bumper Limited Warranty

#### Roadside Assistance/Courtesy Transportation:

- Included for the duration of the Powertrain Limited Warranty
- Transferable to subsequent owner
- \$0 Deductible
- See dealer for complete details

# 2 year/24,000-mile (whichever comes first) Included Scheduled Maintenance

- 2014 Buick, Chevrolet and GMC models
- Includes oil and filter changes, four-wheel tire rotations, and 27-point vehicle inspection based on vehicle owner's manual maintenance schedule and oil life monitoring system
- See dealer for complete program details

#### 2-year/30,000-mile (whichever comes first) Business Choice Maintenance on Select Models

- Must be eligible for Business Choice
- Purchase or lease an eligible new 2014
   Chevrolet, Buick or GMC car, truck or crossover in the U.S. and it will be covered by a maintenance program that includes certain scheduled services for two years or 30,000 miles, whichever occurs first
- Includes oil and filter changes, four-wheel tire rotations, and 27-point vehicle inspection based on vehicle owner's manual maintenance schedule and oil life monitoring system
- See dealer for complete program details

#### Additional Cadillac Plans

- 50,000-mile/4-year Premium Care Maintenance Plan included on Cadillac vehicles
- Cadillac Professional Vehicle Protection Plan (PVPP) is included on chauffeured transportation and Funeral Industries. Covers select components on eligible models for up to 150,000 miles/36 months (whichever comes first) on livery vehicles or 100,000,miles/72 months (whichever comes first) on funeral vehicles. See dealer for a list of covered components and complete details. A \$50 deductible applies

#### Fleet Focused Solutions

- Dedicated Fleet Sales, Service and Parts organization
- Experienced in assisting fleets with maximizing vehicle uptime and driver convenience
- Operating expense consultation
- Fleet Action Center 1-800-FLEETOP (1-800-353-3867)

#### Maintenance Savings Technology

- Oil Life Monitoring System (available on most models)
- Simplified maintenance
- Tire Pressure Monitoring System (Tire Pressure Monitoring System does not apply to spare tire.)
- OnStar® Business Vehicle Manager (available on OnStar-equipped models).
   Requires an active OnStar subscription. Visit onstar.com for coverage map, system limitations and details

#### **GM Tools and Equipment**

- Service Tools and Equipment
- Fleets may purchase tools and equipment available through GM's authorized source
- Visit <u>www.gmdesolutions.com</u> or call 1-800-GM-TOOLS (1-800-468-6657)

#### World Class Training

- Web-based technical training
- Instructor-led classroom sessions provide hands-on technical training
- Visit <u>www.centerlearning.com</u> or www.acdelcotechconnect.com



#### Service Reference and Diagnostics (SI 2000)

- Valuable service information necessary to successfully diagnose and complete vehicle repairs
- TechLink Bulletins, Service Manuals, Service Bulletins and Information
- Electronic Tech II Updates
- Multiple Diagnostic Interface (MDI)
- Visit www.gmfleet.com



# FOR FLEETS WITH IN-HOUSE MAINTENANCE AND REPAIR FACILITIES, GM HAS QUALITY PARTS FOR YOUR GM AND NON-GM VEHICLES

#### **GM Parts**

 High quality GM Parts designed, manufactured, and tested to help keep your GM vehicle running at peak performance



ACDelco

 Your GM dealer has access to a full line of genuine GM Parts — Maintenance/Repair, Collision, Powertrain, and GM Access

#### ACDelco Parts

- Meet GM's stringent quality standards
- Available for GM and non-GM vehicles





#### ACDelco Key Fleet Program

- Offers fleets technical and related benefits to help increase efficiency and reduce downtime
- Product training and service seminars at no charge
- Technical assistance hotline
- Discounts on SPX tools, equipment, service and training manuals
- Visit www.acdelcotechconnect.com



#### WIP (WISE Internet Parts)

- Online parts/ordering link to local ACDelco Warehouse Distributors
- Order history and saved order sheets
- Labor, tech specs, and other optimal modules available or additional information, call 1-800-825-5886, option 3



#### UNMATCHED GM DEALER NETWORK

- Over 4,000 GM locations nationwide the industry's largest OEM automotive service provider
- Multi-Point Vehicle Inspection
- Advanced diagnostic equipment and a link to GM engineers who supply daily service information
- GM-trained and ASE-certified technicians with over 2 million hours of training annually
- Genuine GM Parts, manufactured to meet the exact specifications of your GM vehicle
- One-stop shopping for all your service needs
- Go to <u>www.mycertifiedservice.com</u> for a location near you

# **Business Elite**

Chevrolet and GMC Business Elite dealers across the country feature knowledgeable, professionally trained staff committed to helping businesses like yours identify the vehicles you need to operate your business effectively and efficiently. The right vehicles to get the job done, equipped the way you need them!

#### These dealers:

- Are committed to businesses like yours
- Have dedicated, knowledgeable, trained staff
- Have commercial demonstrator vehicles available for Business Service Customer
- Inventory work-ready business trucks, vans and utility vehicles available for prompt delivery
- Have access to Special Vehicle Manufacturers to help you get special upfits and equipment you need to get work done
- Have service facilities staffed and equipped to cater to business customers



# Ally Commercial Services

At Ally, we have the knowledge and special programs to fit most business transactions that you, as a business customer, depend on to meet your day-to-day requirements. Please contact your local General Motors dealer to inquire about the various plans and programs we offer.

Ally offers a variety of options like:

- Ally Commercial SmartLease® closed-end lease plan
- Ally ComTRAC<sup>®</sup> Lease open-end lease plan
- Ally Municipal Lease-Purchase Plan
- Ally Commercial Line of Credit
- Ally Third-Party Guaranty

For more information on our plans and products, please visit our website at <a href="https://www.ally.com/auto">www.ally.com/auto</a>.

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# GM FleetTrac

(Consolidated Billing Program)

GM FleetTrac simplifies the vehicle maintenance process for fleets of all sizes and types. This program offers consolidated billing and additional features that reduce the administrative burdens associated with fleet maintenance, providing fleet drivers and managers with unsurpassed convenience.

GM FleetTrac features include:

- Nationwide GM FleetTrac Dealer Network
- Consolidated Invoice
- Spending Controls
- Simplicity
- Online Account Access
- Reports
- No Make Limitation
- GM Certified Technicians
- Quality GM Parts
- Factory Updates
- Special GM Tools & Equipment
- May be used to purchase over the counter parts and/or services

For more information or to enroll, visit us at www.gmfleettrac.com.







GM Business Choice offers the new 2-year/24,000-mile Brand Scheduled Maintenance on 2014 models<sup>1</sup> or 2-year/30,000-mile Business Choice Maintenance on 2012 and 2013 models<sup>2</sup> in addition to the upfit cash or accessory cash for increased savings. It is an incentive program designed specifically for small-business owners who use vehicles in the day-to-day operation of their business, and not solely for transportation purposes. This incentive is available to small-business customers that purchase or lease an eligible Chevrolet or GMC.

#### for CARGO AND CUTAWAY VANS

• Up to \$1200 upfit cash allowance<sup>3,4</sup> OR a \$2327 value interior system4



#### for CHASSIS CABS

• \$750 upfit cash allowance<sup>3</sup>



#### for TRUCKS (2500 AND 3500)

• \$1000 in accessory cash allowance OR \$500 upfit cash allowance + \$500 for snow plow upfit<sup>5</sup>



#### for LIGHT-DUTY VEHICLES

• \$400 in accessory cash allowance OR \$200 upfit cash allowance + \$200 for snow plow upfit<sup>5</sup>



#### Eligible vehicles and dates

• 2012-2014 Express/Savana, Silverado/Sierra pickups and Chassis Cabs

#### **GM Business Choice Program Requirements**

- The 2014 GM Business Choice Program is valid from October 1, 2013 through September 30, 2014. 2011 models expire from the program on Sept. 30,2013
- You must purchase or lease and take delivery of your vehicle during the program period and be prepared to provide proof of your business. Vehicle must be used in the day-to-day operation of the business and not solely for transportation purposes. This program may not be compatible with other offers or incentive programs. Consult with your Chevrolet or GMC dealer for program compatibility and other restrictions.

For complete program requirements, including information regarding offers, vehicles, equipment, options, warranties and ordering information, consult with your Chevrolet or GMC dealer, or visit: www.ambusinesschoice.com.

- 1. Covers only scheduled oil changes with filter and tire rotations according to your new vehicle's recommended maintenance schedule for up to 2 years or 24,000 miles, whichever comes first. Does not include air filters. Maximum of 4 service events. See participating dealer for other restrictions and complete
- 2. Whichever comes first. See dealer for complete details.
- 3. To qualify, vehicles must be used in day-to-day operations of your business and not solely for transportation purposes. Must provide proof of business. Visit ambusinesschoice.com or your Chevrolet or GMC dealer for details. Take delivery by 9/30/14.
- 4. Adrian Steel® packages only.
- 5. Requires Snow Plow Prep.



If cargo needs weather protection, a van body is the answer. It offers maximum versatility for meat, poultry and flower wholesalers; newspapers; cities/counties; and, naturally, delivery and expediting companies.

See Powertrain Combinations chart for applicable engines, transmissions and 2WD/4WD/AWD availability.

Model	Cab or Equipment	WB/CA	Drive		E	Body Le	ength (fe	eet)		Maximum GVWR	Maxilliulli buuy allu			
Model	Cab of Equipment	(inches)	Axle(s)	6	7	8	9	10	12	(pounds)	Payload (pounds) <sup>2</sup>			
	Danulan Cab	100 7/5 / 0	2WD							10000	4549			
2015 Silverado/Sierra	Regular Cab	133.7/56.0	4WD							9900	3876			
2500HD (with ZW9	Davible Cab	450.0/55./	2WD							10000	3802			
Pickup Box Delete)	Double Cab	158.2/55.6	4WD							10000	3517			
rickup box betete,	Crew Cab	4 / 5 5 / 5 /	2WD							10000	3583			
	crew cab	167.7/55.6	4WD							10000	3631			
			2WD							11100 SRW	4937 SRW			
	Dagular Cab	100 7/5 / 0	2000			_				13500 DRW	7656 DRW			
	Regular Cab	133.7/56.0	4WD							11400 SRW	4915 SRW			
2015 Silverado/Sierra			4VVD			_				13400 DRW	7234 DRW			
			2WD							11200 SRW	4848 SRW			
3500HD (with ZW9	Double Cab	150.0/55./	2000			_				13025 DRW	6732 DRW			
Pickup Box Delete)		158.2/55.6	4WD							11600 SRW	4872 SRW			
			4000			_				13025 DRW	6452 DRW			
			2WD							11400 SRW	4642 SRW			
	00.1	4 / 8 8 / 5 5 /	2000			_				13025 DRW	6590 DRW			
	Crew Cab	167.7/55.6	4WD							11600 SRW	4603 SRW			
						4VVD			_				13025 DRW	6247 DRW
	Damilan Cab CWD	107 5/50 0	2WD							13200	7490			
2015 Silverado/Sierra 3500HD Chassis Cab  Regular Cab Si Regular Cab Li Crew Cab	Regular Cab SWB	137.5/59.8	4WD							13200	7075			
	Dagular Cab I WD	1 / 0 0 / 0 / 0	2WD							13200	7287			
	Regular Cab LWB	162.0/84.3	4WD							13200	6964			
	Craw Cab	454 5/50 /	2WD							13200	6783			
	crew cap	171.5/59.4	4WD							13200	6453			

<sup>1.</sup> When properly equipped; includes weight of vehicle, passengers, cargo and equipment.

<sup>2.</sup> When properly equipped; maximum payload capacity includes weight of driver, passengers, optional equipment and cargo.



Model	Cab or Equipment	WB/CA	Drive Axle(s)		E	Body Le	ngth (fe	et)		Maximum	Maximum Body and
Model	Can of Equipment	(inches)	hes)		10	12	14	16	18	GVWR (pounds)¹	Payload (pounds) <sup>2</sup>
Express/Savana	Standard Cargo	135/NA	2WD							7300	2360
1500	Van Body	133/11A	AWD							7300	1995
Express/Savana	Standard Cargo	135/NA	2WD							8600	3191
2500	Van Body	155/NA	2WD							8600	2978
Express/Savana	Standard Cargo	135/NA	2WD							9600	4145
3500	Van Body	155/NA	2WD							9600	3951
Express/Savana		139/80	2WD							12300	7307
3500	Cutaway	159/100	2WD							12300	7310
3300		177/118	2WD							12300	7248
Express/Savana		159/100	2WD			_				14200	9156 (Gas)
4500		137/100	ZVVD							14200	8135 (Diesel)
	Cutaway	159/100	2WD							13980 (C8V)	7915 (Diesel)
		177/118	OME							1/000	8868 (Gas)
		1///110	2WD							14200	7824 (Diesel)
		177/118	2WD							13980 (C8V)	7794 (Diesel)

<sup>1.</sup> When properly equipped; includes weight of vehicle, passengers, cargo and equipment.

<sup>2.</sup> When properly equipped; maximum payload capacity includes weight of driver, passengers, optional equipment and cargo.



Carrying everything from livestock to lumber and scrap metal, platform/stake applications are among the most versatile of work trucks. Properly spec'd, they can meet the diverse needs of many different types of customers.

See Powertrain Combinations chart for applicable engines, transmissions and 2WD/4WD availability.

Model	Cab or Equipment	WB/CA	Drive		E	Body Le	ngth (fe	eet)		Maximum GVWR	Maximum Body and
Modet	Can or Equipment	(inches)	Axle(s)	6	7	8	9	10	12	(pounds) <sup>1</sup>	Payload (pounds) <sup>2</sup>
	Regular Cab	133.7/56.0	2WD							10000	4549
2015 Silverado/Sierra	Regular Cab	133.7/36.0	4WD							9900	3876
•	Double Cab	158.2/55.6	2WD							10000	3802
2500HD (with ZW9	Double Cab	108.2/00.6	4WD							10000	3517
Pickup Box Delete)	Crew Cab	167.7/55.6	2WD							10000	3583
	Clew Cab	107.7/33.0	4WD							10000	3631
			2WD							11100 SRW	4937 SRW
	Regular Cab	133.7/56.0	2000			_				13500 DRW	7656 DRW
	Regular Cab	133.7/30.0	4WD							11400 SRW	4915 SRW
2015 Cilvarada/Ciarra			4VVD							13400 DRW	7234 DRW
	Double Cab 158.:		2WD							11200 SRW	4848 SRW
2015 Silverado/Sierra		158.2/55.6	2000							13025 DRW	6732 DRW
3500HD (with ZW9		108.2/00.6	4WD							11600 SRW	4872 SRW
Pickup Box Delete)			4VVD			_				13025 DRW	6452 DRW
			2WD							11400 SRW	4642 SRW
	Crew Cab	167.7/55.6	2000			_				13025 DRW	6590 DRW
	Clew Cab	107.7/33.0	4WD							11600 SRW	4603 SRW
			4VVD							13025 DRW	6247 DRW
	Regular Cab SWB	137.5/59.8	2WD							13200	7490
201E Cilvara da /Ciarra	Regular Cab SWD	137.3/37.0	4WD							13200	7075
2015 Silverado/Sierra 3500HD Chassis Cab	Regular Cab LWB	162.0/84.3	2WD							13200	7287
	Regular Cab EVVD	102.0/04.3	4WD							13200	6964
	Crew Cab	171.5/59.4	2WD							13200	6783
	Clew Cap	1/1.3/37.4	4WD							13200	6453

<sup>1.</sup> When properly equipped; includes weight of vehicle, passengers, cargo and equipment.

<sup>2.</sup> When properly equipped; maximum payload capacity includes weight of driver, passengers, optional equipment and cargo.







Dump operations usually mean severe service — they need the fortitude for max-load performance both on- and off-road, and the ability to routinely absorb shock loads from loaders and bed dumps. Stability for high dump bed angles and load shift when offloading is also a mandatory personality trait. In addition to earthmoving, sand-and-gravel haulers and aggregate hauler vocations, other applications include dredgers, asphalt, masonry, mining, nurseries and much more.

See Powertrain Combinations chart for applicable engines, transmissions and 2WD/4WD availability.

Model	Cab or Equipment	WB/CA	Drive		E	Body Le	ngth (fe	et)		Maximum GVWR	Maximum Body and
Model	Cab of Equipment	(inches)	Axle(s)	8	9	10	12	14	16	(pounds) <sup>1</sup>	Payload (pounds) <sup>2</sup>
			2WD							11100 SRW	4937 SRW
	Regular Cab	133.7/56.0	200	_						13500 DRW	7656 DRW
	Regular Cab	133.7/30.0	4WD							11400 SRW	4915 SRW
			4000							13400 DRW	7234 DRW
2015 Silverado/Sierra			2WD							11200 SRW	4848 SRW
	Double Cab	158.2/55.6	200							13025 DRW	6732 DRW
3500HD (with ZW9 Pickup Box Delete)			4WD							11600 SRW	4872 SRW
			4000							13025 DRW	6452 DRW
		167.7/55.6	2WD							11400 SRW	4642 SRW
	Crew Cab		2000							13025 DRW	6590 DRW
	Clew Cab	107.7733.0	4WD							11600 SRW	4603 SRW
			4000							13025 DRW	6247 DRW
	Pogular Cab SWR	137.5/59.8	2WD							13200	7490
	Regular Cab SWB	137.3/37.0	4WD							13200	7075
3500HD Chassis Cab	Regular Cab LWB	162.0/84.3	2WD							13200	7287
	Regular Cab LWB	102.0/04.3	4WD							13200	6964
	Crew Cab	171.5/59.4	2WD							13200	6783
	CIEW Cab	1/1.3/37.4	4WD							13200	6453

<sup>1.</sup> When properly equipped; includes weight of vehicle, passengers, cargo and equipment.

<sup>2.</sup> When properly equipped; maximum payload capacity includes weight of driver, passengers, optional equipment and cargo.

# SNOW PLOW/SPREADER APPLICATION





GM offers hardworking trucks for snow business, with Chevrolet and GMC trucks equipped with the available Snow Plow Prep Package. Our prep packages are carefully thought out to ensure that the loads imposed by heavy plows and salt/sand spreaders are manageable. But it doesn't stop there. Depending on the specific application, prep packages can include a mounting location for snow plow controls, high-output alternator, backup

emergency light power and forward lamp wiring harness, an instrument panel jumper wiring harness for an electric trailer brake controller, a high-flow front bumper, a high-capacity air filter and skid plates.

See Powertrain Chart for applicable engines and transmissions. Many powertrain combinations for snow plow prep are listed in the chart footnotes.

NOTE: For use in a snow plow application, all models listed in the chart must be equipped with the optional Snow Plow Prep Package, available at additional cost.

Cab or Equipment	WB/CA		Plo	w Wid	lth (fee	et)	Sprea Lei	der/H ngth (fe	opper eet)	Maximum GVWR (pounds) <sup>4</sup>	Maximum Payload (pounds)⁵
	(inches)	Axle(s)	7.5	8	9	10	7	8	10	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	(pounds)°
Regular Cab/Standard Box	119.0/41.4	4WD								6800	2088
Regular Cab/Long Box	133.0/55.4	4WD								7000	2059
Regular Cab/Long Box	133.7/56.0	4WD								9900	3633
Double Cab/Standard Box	144.2/41.6	4WD								10000	3379
Double Cab/Long Box	158.2/55.6	4WD								10000	3274
Crew Cab/Standard Box	153.7/41.6	4WD								10000	3152
Crew Cab/Long Box	167.7/55.6	4WD								10000	3388
Pogular Cah/Long Roy	122 7/54 N	/WD								11400 SRW	4660 SRW
Regular Cab/Long Box	133.7730.0	400								13400 DRW	6952 DRW
Double Cab/Long Box	158 2/55 4	/WD								11600 SRW	4617 SRW
										13025 DRW	6170 DRW
Crew Cab/Standard Box	153.7/41.6	4WD								11500 SRW	4324 SRW
Crew Cab/Long Box	167 7/55 6	4WD								11600 SRW	4348 SRW
orew eas, Long Bex	10717700.0	.,,,,								13025 DRW	5965 DRW
Regular Cab SWB	137.5/59.8	4WD								13200	7075
Regular Cab LWB	162.0/84.3	4WD								13200	6964
Crew Cab	171.5/59.4	4WD								13200	6453
	Regular Cab/Long Box Regular Cab/Long Box Double Cab/Standard Box Double Cab/Long Box Crew Cab/Standard Box Crew Cab/Long Box Regular Cab/Long Box Double Cab/Long Box Crew Cab/Standard Box Crew Cab/Standard Box Crew Cab/Standard Box Crew Cab/Long Box Regular Cab SWB Regular Cab LWB	Regular Cab/Standard Box 119.0/41.4 Regular Cab/Long Box 133.0/55.4 Regular Cab/Long Box 133.7/56.0 Double Cab/Standard Box 144.2/41.6 Double Cab/Long Box 158.2/55.6 Crew Cab/Standard Box 167.7/55.6 Regular Cab/Long Box 167.7/55.6 Regular Cab/Long Box 158.2/55.6 Crew Cab/Long Box 167.7/55.6 Regular Cab/Long Box 158.2/55.6 Crew Cab/Long Box 158.2/55.6 Crew Cab/Long Box 158.2/55.6 Crew Cab/Long Box 158.2/55.6 Crew Cab/Standard Box 153.7/41.6 Crew Cab/Long Box 167.7/55.6 Regular Cab SWB 137.5/59.8 Regular Cab SWB 137.5/59.8	Regular Cab/Standard Box         119.0/41.4         4WD           Regular Cab/Long Box         133.0/55.4         4WD           Regular Cab/Long Box         133.7/56.0         4WD           Regular Cab/Long Box         144.2/41.6         4WD           Double Cab/Long Box         158.2/55.6         4WD           Crew Cab/Standard Box         153.7/41.6         4WD           Crew Cab/Long Box         167.7/55.6         4WD           Regular Cab/Long Box         158.2/55.6         4WD           Crew Cab/Standard Box         158.2/55.6         4WD           Crew Cab/Long Box         153.7/41.6         4WD           Crew Cab/Long Box         167.7/55.6         4WD           Regular Cab SWB         137.5/59.8         4WD           Regular Cab LWB         162.0/84.3         4WD	Cab or Equipment         WB/CA (inches)         Drive Axle(s)           Regular Cab/Standard Box         119.0/41.4         4WD           Regular Cab/Long Box         133.0/55.4         4WD           Regular Cab/Long Box         133.7/56.0         4WD           Double Cab/Standard Box         144.2/41.6         4WD           Double Cab/Long Box         158.2/55.6         4WD           Crew Cab/Standard Box         153.7/41.6         4WD           Crew Cab/Long Box         133.7/56.0         4WD           Double Cab/Long Box         158.2/55.6         4WD           Crew Cab/Standard Box         153.7/41.6         4WD           Crew Cab/Long Box         153.7/41.6         4WD           Crew Cab/Long Box         167.7/55.6         4WD           Regular Cab SWB         137.5/59.8         4WD           Regular Cab LWB         162.0/84.3         4WD	Cab or Equipment         WB/CA (inches)         Drive Axle(s)           Regular Cab/Standard Box         119.0/41.4         4WD           Regular Cab/Long Box         133.0/55.4         4WD           Regular Cab/Long Box         133.7/56.0         4WD           Double Cab/Standard Box         144.2/41.6         4WD           Double Cab/Long Box         158.2/55.6         4WD           Crew Cab/Standard Box         153.7/41.6         4WD           Regular Cab/Long Box         133.7/56.0         4WD           Double Cab/Long Box         158.2/55.6         4WD           Crew Cab/Standard Box         153.7/41.6         4WD           Crew Cab/Long Box         167.7/55.6         4WD           Regular Cab SWB         137.5/59.8         4WD           Regular Cab LWB         162.0/84.3         4WD	Cab or Equipment         WB/CA (inches)         Drive Axle(s)           Regular Cab/Standard Box         119.0/41.4         4WD         Image: Cab control of the contr	Cab of Equipment	Cab or Equipment         WB/CA (inches)         Drive Axle(s)         7.5         8         9         10         7           Regular Cab/Standard Box         119.0/41.4         4WD         Image: Average of the content of the c	Cab or Equipment         WB/CA (inches)         Drive Axle(s)         7.5         8         9         10         7         8           Regular Cab/Standard Box         119.0/41.4         4WD         Image: Cab/Standard Box (inches)         133.0/55.4         4WD         Image: Cab/Standard Box (inches)         Image: Cab/Standard Box (inches)	Cab or Equipment         WB/CA (inches)         Drive Axle(s)         7.5         8         9         10         7         8         10           Regular Cab/Standard Box         119.0/41.4         4WD         ■	Cab or Equipment

- 1. Snow Plow Prep Package includes includes power feed for backup and roof emergency light, (KW7) 170-amp alternator, forward lamp wiring harness, (TRW) Provision for cab roof mounted lamp/beacon, (K47) high-capacity air cleaner, (NZZ) underbody shield and Heavy Duty Front Springs. VYU not available with 20" wheels without Z71 suspension.
- 2. Snow Plow Prep Package includes 10-amp power for backup and roof emergency light, high-flow front bumper, forward lamp wiring harness, (TRW) provision for cab roof mounted lamp/beacon, instrument panel jumper wiring harness for electric trailer brake controller, (NZZ) Skid Plate Package and increased front gross axle rating. Requires 4WD models. Includes (KW1) 160-amp alternator with (L96) Vortec 6.0L V8 SFI engine. Includes (K76) dual 125-amp alternators with (LML/LGH) Duramax 6.6L Turbo Diesel V8 engine.
- 3. Snow Plow Prep Package includes 10-amp power for backup and roof emergency light, high-flow front bumper, forward lamp wiring harness, (TRW) provision for cab roof mounted lamp/beacon, instrument panel jumper wiring harness for electric trailer brake controller, (NZZ) Skid Plate Package and increased front gross axle rating. Requires 4WD models. Not available with (CF5) power sunroof or (UG1) Universal Home Remote. Includes (KW1) 160-amp alternator with (L96) Vortec 6.0L V8 SFI engine. Includes (K76) dual 125-amp alternators with (LGH) Duramax 6.6L Turbo Diesel V8 engine.
- 4. When properly equipped; includes weight of vehicle, passengers, cargo and equipment.
- 5. When properly equipped; maximum payload capacity includes weight of driver, passengers, optional equipment and cargo.

#### Snow Plow/Spreader - Special Notes:

- GM recommends that when a snow plow is mounted on a vehicle, only one passenger should accompany the driver. More passengers may result in exceeding Front Gross Axle Weight Ratings
- The loaded vehicle with all passengers, snow plows, spreaders and cargo must have a center of gravity within a specified area
- The use of rear ballast weight may be required to ensure allowable center of gravity
- See Body Builder Manual for details



Compartment storage is the name of the game for Utility Bodies, where primary customers such as tradespeople and government agencies need maximum storage-space versatility. In addition to packing plenty of well-organized storage space, Utility Bodies are also well suited to take on additional duties with cherry-picker buckets, air compressors, cable reels, cranes, digger derricks and rescue equipment.

See Powertrain Combinations chart for applicable engines, transmissions and 2WD/4WD availability.

Model	Cab or Equipment	WB/CA	Drive			Body Le	ngth (fee	t)		Maximum GVWR	Maximum Body and
Modet	Cab or Equipment	(inches)	Axle(s)	6	7	8	9	10	11	(pounds)¹	Payload (pounds) <sup>2</sup>
	Regular Cab	133.7/56.0	2WD							10000	4549
2015 Silverado/Sierra	Regular Cab	133.7/36.0	4WD							9900	3876
2500HD (with ZW9	Double Cab	150 2/55 /	2WD							10000	3802
Pickup Box Delete)		158.2/55.6	4WD							10000	3517
r ickup box betete)	Crew Cab	167.7/55.6	2WD							10000	3583
	Crew Cab	167.7/33.6	4WD							10000	3631
			2WD			_				11100 SRW	4937 SRW
	Regular Cab	133.7/56.0	2446			_				13500 DRW	7656 DRW
	Regular Cab	133.7/30.0	4WD			_				11400 SRW	4915 SRW
			400			_				13400 DRW	7234 DRW
			2WD			_				11200 SRW	4848 SRW
2015 Silverado/Sierra	Double Cab	158.2/55.6	2000			_				13025 DRW	6732 DRW
3500HD (with ZW9	Double Cab	136.2/33.6	4WD							11600 SRW	4872 SRW
Pickup Box Delete)			4446			_				13025 DRW	6452 DRW
			2WD			_				11400 SRW	4642 SRW
	Crew Cab	167.7/55.6	2000			_				13025 DRW	6590 DRW
	Clew Cab	167.7/55.6	4WD							11600 SRW	4603 SRW
			4110			_				13025 DRW	6247 DRW
	Regular Cab SWB	107 5/50 0	2WD							13200	7490
	Regular Cab SVVD	137.5/59.8	4WD							13200	7075
2015 Silverado/Sierra 3500HD Chassis Cab	Regular Cab LWB	1/20/0/2	2WD							13200	7287
	Regular Cab LVVD	162.0/84.3	4WD							13200	6964
	Crow Cah	171 5/50 /	2WD							13200	6783
Crew Cab		171.5/59.4	4WD							13200	6453

<sup>1.</sup> When properly equipped; includes weight of vehicle, passengers, cargo and equipment.

<sup>2.</sup> When properly equipped; maximum payload capacity includes weight of driver, passengers, optional equipment and cargo.



Model	Cab or Equipment	WB/CA	Drive Axle(s)			Body Le	ngth (feet)			Maximum GVWR	Maximum Body and Payload (pounds) <sup>2</sup>
Model	Can of Equipment	(inches)		8	10	12	14	16	18	(pounds) <sup>1</sup>	
Express/Savana		139/80	2WD							12300	7307
3500	Cutaway	159/100	2WD							12300	7310
3300	3300	177/118	2WD							12300	7248
Express/Savana		159/100	2WD							14200	9156 (Gas)
4500		137/100	200				_			14200	8135 (Diesel)
	Cutaway	159/100	2WD							13980 (C8V)	7915 (Diesel)
		177/118	2WD							14200	8868 (Gas)
		1///110	ZVVD							14200	7824 (Diesel)
		177/118	2WD							13980 (C8V)	7794 (Diesel)

<sup>1.</sup> When properly equipped; includes weight of vehicle, passengers, cargo and equipment.

<sup>2.</sup> When properly equipped; maximum payload capacity includes weight of driver, passengers, optional equipment and cargo.



Wrecker duty is one of the toughest jobs a truck can face. Severe frame loads, extended idling and less-than-ideal conditions for vehicle recovery underline the importance of careful vehicle and package selection. Cities, collision shops, cab companies and vehicle transport companies all rely on their GM Sales Consultant to properly specify their GM truck for optimum reliability and long-lasting service.

See Special Equipment Options for factory preparation vital to your application.

See Powertrain Combinations chart for applicable engines and transmissions.

# **Wrecker Towing Capacity Guidelines**

Wrecker towing capacity is affected by:

- Type of lift (single winch, twin-winch/singleboom, single hydraulic extendable boom, underlift extendable boom, or roll-back carrier winch)
- Wrecker wheelbase
- Rear overhang
- Front axle weight

Compute the lift load limit of a specific wrecker by considering the weight remaining at the front axle. It should never be less than half its weight when not towing (or the front axle weight minus 3500 pounds, whichever is less).

This is the MINIMUM required to ensure proper steering.

## Towing & Recovery Vehicle Types:

#### Hydraulic & Mechanical

Wrecker types come in two basic forms:

- 1) Recovery and tow vehicles
- 2) Transporter "roll back" type units

They have vastly different chassis component requirements and operational environments.

## **Wrecker Capacities**

- Can be stated in a number of ways:
- Lifting and towing capacity
- Boom rating
- Drum rating
- Working line limits
- Chassis GAWR limits
- Particular wrecker body design will have a "Basic Wrecker Rating" capacity stated in tons

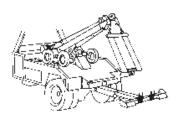
#### Wrecker Bodies

- Different configurations of booms, masts, cables and capacities can be mounted on a single wrecker body
- Bodies can be custom-made to accommodate:
  - 1) Non-standard wheelbase lengths
  - 2) Vertical exhaust systems and any other equipment located behind the cab
- Wrecker bodies are also made to fit the standard CA dimensions
- Wrecker bodies have wheel well openings that may require accommodation
- Bodies require careful attention to CA and axle width for compatibility
- Careful attention must be paid to any equipment mounted behind the cab



#### Single Winch (Boom)

- Has a vertical mast located behind the cab
- A single boom extends out at an angle from the base of the mast to a point past the end of the body
- Cable is routed from the winch and service line drum, up to the mast and the end of the boom
- General service units have both recovery and towing capability
- This is the least complicated and least expensive unit
- Can also be found with underlift pickup units

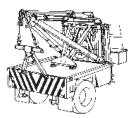


#### Single Hydraulic Extendable Boom

- Uses a combination of a mast and single extendable boom
- Twin cables and drums are added for recovery versatility
- Ability of this unit to reach out over quard rails and other obstacles is important
- Boom is extended, lowered and raised by hydraulic power
- Capacity of the boom will vary with the length of the boom's extension and structural strength
- Combines hydraulic boom lift power with cable lift capability
- Requires higher hydraulic operating capabilities to run the boom extension and boom lift, and run cable drum winch
- Can also be outfitted with powered underlifts to permit towing

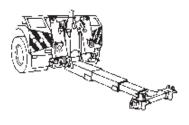
## Twin Winch (Single Boom)

- Mast is similar to the single boom
- Has two cables and two service line drums
- Cables can be split for side pulling and uprighting overturned vehicles with two attachment points
- Cables joined provide increased lifting capability
- Twin winch is more expensive than the single winch
- Added versatility of the twin winch design enables the wrecker to perform more difficult and varied recoveries



#### Underlift

- Can either lift under its own power or rely on the main boom to lift the underlift and the vehicle
- Structure is mounted behind the wrecker body and extends out
- Units that employ the boom for lifting force receive added towing capacity
- Underlift extends out to facilitate towing of vehicles with large front overhangs



# Boom

Model	Cab or Equipment	WB/CA (inches)	Drive Axle(s)	GVWR (pounds)¹	Maximum Body and Payload (pounds) <sup>2</sup>
2015 Silverado/Sierra	Regular Cab SWB	137.5/59.8	2WD	13200	7490
3500HD Chassis Cab	Regular Cab LWB	162.0/84.3	2WD	13200	7287

<sup>1.</sup> When properly equipped; includes weight of vehicle, passengers, cargo and equipment.

<sup>2.</sup> When properly equipped; maximum payload capacity includes weight of driver, passengers, optional equipment and cargo.







When lives are on the line, a robust equipment combination is key. GM provides YF2 Ambulance Packages for van vehicle lines: Express/Savana 3500 Cargo Van; and Express/Savana 3500 and 4500 Cutaway.

Contents of the Ambulance Package varies with the model.

See Powertrain Combinations chart for applicable engines and transmissions.

Model	Cab and Equipment	WB/CA	Drive Axle(s)/Rear	Во	ody Ler	ngth (f	eet)	Engine	Front GAWR (pounds)¹	Maximum GVWR	Maximum Body and Payload
Mouet	Cab and Equipment	(inches)	Wheels	8	10	12	14		(pourius)	(pounds)¹	(pounds) <sup>2</sup>
Express/Savana 3500	Cargo Van – LWB	155/NA	2WD/SRW					L96	4300	9600	3940
(available with YF2	155/NA	2WD/SRW					LGH	4600	9900	3470	
Ambulance Package)  Cutaway	139/80	2WD/DRW					L96	4300	12300	7307	
	Outaway	139/80	2WD/DRW					LGH	4600	12300	6620
		159/100	2WD/DRW					L96	4300	12300	7310
		159/100	2WD/DRW					LGH	4600	12300	6714
Express/Savana 4500		159/100	2WD/DRW					L96	4600	14200	9156
(available with YF2	Cutaway	159/100	2WD/DRW					LGH	4600	14200	8135
Ambulance Package)											

<sup>1.</sup> When properly equipped; includes weight of vehicle, passengers, cargo and equipment.

<sup>2.</sup> When properly equipped; maximum payload capacity includes weight of driver, passengers, optional equipment and cargo.



Vehicles shown have been altered or upfitted with equipment supplied by independent suppliers. See the Owner Manual for information on alterations and warranties.

GM provides the Motorhome Express 3500 and 4500 Chassis to support RV applications. This provides RV manufacturers the newest and most capable platforms with equipment that customers want on their RVs, including the Chrome Appearance Package, Convenience Package and options including navigation radios.

The Express RV Cutaway Chassis, with a choice of wheelbases and GVWRs, can be upfit with RV bodies from a variety of manufacturers.

See the Powertrain Combinations chart for applicable engines and transmissions.

Model	Cab or Equipment	WB/CA			Body	Length	(feet)		Engine	Maximum GVWR	Max. Body and	
Mouet	Cab of Equipment	(inches)		8	10	12	14	16	Eligille	(pounds) <sup>1</sup>	Payload (pounds) <sup>2</sup>	
	RV Cutaway	139/80	2WD/SRW						L96	9900	5332	
		139/80	2WD/SRW						LGH	9900	4557	
		139/80	2WD/DRW						L96	10100	5551	
Express 3500 (available with YF1 RV Package)		139/80	2WD/DRW						LGH	10100	4829	
		139/80	2WD/DRW						L96	12300	7307	
		139/80	2WD/DRW						LGH	12300	6620	
		159/100	2WD/DRW						L96	12300	7310	
		159/100	2WD/DRW						LGH	12300	6714	
		177/118	2WD/DRW						L96	12300	7248	
		177/118	2WD/DRW						LGH	12300	6507	
Express 4500		159/100	2WD/DRW						L96	14200	9156	
(available with YF1 RV Package)	RV Cutaway	159/100	2WD/DRW				•		LGH	14200	8135	
11 1 IV 1 dekage)												

- 1. When properly equipped; includes weight of vehicle, passengers, cargo and equipment.
- 2. When properly equipped; maximum payload capacity includes weight of driver, passengers, optional equipment and cargo.







Vehicles shown have been altered or upfitted with equipment supplied by independent suppliers. See the Owner Manual for information on alterations and warranties.

GM provides the Commercial Cutaway Express/Savana 3500 and 4500 Chassis to support school bus applications. This provides school bus manufacturers the newest and most capable platforms.

The Express/Savana Cutaway Chassis, with a choice of wheelbases and GVWRs, can be upfit with school bus bodies from a variety of manufacturers.

Dedicated LPG fuel systems are available on the 4500 Cutaway.

See the Powertrain Combinations chart for applicable engines and transmissions.

Model	Cab or Equipment	WB/CA	Drive Axle(s)/	E	Body Le	ngth (fe	et)	Engine	Maximum GVWR	Max. Body and
Model	Can of Equipment	(inches)	Rear Wheels	8	10	12	14	Eligille	(pounds) <sup>1</sup>	Payload (pounds) <sup>2</sup>
		139/80	2WD/SRW					L20	9900	5381
		139/80	2WD/SRW					L96	9900	5332
		139/80	2WD/SRW					LGH	9900	4557
Express/Savana 3500 (available with B3D School Bus Package)		139/80	2WD/DRW					L96	10100	5551
	Commercial Cutaway	139/80	2WD/DRW					LGH	10100	4829
	Commercial Culaway	139/80	2WD/DRW					L96	10050	5100
		139/80	2WD/DRW					LGH	10050	4327
		139/80	2WD/DRW					L96	12300	7307
		139/80	2WD/DRW					LGH	12300	6620
		159/100	2WD/DRW					L96	12300	7310
		159/100	2WD/DRW					LGH	12300	6714
Express/Savana 4500		159/100	2WD/DRW					L96	14200	9156
(available with B3D	Commercial Cutaway	159/100	2WD/DRW					LGH	14200	8135
School Bus Package		159/100	2WD/DRW					LC8 (3-tank)	14200	8756

- 1. When properly equipped; includes weight of vehicle, passengers, cargo and equipment.
- 2. When properly equipped; maximum payload capacity includes weight of driver, passengers, optional equipment and cargo.

# SHUTTLE APPLICATION



GM provides the Commercial Cutaway Express/Savana 3500 and 4500 Chassis to support shuttle applications. This provides shuttle bus manufacturers the newest and most capable platforms.

The Express/Savana Cutaway Chassis, with a choice of wheelbases and GVWRs, can be upfit with shuttle bodies from a variety of manufacturers for greater seating capacity than standard passenger vans.

Dedicated LPG fuel systems are available on the 4500 Cutaway.

See the Powertrain Combinations chart for applicable engines and transmissions.

Model	Cab or Equipment	WB/CA	Drive Axle(s)/	Body Length (feet)				Engine	Maximum GVWR	Max. Body and
Model	(Inches) Rear wheels 8		8	10	12	14	Engine	(pounds) <sup>1</sup>	Payload (pounds) <sup>2</sup>	
		139/80	2WD/SRW					L96	9900	5332
		139/80	2WD/SRW					LGH	9900	4557
		139/80	2WD/DRW					L96	10050	5100
Express/Savana		139/80	2WD/DRW					LGH	10050	4327
3500 (available with	Commercial Cutaway	139/80	2WD/DRW					L96	12300	7307
ANC Shuttle Bus		139/80	2WD/DRW					LGH	12300	6620
Package)		159/100	2WD/DRW					L96	10050	5096
		159/100	2WD/DRW					LGH	10050	4347
		159/100	2WD/DRW					L96	12300	7310
		159/100	2WD/DRW					LGH	12300	6714
Express/Savana		159/100	2WD/DRW					L96	14200	9156
4500 (available with ANC Shuttle Bus Package)		159/100	2WD/DRW					LGH	14200	8135
	Commercial Cutaway	159/100	2WD/DRW					LC8 (3-tank)	14200	8756
		159/100	2WD/DRW					LC8 (4-tank)	14200	8535

<sup>1.</sup> When properly equipped; includes weight of vehicle, passengers, cargo and equipment.

<sup>2.</sup> When properly equipped; maximum payload capacity includes weight of driver, passengers, optional equipment and cargo.

#### Online Order Guide Trailering Specs

Consult the following chart to determine the suitability of a specific model for your towing needs. Hitch types must conform to the tongue weight and Gross Trailer Weight of your towing application. For full safety information, consult the Chevrolet or GMC Trailering Guide. Comprehensive trailering specifications by model are listed online at <a href="mailto:gmfleet.com">gmfleet.com</a>. To access the specs, select the "TOOLS" menu and click on "PRE-ORDER" and then "Online Order Guide" submenu item. Select a model year and choose "Cars/Light Trucks" from the menu. Once inside the Online Order Guide, select a model and click on the "Trailering Specs" menu item for that model.

Note: Maximum trailer ratings are calculated assuming a properly equipped base vehicle, plus driver. See the Chevrolet or GMC Trailering Guide for details.

# Trailering Classifications

Classification	Typical Examples	Weight Range	Typical Hitch Type	Typical Hitch (Tongue) Weight
Light-Duty (I)	Folding camping trailer, snowmobiles and Jet Ski trailers	Up to 2000 pound gross weight (trailer and cargo combined)	Weight-carrying hitch	10%–15% of gross trailer weight (200-pound maximum)
Medium-Duty (II)	Single-axle trailers up to 18 feet long, open utility trailers and small speedboats	2001–3500 pound gross trailer weight	Weight-carrying hitch	10%–15% of gross trailer weight (350-pound maximum)
Heavy-Duty (III)	Dual- or single-axle trailers, larger boats and enclosed utility trailers	3501–5000 pound gross trailer weight	Weight-carrying hitch or weight-distributing hitch	10%–15% of gross trailer weight (600-pound maximum)
Extra Heavy-Duty (IV)	Two-horse, travel and fifthwheel recreational trailers	5001–10,000 pound gross trailer weight	Weight-distributing hitch or fifth-wheel hitch	10%–15% of gross trailer weight (1200-pound maximum)
Maximum Heavy-Duty (V)	Largest horse, travel and fifth-wheel recreational or commercial trailers	10,001 pound and above gross trailer weight	Weight-distributing hitch or fifth-wheel hitch	10%–15% of gross 15%–25% of trailer weight gross trailer (1500-pound maximum for weight-distributing hitch) for fifth-wheel or gooseneck hitch)

# Selecting the Right Hitch

Choosing the right hitch and making the proper electrical connections affects how your vehicle handles, corners and brakes, and allows you to alert other drivers of your intentions. Before selecting a hitch or

trailering package, you should be familiar with the weight ratings specific to your vehicle.

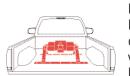


The Weight-Carrying (Deadweight) Hitch consists of a hitch ball mounted to a step bumper or draw bar. It is the most common type of hitch used for trailering light and medium loads. Hitch balls are available in a range of sizes. Class I hitches use a 1%-inch hitch ball, available as an accessory from GMSPO. Class II trailers use a deadweight hitch and a 2-inch hitch ball. Class III hitches may be weight-carrying or weightdistributing, depending on application. Make sure that the hitch ball diameter matches the trailer coupler. Also check that the ball meets or exceeds the gross trailer weight requirements.





The Weight-Distributing Hitch is most often used for heavier trailering. This hitch type more evenly distributes the trailer load by using adjustable spring bars that pull upward on the hitch, to shift some of the hitch weight forward onto the tow vehicle's front axle and rearward to the trailer's axles. Its effects are to improve steering sensitivity and feel, and to reduce trailer sway.





Fifth-Wheel and Gooseneck Hitches are specifically designed for heavy trailering with full-size pickup trucks like the Silverado and Sierra. These hitches are located in the bed of the truck and position the trailer's kingpin weight over or slightly in front of the truck's rear axle. Fifthwheel and gooseneck hitches are most frequently used with travel trailers, horse trailers and other large trailers.

The Wiring Harness allows you to connect the electrical components of your trailer, such as signal and brake lights, to the trailering vehicle. Silverado and Sierra feature a 7-pin wiring harness to streamline hookup of trailer lighting and brakes and a bussed electrical center makes it easier to connect an electrical trailer brake controller.

Trailer Brakes are required above 2000-pound trailer weight on Silverado and Sierra. The most common trailer braking systems are surge brakes (found primarily on boat trailers) and electric brakes (often used on travel trailers, horse trailers and car haulers). Surge brakes are a self-contained hydraulic brake system on the trailer, activated during deceleration and while the trailer coupler pushes on the hitch ball.

An electric trailer brake system uses a brake control unit mounted inside the trailering vehicle; it operates by sensing the vehicle brakes and then applying the trailer brakes.

Optional **Trailering Packages** are available for a wide variety of models, and many include a trailer hitch platform.

# **Trailering Terms**

Gross Axle Weight Rating (GAWR) is the weight in pounds each axle is capable of supporting. The load on each axle must not exceed its GAWR. The GAWR for each vehicle is displayed on the driver's door or door-lock pillar label.

Gross Combination Weight Rating (GCWR) is the maximum possible weight (in pounds) of the vehicle and trailer combination, including the weight of the driver, passengers, fuel, optional equipment and gear in the vehicle and trailer.

Gross Trailer Weight (GTW) is the weight of a loaded trailer.

Gross Vehicle Weight Rating (GVWR) is the maximum number of pounds a tow vehicle may weigh. Everything that contributes to the weight of the tow vehicle is calculated in this rating, including the weight of the vehicle, driver and all passengers, fuel, payload, trailer tongue weight, hitch weight and all optional equipment. The GVWR is displayed on the driver's door or door-lock pillar label of your vehicle.

Maximum Trailer Rating is determined by subtracting vehicle weight from the GCWR. At the maximum trailer rating for a properly equipped vehicle, you should be able to accelerate and merge with traffic, climb typical interstate grades at highway speeds, have control on varying road surfaces and stop adequately within a reasonable distance.

**Tongue (or Hitch) Weight** is the total number of pounds of trailer weight pressing down on the trailer hitch. Keep in mind that the way a trailer is loaded affects the overall tongue weight and will also affect the handling of the tow vehicle when trailering.

#### 2014 Silverado/Sierra 1500

#### Available Models, offering optional Snow Plow Prep Package

- 4WD Regular Cab Standard Box (CK15703/TK15703)
- 4WD Regular Cab Long Box (CK15903/TK15903)

	,	3 1
LV3		Ecotec3 4.3L V6 DI, Active Fuel Management™, E85 FlexFuel²
		285 horsepower, 305 lbft. torque
L83		Ecotec3 5.3L V8 DI, Active Fuel Management™, E85 FlexFuel²
		355 horsepower, 383 lbft. torque

			Transmission	Ax	xle		GVV	WR¹ (pound	s)
	Model	Engine	6-Speed Automatic HD (MYC)	3.08 (GU4)	3.42 (GU6)	6700 (C3J)	6800 (C5U)	6900 (C5H)	7000 (C5W)
	CK15*03/ TK15*03	4.3L V6 (LV3)	S	-	S	S Std. Box	_	S Long Box	_
	CK15*03/ TK15*03	5.3L V8 (L83)	S	S	А	_	S Std. Box	_	S Long Box

S = Standard Equipment

<sup>1.</sup> When properly equipped; includes weight of vehicle, passengers, cargo and equipment.

S = Standard Equipment A = Available -- = Not Available

<sup>1.</sup> When properly equipped; includes weight of vehicle, passengers, cargo and equipment.

<sup>2.</sup> E85 is 85% ethanol, 15% gasoline. Visit <a href="http://www.gmfleet.com/alternative-fuels/alt-fuels.jsp">http://www.gmfleet.com/alternative-fuels/alt-fuels.jsp</a> to see where there is an E85 station near you.

#### 2015 Silverado/Sierra 2500HD

#### Available Models, with Pickup Box Delete (ZW9)

- 2WD Regular Cab (CC25903/TC25903)
- 2WD Double Cab (CC25953/TC25953)
- 2WD Crew Cab (CC25943/TC25943)
- 4WD Regular Cab (CK25903/TK25903)
- 4WD Double Cab (CK25953/TK25953)
- 4WD Crew Cab (CK25943/TK25943)

#### Engines with Pickup Box Delete

1 96	Vortec 6.0L V8 SFI
L70	322 horsepower, 380 lbft. torque
I MI	Duramax 6.6L Turbo Diesel V8; B20 Diesel compatible
	397 horsepower, 765 lbft. torque

#### Available Models, offering optional Snow Plow Prep Package (VYU)

- 4WD Regular Cab Long Box (CK25903/TK25903)
- 4WD Double Cab Standard Box (CK25753/TK25753)
- 4WD Double Cab Long Box (CK25953/TK25953)
- 4WD Crew Cab Standard Box (CK25743/TK25743)
- 4WD Crew Cab Long Box (CK25943/TK25943)

#### Engines offering optional Snow Plow Prep Package

	Vortec 6.0L V8 SFI, E85 FlexFuel <sup>1</sup>
L96	360 horsepower, 380 lbft. torque (Fleetside)
	322 horsepower, 380 lbft. torque (pickup box delete)
	Vortec 6.0L V8; Operates on CNG and Gasoline (Fleetside)
LC8	360 horsepower, 380 lbft. torque on gasoline
	301 horsepower, 333 lbft. torque on CNG
LML	Duramax 6.6L Turbo Diesel V8; B20 Diesel compatible
LIVIL	397 horsepower, 765 lbft. torque

- S = Standard Equipment
- A = Available
- = Not Available
- 1. E85 is 85% ethanol, 15% gasoline. Visit gm.com/biofuels to see where there is an E85 station near you.
- 2. Standard on C25903.
- 3. Standard on C25753, C25953, K25743 and K25943.
- 4. Standard on K25943.
- 5. Standard on C25903 with (UB7) Higher Payload Performance Package.
- 6. Standard on C25903 and K25903.
- 7. Standard on C25753, C25953, C25743, C25943, K25753, K25753, K25953, K25743 and K25943.

		Transn	Axl	es	GVWR <sup>7</sup> (pounds)				
Model	Engine	6-Speed Automatic HD (MYD)	Allison 1000 6-Speed Automatic (MW7)	3.73 (GT4)	4.10 (GT5)	9300 (G4A)	9500 (GEH)	9900 (C4M)	10000 (C7A)
CC25**3/	6.0L V8 (L96)	S	-	S	А	S <sup>2</sup>	S <sup>3</sup>	A <sup>4</sup>	$A^5$
TC25**3 CK25**3/ TK25**3	6.0L V8 (LC8)	S	_	S	А	-	S	-	_
11120	6.6L V8 (LML)	-	S	S	-	-	-	S <sup>6</sup>	S <sup>7</sup>

# 2015 Silverado/Sierra 3500HD

#### Available Models, with Pickup Box Delete

- 2WD Regular Cab Long Box with Single Rear Wheel only (CC35903/TC35903)
- 2WD Double Cab Long Box with Single or Dual Rear Wheel (CC35953/TC35953)
- 2WD Crew Cab Long Box with Single or Dual Rear Wheel (CC35943/TC35943)
- 4WD Regular Cab Long Box with Single or Dual Rear Wheel (CK35903/TK35903)
- 4WD Double Cab Long Box with Single or Dual Rear Wheel (CK35953/TK35953)
- 4WD Crew Cab Long Box with Single or Dual Rear Wheel (CK35943/TK35943)

#### **Engines with Pickup Box Delete**

5	the state of the s
	Vortec 6.0L V8 SFI
1 96	322 horsepower, 380 lbft. torque
L/0	Duramax 6.6L Turbo Diesel V8; B20 Diesel compatible
LMI	397 horsepower, 765 lbft. torque

#### Available Models, with Snow Plow Prep Package (VYU)

- 4WD Regular Cab Long Box (CK35903/TK35903)
- 4WD Double Cab Long Box (CK35953/TK35953)
- 4WD Crew Cab Standard Box (CK35743/TK35743)
- 4WD Crew Cab Long Box (CK35943/TK35943)

#### Engines with Snow Plow Prep Package

1.07	Vortec 6.0L V8 SFI, E85 FlexFuel <sup>1</sup>
L96	322 horsepower, 380 lbft. torque
LMI	Duramax 6.6L Turbo Diesel V8; B20 Diesel compatible
LML	397 horsepower, 765 lbft. torque

<sup>1.</sup> E85 is 85% ethanol, 15% gasoline. Visit gm.com/biofuels to see where there is an E85 station near you.



# 2015 Silverado/Sierra 3500HD (continued)

Regular (	Cab	Transm	ission	Ax	les		GVWR <sup>3</sup> (pounds)							
Model	Engine	6-Speed Automatic HD (MYD)	Allison 6-Speed Automatic (MW7)	3.73 (GT4)	4.10 (GT5)	10000 (C7A)	10400 (JFI)	10700 (JFK)	11100 (JFN)	11400 (C7W)	12800 (9F6)	13025 (CHX)	13400 (9G4)	13500 (9GH)
CC35903/	6.0L V8 (L96)	S	_	S	А	_	S	_	_	_	_	_	_	A¹
TC35903	6.6 V8 (LML)	_	А	S	_	-	_	_	А	_	_	A¹	-	-
CK35903/	6.0L V8 (L96)	S	-	S	А	А	_	А	_	-	-	-	-	A <sup>1</sup>
TK35903	6.6 V8 (LML)	_	А	S	_	-	-	-	_	А	_	A¹	_	_

Double C	ab	Transm	Transmission Axles GVWR³ (pounds)								
Model	Engine	6-Speed Automatic HD (MYD)	Allison 6-Speed Automatic (MW7)	3.73 (GT4)	4.10 (GT5)	10000 (C7A)	10700 (JFK)	11000 (C7E)	11200 (JF0)	11600 (C7V)	13025 (CHX)
CC35953/	6.0L V8 (L96)	S	_	S	А	А	$A^2$	_	_	_	A¹
TC35953	6.6 V8 (LML)	_	А	S	_	_	_	_	$A^2$	-	A <sup>1</sup>
CK35953/	6.0L V8 (L96)	S	-	S	А	А	-	S <sup>2</sup>	_	-	A <sup>1</sup>
TK35953	6.6 V8 (LML)	_	А	S	-	-	_	_	_	$A^2$	A¹

S = Standard Equipment

A = Available

— = Not Available

- 1. Requires dual rear wheels.
- 2. Requires single rear wheels.
- When properly equipped; includes weight of vehicle, passengers, cargo and equipment.

# 2015 Silverado/Sierra 3500HD (continued)

Crew Cab Standard Box		Transmission		Axles		GVWR³ (pounds)					
Model	Engine	6-Speed Automatic HD (MYD)	Allison 6-Speed Automatic (MW7)	3.73 (GT4)	4.10 (GT5)	10000 (C7A)	10500 (C7G)	10800 (JFL)	11100 (JFN)	11500 (G1Y)	
CC35743/	6.0L V8 (L96)	S	_	S	А	А	$S^2$	-	_	_	
TC35743	6.6L V8 (LML)	_	А	S	-	_	-	_	$A^2$	_	
CK35743/	6.0L V8 (L96)	S	-	S	А	А	-	S <sup>2</sup>	-	_	
TK35743	6.6L V8 (LML)	-	А	S	-	-	-	-	_	$A^2$	

Crew Ca Long Box	_	Transmission		Axles		GWWR <sup>3</sup> (pounds)						
Model	Engine	6-Speed Automatic HD (MYD)	Allison 6-Speed Automatic (MW7)	3.73 (GT4)	4.10 (GT5)	10000 (C7A)	10700 (JFK)	11000 (C7E)	11400 (C7W)	11600 (C7V)	13025 (CHX)	
CC35943/	6.0L V8 (L96)	S	_	S	А	А	$A^2$	-	_	-	S	
TC35943	6.6 V8 (LML)	_	А	S	-	_	-	-	$A^2$	_	$A^1$	
CK35943/	6.0L V8 (L96)	S	_	S	А	А	-	S <sup>2</sup>	-	_	S	
TK35943	6.6 V8 (LML)	_	А	S	_	_	_	-	_	A¹	A¹	

S = Standard Equipment

A = Available

— = Not Available

- 1. Requires dual rear wheels.
- 2. Requires single rear wheels.
- When properly equipped; includes weight of vehicle, passengers, cargo and equipment.

#### 2015 Silverado/Sierra 3500HD Chassis Cab

#### Available Models

- 2WD Regular Cab SWB (CC36003/TC36003)
- 2WD Regular Cab LWB (CC36403/TC36403)
- 2WD Crew Cab (CC36043/TC36043)
- 4WD Regular Cab SWB (CK36003/TK36003)
- 4WD Regular Cab LWB (CK36403/TK36403)
- 4WD Crew Cab (CK36043/TK36043)

#### **Engines**

5	
L96	Vortec 6.0L V8 SFI
L70	322 horsepower, 380 lbft. torque
I MI	Duramax 6.6L Turbo Diesel V8; B20 Diesel compatible
LIVIL	397 horsepower, 765 lbft. torque

		Trans	smissions	Axl	es	GVWR¹ (pounds)	
Model	Engine	6-Speed Automatic HD (MYD)	Allison 1000 6-Speed Automatic with OD (MW7)	3.73 (GT4)	4.10 (GT5)	13200 (9E5)	
CC36**3/	6.0L V8 (L96)	S	_	S	А	S	
TC36**3	6.6L V8 (LML	_	А	S	-	S	
CK36*03/	6.0 L V8 (L96)	S	_	S	А	S	
TK36*03	6.6L V8 (LML)	_	А	S	-	S	

S = Standard Equipment A = Available - = Not Available

<sup>1.</sup> When properly equipped; includes weight of vehicle, passengers, cargo and equipment.

# Express/Savana Cargo Vans

#### Available Models

- 135-inch wheelbase G1500 Cargo Van (CG13405/TG13405)
- 135-inch wheelbase G1500 AWD Cargo Van (CH13405/TH13405)
- 135-inch wheelbase G2500 Cargo Van (CG23405/TG23405)
- 155-inch wheelbase G2500 Cargo Van (CG23705/TG23705)
- 135-inch wheelbase G3500 Cargo Van (CG33405/TG33405)
- 155-inch wheelbase G3500 Cargo Van (CG33705/TG33705)

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Ε	n	a	ı	n	ρ	ς

Liigiiies	
LU3	Vortec 4.3L V6 MFI 195 horsepower, 260 lbft. torque
L20	Vortec 4.8L V8 SFI 285 horsepower, 295 lbft. torque
LMF	Vortec 5.3L V8 SFI; FlexFuel <sup>3</sup> 310 horsepower, 334 lbft. torque
L96	Vortec 6.0L V8 SFI; FlexFuel <sup>3</sup> 342 horsepower, 373 lbft. torque
LC8	6.0L V8 SFI Gaseous 279 horsepower, 320 lbft. torque on CNG
LGH	Duramax 6.6L Turbo Diesel V8; B20 Diesel compatible 260 horsepower, 525 lbft. torque

	Transmissions				Axles	GVWR <sup>4</sup> (pounds)				
Model	Engine	4-Speed Automatic (M30)	6-Speed Automatic HD (MYD)	3.42 (GU6)	3.54 (GHO)	3.73 (GT4)	7300 (C6A)	8600 (C6P)	9600 (C6Y)	9900 (C4M)
1500										
CG13405/ TG13405/	4.3L V6 (LU3) <sup>1</sup>	S	_	S	-	-	S	-	-	-
CH13405/ TH13405	5.3L V8 (LMF)	S	_	S	_	A <sup>1</sup>	S	_	-	-
2500										
CG23405/ TG23405/	4.8L V8 (L20)	_	S	S	_	_	_	S	_	_
	6.0L V8 (L96)	_	S	S	_	_	_	S	_	_
CG23705/ TG23705	6.0L V8 <sup>1</sup> (LC8)	_	S	S	-	-	_	S	-	_
	6.6L V8 (LGH)	-	S	_	S	-	_	S	-	-
3500										
	4.8L V8 (L20)	_	S	S	-	-	_	_	S	_
CG33405/ TG33405/	6.0L V8 (L96)	-	S	S	_	_	_	_	S	_
CG33705/ TG33705	6.0L V8 <sup>1</sup> (LC8)	_	S	S	-	-	-	S	-	-
	6.6L V8 (LGH)	-	S	-	S	_	-	_	S	S <sup>2</sup>

- S = Standard Equipment A = Available = Not Available
- 1. Not available on T/CG23705 or T/CG33705.
- 2. Standard on G33705.
- 3. E85 is 85% ethanol, 15% gasoline. Visit <a href="http://www.gmfleet.com/alternative-fuels/alt-fuels.jsp">http://www.gmfleet.com/alternative-fuels/alt-fuels.jsp</a> to see where there is an E85 station near you.
- 4. When properly equipped; includes weight of vehicle, passengers, cargo and equipment.

# Express/Savana Passenger Vans

#### Available Models

- 135-inch wheelbase 1500 Passenger Van (CG13406/TG13406)
- 135-inch wheelbase 1500 AWD Passenger Van (CH13406/TH13406)
- 135-inch wheelbase 2500 Passenger Van (CG23406/TG23406)
- 135-inch wheelbase 3500 Passenger Van (CG33406/TG33406)
- 155-inch wheelbase 3500 Passenger Van (CG33706/TG33706)

Engines	
L20	Vortec 4.8L V8 SFI 285 horsepower, 295 lbft. torque
LMF	Vortec 5.3L V8 SFI; E85 FlexFuel <sup>1</sup> 310 horsepower, 334 lbft. torque
L96	Vortec 6.0L V8 SFI; E85 FlexFuel <sup>1</sup> 342 horsepower, 373 lbft. torque
LGH	Duramax 6.6L Turbo Diesel V8; B20 Diesel compatible 260 horsepower, 525 lbft. torque

		Transm		Axles		GVWR² (pounds)				
Model	Engine	4-Speed Automatic (M30)	6-Speed Auto. HD (MYD)	3.42 (GU6)	3.54 (GH0)	3.73 (GT4)	7300 (C6A)	8600 (C6P)	9600 (C6Y)	9900 (C4M)
1500										
G/H13406	5.3L V8 (LMF)	S	_	S	-	А	S	_	_	_
2500										
CG23406/	4.8L V8 (L20)	_	S	S	_	_	_	S	_	_
TH23406	6.0L V8 (L96)	_	S	S	_	_	_	S	_	_
3500										
CG33406/	4.8L V8 (L20)	-	S	S	-	-	-	-	S	-
TH33406/ CG33706/	6.0L V8 (L96)	_	S	S	-	-	-	-	S	-
G33706	6.6L V8 (LGH)	-	S	-	S	-	-	_	-	S

<sup>1.</sup> E85 is 85% ethanol, 15% gasoline. Visit gm.com/biofuels to see where there is an E85 station near you.

<sup>2.</sup> When properly equipped; includes weight of vehicle, passengers, cargo and equipment.

# Express/Savana Cutaway

#### Available Models

- 139-inch wheelbase Cutaway Van (CG33503/TG33503)
- 159-inch wheelbase Cutaway Van (CG33803/TG33803)
- 4500 Series; 159-inch wheelbase Cutaway Van (CG33803/TG33803)
- 177-inch wheelbase Cutaway Van (CG33903/TG33903)

Engine RP0s	
L20	Vortec 4.8L V8 SFI 285 horsepower, 295 lbft. torque
LC8	6.0L V8 SFI Gaseous LPG 332 horsepower, 370 lbft. torque
L96	Vortec 6.0L V8 SFI 342 horsepower, 373 lbft. torque
LGH	Duramax 6.6L Turbo Diesel V8; B20 Diesel compatible 260 horsepower, 525 lbft. torque

		Transmission		Axl	es				GVWR² (	pounds)		
Model	Engine	6-Speed Automatic HD (MYD)	3.42 (GU6)	3.54 (GHO)	3.73 (GT4)	4.10 (GT5)	9900 (C4M)	10050 (9N2)	10100 (JFF)	12300 (C7N)	13980 (C8V)	14200 (C71)
	4.8L V8 (L20)	S	S	-	А	_	S <sup>1</sup>	$A^2$	$A^2$	_	_	-
CG33503/ TG33503	6.0L V8 (L96)	S	А	-	А	_	А	$A^2$	$A^2$	$A^2$	_	_
	6.6L V8 (LGH)	S	_	А	А	_	S <sup>1</sup>	A <sup>2</sup>	$A^2$	A <sup>2</sup>	_	_
	4.8L V8 (L20)	S	-	_	S	-	-	S <sup>2</sup>	S <sup>2</sup>	-	-	-
CG33803/	6.0L V8 (L96)	S	-	_	_	S³	-	S <sup>2</sup>	S <sup>2</sup>	$A^2$	_	$A^3$
TG33803	6.0L V8 (LC8)	S	_	-	_	S	_	_	-	-	-	$A^3$
	6.6L V8 (LGH)	S	-	_	S	_	-	S <sup>2</sup>	S <sup>2</sup>	A <sup>2</sup>	A <sup>3</sup>	A <sup>3</sup>
CG33903/ TG33903	6.0L V8 (L96)	S	-	-	S	_	-	-	-	S <sup>2</sup>	-	$A^3$
	6.6L V8 (LGH)	S	_	_	S	_	_	_	_	S <sup>2</sup>	$A^3$	$A^3$

<sup>1.</sup> Requires (R04) Single Rear Wheels. 2. Requires (R05) Dual Rear Wheels. 3. Requires 4500 Vans.

S = Standard Equipment A = Available

<sup>- =</sup> Not Available

Use the following approximate weights of materials to estimate payloads. Subtract 150 pounds per person from the payload and remember to reduce payload calculation by the weight of such add-ons as a snow plow, rear tailgate lift, and any tools or items carried in the cab.

#### Approximate Weights of Materials

Most materials and commodities vary in weight, and containers vary in shape and size. Therefore, it is impossible to list anything but average weights per cubic foot or per unit of measurement, and the following weights should be used only for approximation purposes. When it is necessary to figure weights accurately for recommendation of truck or tractor-trailer equipment, exact weights and dimensions should be obtained from local sources. This is particularly true of fruits and vegetables, containers for which vary widely in type, size and shape.

#### A. BUILDING SUPPLIES

(other than lumber and stone)

#### Pounds per Cubic Foot/Cubic Yard **Asbestos** 153/4130 125/3375 Asphalt brick lumps 85/2300 100/2700 paving Cinders 50/1350 85/2300 Clay dry lumps 110/2970 wet lumps wet packed 135/3650 fire 125/3375 Concrete cinder or slag 120/3250 gravel or stone 150/4050 138/3730 average wet mix 100/2700 Crushed stone, average 76/2050 Earth (loam) loose shaken 87/2350 95/2565 packed 100/2700 moist 125/3375 wet

Gravel dry	95/2565
wet	125/3375
Mortar lime	110/2970
rubble-dry	138/3730
rubble-wet	154/4160
Mulch 19-30	0/500-800
Pitch	70/1900
Plaster of Paris (gypsum)	150/4050
Quicklime solid	95/2550
ground-loose	55/1485
shaken	75/2030
Rock crushed, average	100/2700
Sand fine-dry	110/2970
fine-wet	125/3375
coarse-dry	95/2565
coarse-wet	120/3240
Tar	65/1755
Terra Cotta	110/2970
Tile solid	115/3100
construction	40/1080

Pounds per Thousar	nd	
Brick		
Soft, $2^{1}/4 \times 4 \times 8^{1}/4$		4320
Common, 2 <sup>1</sup> / <sub>4</sub> x 4 x	81/4	5400
Hard, $2^{1}/4 \times 4^{1}/4 \times 8^{1}/4$	2	6480
Pressed, 2 <sup>3</sup> / <sub>8</sub> x 4 x 8	3%	7500
Paving, 2½ x 4 x 8½	/2	6750
Paving block, 3½ x	4 x 8 <sup>1</sup> / <sub>2</sub>	8750
Fire, 2½ x 4½ x 9		7000
Pounds per		
Cement, Portland		94 sack
(4 sacks per barrel)		
Cement block 8 x 8 x	<b>(16</b>	42 each
8 x 12 x 16		58 each
Cinder block $8 \times 8 \times$	16	35 each
8 x 12 x 16		45 each
Glass common	162 c	ubic feet
window		
plate, ¼ thick	3.3 sq	uare feet
Lime small barrel	2	10 barrel
large barrel	32	20 barrel

# B. FARM AND DAIRY PRODUCTS

(except fruits and vegetables)

Pounds per	
Alfalfa seed	60 bushel
Barley	48 bushel
Bran	20 bushel
Buckwheat	49 bushel
Butter 15 diameter x 51/4	25 tub
15 diameter x 15	70 tub
$10^{1}$ /4 x $8^{3}$ /4 x $10^{1}$ /2	
(30-pound bricks)	32 case
9-pound pail	10 each
Calf, live (average)	1500 head
Cheese 15 diameter x 5½	25 box
15 diameter x 7½	35 box
15 diameter x 15	70 box
Chickens	
Live-broilers (20 avg.)	58 crate
Live-fowl (12 avg.)	78 crate

Standard crate,	
empty 24 x 35 x 13	18 each
Clover seed	60 bushel
Corn ear	35 bushel
shelled	56 bushel
sweet corn (green)	43 bushel
Corn meal	44 bushel
Cotton Gin bale	515 each
30 x 48 x 54	
Standard bale	515 each
24 x 28 x 56	
Compressed bale	515 each
20 x 24 x 56	
Cotton seed	32 bushel
Cow live-feeder (average	e) 600 head
live-butcher (average)	800 head
live-heavy steer	1100 head
(average)	
Eggs 30 dozen 12 x 12 x	26 55 crate
Flax Seed	56 bushel
Flour	19½ head
30 stave	215 barrel

Cargo and load capacity limited by weight and distribution.

Hay, baled 17 x 22 x 40	)		60 b	ale
Hay, baled 14 x 16 x 43	3		85 b	ale
Hemp seed		44	bus	hel
Hog, live (average)		23	5 h	ead
Horse, live (average)	1	135	0 h	ead
Ice cream				
2.5 gallon 9 diamete	r x ´	11	18	can
5 gallon 9 diameter :	x 21		35	can
Lamb, live (average)		8	0 h	ead
Malt barley		28	bus	hel
Malt rye		32	bus	hel
Malt brewer's grain		40	bus	hel
Millet		50	bus	hel
Oats		32	bus	hel
Popcorn ear		35	bus	hel
shelled		56	bus	hel
Rice, unhulled		43	bus	hel
Rye		56	bus	hel
Sheep, live (average)		13	88 e	ach
Shorts		20	bus	hel
Soy beans		60	bus	hel
Straw, baled 17 x 22 x	40		45 b	ale
Tallow	60	cul	oic f	eet
Timothy seed		45	bus	hel
Vetch seed		60	bus	hel
Wheat, bulk		60	bus	hel
bag	90 ′	1 1/2	bus	hel
Wool, pressed	82	cul	oic f	eet

# C. FRUITS, VEGETABLES AND NUTS

(in bulk unless container is specified)

Pounds per Bushel Container or Container (dimensions in inches) 48 Apples, fresh bushel Western, box 11½ x 12 x 20 50 New England, 56 box  $11\frac{1}{4}$  x  $14\frac{1}{4}$  x  $17\frac{1}{2}$ Standard barrel 160 17 hd. 28½ stone Apricots, fresh bushel 48 Western, box  $5\frac{1}{2}$  x 12 x 20 23 Artichokes, box  $10 \times 11^{1}$ /<sub>2</sub> x 22 Asparagus, crate, 11½ high, 19¾ long, 9¾ wide top, 11 bottom 38 loose bunches 31 Avocados box  $5^{3}$  x  $11^{1}$ /<sub>4</sub> x  $17^{1}$ /<sub>2</sub> Bananas, carton  $4\frac{1}{4} \times 14\frac{1}{4} \times 30$ 38 55 Bananas, single stem bunch Beans, dry castor bushel 46 60 Beans, dry white bushel Beans, dry lima bushel 56 Beans, fresh lima bushel 39 Beans, fresh string bushel 36 (hamper) string 5-peck 45 Beets (average) bushel 55 Beets small crate  $9^{3}$ /<sub>4</sub> x  $13^{1}$ /<sub>4</sub> x 24 50 Western crate 14 x 19 x 24½ 95 Berries crate, 24 pint 25 9<sup>3</sup>/<sub>4</sub> x 9<sup>3</sup>/<sub>4</sub> x 20 Berries crate, 24-quart 48

 $11^{3}$ /<sub>4</sub> x  $11^{3}$ /<sub>4</sub> x 24

Berries crate, 32-quart 15½ x 11¾ x 24	63
Broccoli bushel crate 12¾ x 12¾ x 17	30
Brussels sprouts crate $7\frac{3}{4} \times 10\frac{1}{2} \times 21\frac{3}{4}$	26
Cabbage hamper 1½ bushel	58
Cabbage crate $12^{3}$ /x $18^{1}$ // x 19	60
Cabbage Western	85
crate 14 x 19 x 24½	
Cabbage	110
barrel crate 12¾ x 18¾ x 37¾	
Cantaloupe	58
crate pony 11¾ x 11¾ x 23½	
standard 12¾ x 12¾ x 23½	68
jumbo 13¾ x 13¾ x 23½	78
pony flat 4¾ x 12¾ x 23½	26
standard flat 51/4 x 141/4 x 231/2	28
jumbo flat 5½ x 15½ x 23½	32
Carrots topped bushel	55
Carrots with tops bushel	40
Carrots with tops	60
crate 11¾ x 14½ x 24	
Cauliflower bushel	30
Cauliflower crate $9\%$ x 19 x 24	50
Celery standard crate 11½ x 22 x 22½	70
Celery ½ crate 10¾ x 13 x 20¾	35
Celery Northern	85
crate 16½ x 21¼ x 22	
Cherries unstemmed bushel	56
Cherries stemmed bushel	64
Cherries lug box 5¾ x 11½ x 19¾	17
Chestnuts bushel	50
Cranberries ¼ barrel box 9½ x 11 x 14	28
$\frac{1}{2}$ barrel box $12\frac{1}{4}$ x $14\frac{3}{4}$ x $22$	60

Cucumbers bushel	55
crate 9¾ x 13¾ x 24	75
case 5 x 13½ x 19	26
Eggplant hamper bushel	40
Eggplant crate 14 x 11¾ x 24	54
Endive basket bushel	25
Endive hamper 1½ bushel	36
Grapefruit Western	68
box 11½ x 11½ x 24	
Grapefruit Southern	90
box 12 <sup>3</sup> / <sub>4</sub> x 12 <sup>3</sup> / <sub>4</sub> x 27	
Grapes basket bushel	48
Grapes lug box $5\% \times 16\% \times 17\%$	30
Grapes Western	45
keg 15½ diameter x 14	
Grapes basket 12 quarts	18
Greens bushel	25
Hickory nuts bushel	45
Horseradish roots bushel	35
Kale bushel	25
Lemons, Limes Western	80
box 10 x 13 x 25	
Lemons, Limes Southern	90
box 12 <sup>3</sup> / <sub>4</sub> x 12 <sup>3</sup> / <sub>4</sub> x 27	
Lentils bushel	60
Lettuce hamper bushel	25
Lettuce hamper 1½ bushel	38
Lettuce basket $8\frac{1}{2}$ x 11 $\frac{3}{4}$ x 21 $\frac{3}{4}$	17
Lettuce crate $13^{1}$ /4 x $17^{1}$ /2 x $24^{1}$ /2	75
Lettuce $\frac{1}{2}$ crate $9\frac{1}{2}$ x $13\frac{1}{2}$ x $24\frac{1}{2}$	40
Okra hamper ½ bushel	18
Okra hamper bushel	34
Onions Dry basket bushel	55
Dry bag 17 x 32	50
Dry crate $20\frac{1}{2} \times 11\frac{1}{2} \times 24$	58
Green, with tops bushel	32
Oranges Western	80
box 11½ x 11½ x 24	

Oranges Southern	90
box 12¾ x 12¾ x 27	
Oranges bushel	65
box 10 <sup>3</sup> / <sub>4</sub> x 10 <sup>3</sup> / <sub>4</sub> x 23 <sup>1</sup> / <sub>2</sub>	
Parsley bushel	30
crate 12¾ x 12¾ x 17	
Parsnips bushel	50
Peaches basket bushel	48
Peaches basket ½ bushel	25
Peaches crate 10½ x 11½ x 24	50
Peaches Western box	22
5½ x 12¼ x 19¾	
Peanuts, unshelled bushel	22
Bag 100	
Pears basket bushel	50
Pears Western box	51
9½ x 12½, 19¾	
Peas dry bushel	60
Peas fresh hamper bushel	35
Peas fresh hamper 40 quarts	45
Peas large bag	100
Pecans small bag	50
Peppers basket bushel	25
Peppers crate 14½ x 11¾ x 24	45
Pecans crate 11 x 12½ x 36	85
Plums basket bushel	56
Plums Western	
box 5 <sup>5</sup> / <sub>8</sub> x 16 <sup>3</sup> / <sub>8</sub> x 17 <sup>1</sup> / <sub>2</sub>	25
Potatoes sweet bushel	55
White or Irish bushel	60
bag 1½ bushel	102
barrel	185
Prunes box 55 x 163 x 171/2	25
Quinces bushel	50
Radishes basket bushel	34
Radishes crate 9% x 13% x 24	40
Rhubarb box $5\frac{1}{4}$ x $11\frac{1}{2}$ x 22	24

Cargo and load capacity limited by weight and distribution.

Romaine crate $13\% \times 18\% \times 24\%$	64
Romaine crate $12\frac{1}{4} \times 13 \times 15\frac{1}{4}$	27
Rutabagas bushel	56
Spinach bushel	27
Squash bushel	46
Sweet corn basket bushel	45
Sweet corn crate 13 x 13 x 24	60
Tomatoes basket bushel	55
Tomatoes lug box $7\frac{1}{4}$ x $14$ x $17\frac{1}{2}$	35
Tomatoes crate $10^{1}/_{2} \times 11^{1}/_{4} \times 24$	48
Tomatoes basket $8\frac{1}{2} \times 8\frac{3}{4} \times 20$	18
Turnips bushel	54
Walnuts bulk bushel	50
Walnuts bag 1	00

### D. LIQUIDS

### Pounds per Cubic Foot/Gallon

Touris per ouble root,	Jutton
Acetone	50/6.6
Alcohol, commercial	51/6.8
Asphalt, hot oil	71/9.5
Carbolic acid	60/8.0
Castor oil	61/8.1
Chloroform	95/12.7
Coconut oil	58/7.8
Corn oil	58/7.8
Corn syrup	86/11.5
Cotton seed oil	58/7.8
Cream	64/8.5
Creosote	69/9.2
Crude oil	56/7.5
Ether	46/6.2
Fuel oil, Diesel	52/7.0
Fuel oil, Furnace	56/7.5
Gasoline	45/6.0
Glycerin	79/10.5

Цороу	90/12.0
Honey	
Kerosene	50/6.6
Linseed oil	59/7.9
Lubricating oil	52/7.0
Maple syrup	82/11.0
Milk, bulk	64/8.6
Molasses	90/12.0
Muriatic acid, 40%	40/10.0
Naphtha, petroleum	42/5.6
Nitric acid, 91%	94/12.5
Olive oil	58/7.7
Peanut oil	57/7.6
Petroleum	56/7.5
Sorghum syrup	86/11.5
Soybean oil	58/7.7
Sugar cane syrup	85/11.3
Sulfuric acid, 87%	112/15.0
Turpentine	54/7.3
Vinegar	64/8.5
Water, fresh	63/8.4

Size Pound per Container	
Beer, wood barrel, ¼ barrel	105
Beer, steel barrel, ¼ barrel	95
Beer, wood barrel, ½ barrel	205
Beer, steel barrel, ½ barrel	190
Carton 24 12-oz. regular	45
bottles $17\frac{1}{4} \times 11\frac{1}{2} \times 9\frac{7}{8}$	
steinie bottles	40
18¾ x 12½ x 7¾	
tin cans 16¼ x 11 x 5½	28
Wood case 24 12-oz.	53
regular bottles 21 x 13½ x 10	
steinie bottles 22 x 13¾ x 7½	46
Note: Beer cases are of many types with variable sizes and weights.	

Cases shown are average for	popu-
lar full depth type with partit	ions.
Milk 5-gallon can 10¼ diameter:	x 19 62
10-gallon can	115
13 diameter x 23	
crate 20 ½-pint bottles	33
crate 20-pint bottles	54
crate 12-quart bottles	64
Note: Milk bottle crates vary	widely
in dimensions and weights. T	hose
shown are average weights.	
Molasses 50-gallon barrel	675
20 <sup>1</sup> / <sub>4</sub> hd., 34 stave	
Soft drinks	
Half depth bottle box 24	39
6- to 8-ounce bottles	
$12^{1}$ /4 x $18^{3}$ /4 x $8^{1}$ /2	
Full depth bottle box	60
12 24-to 32-ounce bottles	
13 <sup>3</sup> / <sub>2</sub> x 18 <sup>1</sup> / <sub>2</sub> x 12 <sup>1</sup> / <sub>4</sub>	

# E. LUMBER Air Dried

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

# Pounds per Cubic Foot/1000 Board Feet

Ash black or red	40/3330
Ash white	46/3830
Bamboo	22/1830
Basswood	30/2500
Beech	30/2500
Birch	48/4000
Butternut	30/2500
Cedar	30/2500

Cherry	44/3670
Chestnut	37/3080
Cottonwood	37/3080
Cypress	30/2500
Elm rock	45/3750
Elm soft	38/3170
Fir, Douglas	32/2670
Fir, Eastern	25/2080
Gum	40/3330
Hemlock	29/2420
Hickory	54/4500
Locust	42/3500
Mahogany	42/3500
Maple hard	44/3670
Maple soft	34/2830
Oak, black	42/3500
Oak, red	42/3500
Oak, white	48/4080
Pine, long leaf	44/3670
Pine, North Carolina	36/3000
Pine, Oregon	32/2670
Pine, Red	30/2500
Pine, White	26/2170
Pine, Yellow Northern	34/2830
Pine, Southern	45/3750
long leaf	44/3670
short leaf	38/3170
Poplar	27/2250
Redwood	30/2500
Spruce	28/2330
Sycamore	37/3080
Walnut	43/3580
Willow	31/2580

Lath Standard length 29 inches. Put up in bundles of 50. Average bundle: diameter 9 inches; weight 25 pounds. Shingles Bundle contains the equivalent of 250 shingles; measures 24 x 20 x 10; average weight 50 pounds.

Cargo and load capacity limited by weight and distribution.

# F. METALS, MINERALS, ORES, ROCK, STONE, COAL

Pounds per Cubic Foot/0	Cubic Yard
Alabaster, gypseous	160/4320
Aluminum, pure	165/4450
Andesite stone	180/4850
Antimony	420/11350
Asbestos	153/4130
Babbitt	440/11900
Barytes, mineral	280/7560
Basalt rock	185/5000
Bauxite	160/4320
Bluestone	120/3240
Borax	110/2970
Brass cast	525/14175
Brass drawn	542/14635
Brass rolled	534/14420
Bronze	550/14850
Chalk	137/3700
Charcoal, oak	33/890
Charcoal, pine	23/620
Coal, broken Anthracite	60/1600
Bituminous	45/1200
Cannel	50/1350
Pocahontas	50/1350
Coke	27/730
Copper, cast	550/14850
Copper, rolled	560/15120
Diabase	185/5000
Dolomite	181/4890
Emery	250/6750
Feldspar	160/4320
Flint	185/5000
Gneiss – solid	160/4320
Gneiss – crushed	95/2565

Granite – solid	175/4725
Granite – crushed	96/2590
Graphite	170/4590
Greenstone – solid	187/5050
Greenstone – crushed	107/2900
Gypsum	150/4050
Iron – cast	450/12150
Iron – wrought	485/13100
Hornblende	187/5050
Lead – cast	710/19170
Limestone – solid	166/4480
Limestone – crushed	95/2565
Magnesite	187/5050
Manganese	475/12825
Marble – solid	165/4455
Marble – crushed	95/2565
Marl	140/3800
Mercury	850/22950
Mica	185/5000
Nickel	537/14500
Note: Most ores are 159	% to 20%
heavier than the rock th	nat forms
the bulk of the ore.	
Peat	50/1350
Phosphate rock	200/5400
Porcelain	150/4050
Porphyry	172/4645
Pumice	40/1080
Pyrites	315/8500
Quartz	165/4455
Rip rap stone	65/1750
Salt rock, solid	136/3670
very coarse	35/950
coarse	45/1215
fine	50/1350
barrel, average	280

Saltpeter	69/1860
Sandstone solid	147/3970
Sandstone crushed	86/2325
Shale solid	172/4645
Shale crushed	92/2485
Silica	135/3650
Slag solid	175/4750
Slag crushed	75/2025
Slag screenings	100/2700
Slate	175/4725
Soapstone	169/4565
Steel, cast	490/13250
Steel, rolled	495/13365
Stone crushed, average	100/2700
Sulphur	125/3375
Talc	170/4600
Tin	460/12400
Trap rock	187/5050
Zinc	440/11880

# G. MISCELLANEOUS

Pounds per Cubic Foot/Cu	ubic Yard
Ashes, cool (packed)	45/1215
Bone	115/3105
Cork	15/405
Furniture (household good	ds) 6/160
Garbage	
dry, paper wrapped	
15-3	0/405-810
wet	50/1350
Groceries miscellaneous	30/810
assort.	
Ice	57/1540
Paper solid, average	58/1565
Rubber goods	94/2540
Snow, moist packed	50/1350

Cargo and load capacity limited by weight and distribution.

Add up the following weights to determine total Gross Vehicle Weight (GVW). Note that the weights listed in the following chart are approximate. Always consult the body manufacturer to obtain the exact weight for calculating a safe payload.

#### Vehicle Curb Weight

- + Other accessory equipment weights (including snow plows, tailgate lifts, etc.)
- + Aftermarket body and equipment weights (always consult manufacturer whenever possible)
- + Passenger weight
- + Cargo Weight

## = Total Gross Vehicle Weight (GVW)

Check this figure against the vehicle's Gross Vehicle Weight Rating and Gross Axle Weight Ratings. Never exceed them!

Body Type	Length (feet)	Weight (pounds)
Catering	8	1030-1150
	10	1910
	12	2190-2435
	14	2695
Dump	8 (3-yard dump with 18-inch side height)	1350
	8 (4-yard dump with 24-inch side height)	1300
	9 (4-yard dump with 22-inch side height)	1525
	10 (4-yard dump with 20-inch side height)	1675
	8 (5-yard dump with 30-inch side height)	1450
	9 (5-yard dump with 26-inch side height)	1600
	10 (5-yard dump with 24-inch side height)	1750
	11 (5-yard dump with 22-inch side height)	1875
	12 (5-yard dump with 20-inch side height)	2000

Body Type	Length (feet)	Weight (pounds)
Stake	8	1005
	9	1130
	10	1255
	12	1380
	14	1505
	16	1630
	18	1960
	20	2135
	22	2335
	24	2510
	26	2720
Van	10	1795
	12	2000
	14	2210
	16	2430
	18	2635
	20	2855
	22	3055
	24	3260
	26	3490
Utility	8	1055
	9	1195
	11	1580

AF: Dimension between the center of the fifth wheel or the center of gravity of the body and rear axle. Maximum AF is longest dimension permissible to ensure against load damage to frame. AF dimensions are based on frame strength and do not consider adaptability of average trailer or bodies to the available space behind the cab.

Active Fuel Management: This technology improves fuel economy by shutting down four of the eight cylinders of select GM V8 engines when the power of all eight cylinders is not needed. It works seamlessly and requires no driver input to operate. It is used in all 1500 GM pickups.

Air Resistance: A measure of the drag or retarding effect due to the air turbulence produced by a vehicle in motion. Because it varies theoretically as the square of the speed, it affects the ability of the vehicle to reach top speed as well as the gradability at fast speeds.

Allowable Body Payload: Weight rating designated by the truck manufacturer for model types that are later equipped with some type of body (stripped chassis, chassis-cowl or chassis-cab models, for example). This is the combined allowance for total weight of body and payload together.

Allowable Payload: The maximum load weight that may be carried without exceeding the truck manufacturer's designated maximum rating, or some component rating or legal limit (such as axle capacity or legal axle load limits).

Automatic Locking Rear Differential: A GM-exclusive feature that automatically improves traction by eliminating rear-wheel differential action at low speeds when needed. It is a mechanical system that requires no driver input. It engages when one rear wheel spins 100 rpm faster than the other. It is automatically disengaged at 20 mph. It is available on most rearwheel drive and 4WD GM trucks and vans, both RWD and 4WD.

Auxiliary Springs: Usually rear only, are for increased load stability or capacity without affecting light ride. Mounted to act only after regular springs are partially deflected.

**AW:** Axle width is the distance between the front wheels measured from the centerline of the front tires.

Axle, Full-Floating: The full-floating axle shafts have nothing to do but drive the wheels. The housing supports the entire rear weight through double opposed wheel bearings, which absorb all load and wheel stresses. Should axle shaft breakage occur, the truck can be towed since the wheel is supported by the wheel hub and bearings.

Axle, Semi-Floating: The inner shaft is carried on an extension of the differential, the outer or wheel bearings being carried directly on the axle shaft. With this type, the axle shafts and wheel bearings not only support the total rear weight but must also transmit driving torque to the wheels and resist stresses due to skidding, turning corners, and tractive forces.

**BA:** Dimension from the front bumper to the centerline of the front axle.

**BBC:** Dimension from the front bumper to the back of the cab.

BC (Body Clearance): Distance between the back of the cab and the installed body to prevent cab-torear body contact due to flexing of chassis frame. Biodiesel (B20): Biodiesel is a renewable, clean-burning diesel replacement made from a mix of resources including agricultural oils, recycled cooking oil and animal fats. GM diesel engines designed to operate on biodiesel operate the same on biodiesel as they do on conventional diesel. B20 is a blend of no more than 20% biodiesel and at least 80% traditional diesel fuel. It is available in all 50 states.

Bluetooth: This wireless technology allows data to be transmitted between devices at short range. For drivers, it enables them to pair a phone to a Bluetooth system in their vehicle and operate their phone' without having to hold it or dial by hand. GM Bluetooth for Phone enables drivers to hear phone calls through their car audio system, or stream music from their mobile device into their vehicle audio system. Available on most models.

Body: The part of the vehicle designed to carry items related to the use of the vehicle rather than the operation of the unit. This does not normally include the cab except when the cab is an integral part of the body as in a school bus.

1. Go to **gmtotalconnect.com** to find out which phones are compatible with the vehicle.

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Boxed frame: GM pickups and utilities use a tubular design of frame rails for greater resistance to twisting motions. These frames are designed to meet the needs of commercial customers and drivers who tow heavy loads. The frames include integrated hitch receivers on many models.

Brake, Engine: Brake device using engine compression pressure as a retarding medium.

**BW:** Outer track — measures the distance between the dual rear wheels from the outside of the outer wheels.

**CA:** The dimension from the back of the cab to the centerline of the rear axle. This dimension is important when determining the body application or fifth wheel mounting and weight distribution.

Cab: The part of the vehicle that encloses the driver and vehicle operating controls. The term "cab" may also include the front end, sheet metal housing, the engine, front fenders, etc.

**CE:** The dimension from the back of the cab to the rear of the standard frame. Used primarily to determine the size of the body that may be used.

Center of Gravity: Point where the weight of the truck and/or body and payload appears to be concentrated and, if suspended at that point, would balance front and rear.

#### CGA (Center of Gravity to Axle):

The distance measured from the center of gravity of the body and payload to the center of the rear axle (midpoint between the axles for a tandem).

Chassis: May be used to represent:
(1) Entire vehicle as produced by the factory when no body is included (cab, frame, powerplant, drive line, suspensions, axles, wheels, and tires);
(2) Same as (1) except excluding cab and other sheet metal; or
(3) Frame only with brackets, bumper, and other miscellaneous parts directly attached to the frame.

Chassis Weight: The actual weight of the fully equipped vehicle without body and driver. This weight includes all fluids (no driver or body).

Compressed Natural Gas (CNG): GM sells mono-fuel cargo vans that can operate on Compressed Natural Gas (CNG) and bi-fuel pickups that can operate on either CNG or gasoline. CNG is a domestically produced and low-cost fuel that is especially clean burning. Many government incentives are available for using CNG because of its efficiency, including enabling use of High Occupancy Vehicle lanes. The clear, odorless and non-corrosive fuel is stored in high-pressure cylinders in the trucks and in storage areas. The 6.0L V8 engines used with CNG are modified to handle the unique properties of these safe fuels.

Compression Ratio: The volume of the combustion chamber and cylinder when the piston is at the bottom of its stroke, divided by the volume of the combustion chamber when the piston is at the top of its stroke. Higher compression ratios tend to increase engine efficiency.

Conventional Cab: This is a cab design where the powerplant is located ahead or mostly ahead of the cowl. Term may be applied to basic cab structure only or may include front fenders, hood, grille, etc.

Cowl: The front part of an automotive cab or body, directly below the base of the windshield between the dash panel, is used to indicate the complete vehicle (less body).

**Crossmember:** Structural unit that connects side rails of the frame.

Curb (Vehicle) Weight: The weight of the truck (without load or driver), including fuel, coolant, oil, body and all items of standard and optional equipment.

CWR (Cargo Weight Rating): The value specified by the manufacturer as the cargo-carrying capacity, in pounds, of a vehicle, exclusive of the weight of the occupants. The actual cargo weight is also called the "payload."

Deflection Rate: The deflection rate of a spring is the force required to compress or deflect the spring a distance of one inch. For torsion springs, this distance is measured at the end of the control arm attached to the springs.

Design Weight: This is the maximum to which a vehicle or component may be loaded without the danger of failure and/or premature wear taking place. It is a limit imposed by the manufacturer of that vehicle or component.

Diesel Exhaust Fluid: This exhaust additive is used on most truck diesel engines today to help clean the exhaust after it leaves the engine. Use of DEF enables diesel engines to run cleaner and use less fuel. DEF is available wherever diesel fuel is sold. Government rules stipulate warnings to keep the tank filled, and engine power reductions to occur if the driver operates a vehicle without DEF in its tank. This technology is in use around the globe on diesel engines.

Diesel Particulate Filter: Diesel engines produce small particles in the exhaust that are trapped in a particulate filter and then burned more completely to produce a clean exhaust. Diesel engine operation may be adjusted automatically to help burn off the particles from the filter. Drivers should avoid extended periods of idling to keep the diesel particulate filter unplugged.

Differential: (A) Standard — gear assembly on the drive axle that permits the wheels to turn at different speeds. (B) No-Slip or Limited-Slip — gear assembly on the drive axle that will not permit one wheel to spin while the other is motionless, such as when a truck is stuck in snow or mud. Torque is transmitted to both wheels of the driving axle.

**Disc Brakes:** A brake assembly containing a disc, which rotates as the wheel turns. A caliper device grabs the disc to stop the wheel from rotating.

Displacement: Engine displacement is the volume displaced by a piston during one stroke multiplied by the number of pistons. (bore) x (bore) x (stroke) x (no. of pistons) x (.785)

**Drum Brakes:** A brake assembly with brake shoes, which are pressed against a brake drum to stop the wheels from rotating.

Fifth Wheel: Load supporting plate mounted to the frame of the vehicle. Pivot-mounted, it contains provision for accepting and holding the kingpin of a semi-trailer providing a flexible connection between the tractor and the trailer. Center of fifth wheel (where kingpin is held in position) should always be located ahead of the centerline of the tractor rear axle or axle group.

FlexFuel (E85): Engines designed to operate on mixtures of gasoline or up to 85% ethanol are labeled FlexFuel vehicles. They can operate on either gasoline or E85 fuel with no changes in operation. Use with lower-cost E85 will require more frequent refills because of the slightly lower energy of the E85 fuel mix. Sources of E85 fuel can be found at:

http://www.afdc.energy.gov/locator/stations/

Frame Cut-off: Standard frame on most models extends behind the rear axle, far enough to support a body mounted on the vehicle. For special purpose bodies that may be unusually short for the wheelbase of the vehicle on which it is mounted, or in most tractor operations, this frame extension behind the rear axle may be shortened. The shortest allowable extension for each vehicle is referred to as "maximum frame cut-off."

Full Trailer: A trailing load carrying a vehicle, which is entirely supported by its own suspension systems. The powered unit merely tows this type of trailer and does not directly support any of its weight. Sometimes referred to as a "pup" when towed behind a truck with a mounted body or behind a tractor/semi-trailer combination. Tractor/semi-trailer/full-trailer combinations are often referred to as "double" or "double bottoms."

Gasoline Direct Injection: Called Direct Injection, Gasoline Direct Injection or Spark Ignition Direct Injection, this technology injects gasoline directly into each cylinder at very high pressure to improve fuel economy, emissions and power. GM has been a pioneer in the use of direct injection.

GAWR (Gross Axle Weight Rating):

The value specified by the vehicle manufacturer as the load-carrying capacity of an axle system measured at the tire-ground interfaces.

GCW (Gross Combination Weight):

Represents the actual weight of a vehicle at the ground with a trailer or trailers including vehicle, equipment, driver, passengers, fuel, and payload (everything that moves with the vehicle).

Gear Ratio: The number of revolutions a driving gear requires to turn a driven gear through one complete revolution. For a pair of gears, the ratio is found by dividing the number of teeth on the driven gear by the number of teeth on the driving gear.

**Geared Speed:** The theoretical vehicle speed based on engine rpm, transmission gear ratio, rear axle ratio, and tire size.

**Gradability:** Ability of a truck to negotiate a given grade at a specific GCW or GVW.

**GVW (Gross Vehicle Weight):** Actual weight of the entire vehicle including all equipment, fuel, body, payload, driver, etc. This is for the individual unit only, such as a truck or tractor.

Helical Gears: Gears with slanted teeth, usually used in transmissions. The teeth are positioned diagonally across the face of the gear for quieter operation and more gear tooth contact.

Horsepower: A measure of the amount of work that can be done by an engine in a certain amount of time. One horsepower is equal to 33,000 ft.-lb. of work per minute. The horsepower of an engine depends upon the torque and speed of the engine.

- Brake Horsepower: The actual horsepower delivered by the crankshaft and is measured by means of an electric dynamometer.
- Gross: The brake horsepower of an engine with optimum ignition setting (manual instead of automatic advance) and without allowing for the power absorbed by the engine's accessory units such as the fan, water pump, generator, and exhaust system.
- SAE, Net: The brake horsepower remaining at the flywheel of the engine to do useful work after the power required by the engine accessories (fan, water pump, generator, etc.) has been provided as measured in accordance with SAE standards.

• Taxable: The N.A.C.C. (National Automobile Chamber of Commerce) adopted an arbitrary formula for estimating horsepower to enable comparison of engines on a uniform basis. It assumes that engines deliver their rated power at a piston speed of 1000 feet per minute and that mechanical efficiency will average 75% Taxable Horsepower = (Diameter of Bore) 2 x Number of Cylinders/2.5 = D2N/2.5. Advancement in engine design since this formula was developed has rendered the formula obsolete as a basis of estimating true engine output. The formula is still used in some states for licensing purposes, however.

Hotchkiss Drive: Hotchkiss drive is a term applied to that type of chassis design where the rear springs are mounted at the forward end in a stationary bracket (not shackled as at the rear end) and all driving and braking forces are cushioned by the springs and transferred directly to the frame side members. Open-type universal joints and propeller shafts are used in this design.

Hydroformed frame: Frame rails on GM pickups and utility vehicles are precisely shaped by squeezing tubular steel parts into molds with extremely high pressure water. This technique enables lighter, stronger frames with more precise designs for higher quality vehicles.

**Hypoid Gears:** Hypoid gears and pinions have a tooth form that permits the drive pinion to mesh with the driven gear below the center of the driven gear.

Liquefied Petroleum Gas (LPG): This gaseous fuel is refined from petroleum or natural gas and is typically a mix of Propane and Butane, depending on seasonal needs. It is a clean-burning fuel meeting all EPA and California Air Resources Board certification requirements. GM offers dedicated LPG-fueled cutaway vans for many applications and include certificates for school bus applications. LPG is widely available around the U.S. GM cutaway vans designed for LPG use include engine modifications to reliably run on LPG. The fuel tanks used with LPG cutaway vans are different than the tanks used with the CNG cargo vans.

Maximum Rolling Grade (Gradability): Greatest grade a vehicle is able to climb while under motion, or the number of foot rise the vehicle can attain continuously for each 100 feet of horizontal movement. Maximum rolling grade is calculated with the vehicle in motion with rated load and with gearshift settings to obtain greatest gear reduction.

Maximum Speed: Ability of a vehicle to attain speeds under full load conditions. This speed is calculated using level road conditions and with best concrete road surface. When the vehicle power is great enough to exceed geared mph, the geared mph becomes the maximum speed. Speeds are calculated in the best gear to obtain the highest speed (using a lower gear if necessary).

Maximum Starting Grade (Gradability): Greatest grade a vehicle is able to start on from complete stop. Approximately 10% grade loss from the rolling gradability. (Starting Gradability (%) = Rolling Gradability (%) -10%).

Model Weight: Weight of the vehicle with all items of standard equipment, 150 pounds per passenger in each designated seating position, and maximum capacity of fuel, oil and coolant.

Nominal Truck Rating: An arbitrary classification of truck capacity in tons, such as ½-ton, 1½-ton. Although this classification is still used, the correct rating of truck capacity is gross vehicle weight (GVW).

**OAL:** Overall length of chassis measured from the front bumper to the end of the frame.

**OH:** Overall height of chassis measured from the ground to the topmost point of the cab.

Off-Highway: Vehicle operation over private roads or asphalt or maintained crushed rock surface or similar material, variable grades. Not subject to legal weight and dimensional limitations.

Off-Road: Vehicle operation over private roads in areas with no maintained hard surface variable grades. Not subject to legal weight and dimensional limitations.

On-Highway: Vehicle operation over well-maintained major highways of excellent concrete or asphalt construction, level to rolling terrain with uniform grades. Subject to legal weight and dimensional limitations.

On/Off-Highway: Vehicle operation over secondary roads of good concrete or asphalt construction with partial operation on well-maintained crushed rock surface or similar material, variable grades. Subject to legal weight and dimensional limitations.

#### Overdrive Transmission:

A transmission in which the high gear ratio is less than one to one. This permits the truck, under favorable conditions, to maintain a higher road speed with any given engine speed or a given road speed at a lower engine rpm. The primary use in trucks is for fuel economy on empty return trips.

**OW:** Overall width of chassis from the widest point of the cab.

Payload: Weight or commodity being hauled. This will include the packaging, pallets, banding, etc., but does not include the truck, truck body, etc.

**Pintle Hook:** Hook mounted on the truck or semi-trailer used to couple on a full-trailer.

Planetary Drive: Gear reduction system with sun gear transmitting reduction through planetary gears to main output shaft. This type of gear set is typically used with conventional automatic transmissions.

Power Curve: A graphic illustration of maximum output of power and torque at all operating speeds. These curves are established from data obtained by running a sample engine on an engine dynamometer. Net power figures are used in vehicle.

Power Takeoff (PTO): A device usually mounted on the side of the transmission or transfer case, or off the front of the crankshaft, used to transmit engine power to auxiliary equipment such as pumps, winches, etc.

Powertrain: A name applied to the group of components used to transmit engine power to the wheels. The powertrain includes clutch, transmission, universal joints, driveshafts, and rear-axle gears. PR (Ply Rating): A measure of the strength of tires based on the strength of a single ply of designated construction. An 8-ply rating does not necessarily mean that 8 plies are used in building the tire, but simply that the tire has the strength of 8 standard plies.

Ratio: Proportion input revolutions to output revolutions of a unit (axle, transmission, steering gear, etc.). A two-to-one ratio (2:1) means that two complete revolutions must be made on the input shaft of the item to obtain one complete revolution of the output shaft. This is used primarily to multiply torque (turning force), which is the opposite of speed. To interpret a ratio in terms of torque, the expression becomes the proportion of the output to the input. Thus, a 2-to-1 ratio means that 2 units of force are available at output shaft for each unit of force applied to input shaft.

RBM (Resisting Bending Moment): (Frame section modulus) x (Frame yield strength). The resulting number is used when comparing the strength of two frames made of different materials.

**Reduction:** Used to indicate the slower output speed resulting from a ratio proportion (faster on reductions less than 1).

Rim Pull: The force available at the road surface contacting the driving wheels of the truck. It is determined by engine torque, transmission ratio, axle ratio, tire size, and frictional losses in the drive train. Rim pull is also known as Tractive Effort.

Road Rolling Resistance: A measure of the retarding effect of the road surface to forward movement of the vehicle and varies with the type and condition of the road.

Rolling Radius (Loaded Radius): Tire-rolling radius is the distance from the center of the wheel to the road. Static radius applies when the vehicle is at rest, rolling radius for a vehicle in motion. The latter dimension is usually slightly greater than the static radius and is the figure used in determining the tire revolutions per mile.

**Section Modulus:** A measure of the strength of frame side rails determined by the cross-section area and shape of the side rails.

Semi-Trailers: This is a trailering unit that is supported in the rear by its own suspension system and at the front by the towing vehicle. A separate suspension unit with towing provisions sometimes supports this type of unit, but while being used this way it becomes a full trailer. An exception is the utility-type trailer, house trailer, etc., which is towed by a ball coupling. This is referred to simply as a trailer and is not designed as a semi- or full trailer.

Shipping Weight: The weight of the basic truck including all standard equipment plus grease and oil wherever required. It does not include the weight of fuel or coolant.

Spiral Bevel Gears: Gears with spiral-shaped teeth used primarily to change the direction of transmitted power, such as from the propeller shaft to axle shafts.

**Spring Capacity At Pad:** The amount of sprung weight that will bend a leaf spring its maximum amount.

**Spring Deflection Rate:** The number of pounds necessary to deflect the spring one inch.

Springs, Auxiliary Type: Springs that do not come into operation until a predetermined load is placed on the chassis. They are designed to provide riding comfort whether the truck is empty or under partial load.

**Springs, Progressive Type:** Springs that supply a variable spring rate to provide a good ride with both light and heavy loads.

Springs, Semi-Elliptical: Springs basically consisting of one main leaf with eyes at each end for connection to spring shackles and brackets and a number of shorter leaves of uniformly decreasing length shaped in the form of an arc.

StabiliTrak: As of 2012 all motor vehicles with a gross vehicle weight of less than 10,000 lb are required to have a stability control system. StabiliTrak is GM's stability control system, used in all SRW trucks and passenger vehicles. It is not included on trucks and vans with dual rear wheels. StabiliTrak uses individual brake controls and power management to help keep a vehicle driving in the direction the driver intends. StabiliTrak cannot prevent all skids or loss of control, but the National Highway Traffic Safety Administration (NHTSA) estimated that stability control systems "will reduce single-vehicle crashes of passenger cars by 34% and single-vehicle crashes of sport utility vehicles (SUVs) by 59%, with a much greater reduction of rollover crashes. NHTSA estimates stability control would save 5,300 to 9,600 lives and prevent 156,000 to 238,000 injuries in all types of crashes annually once all light vehicles on the road are equipped with ESC."

Stroke: The distance traveled by a piston in a cylinder during ½ revolution of the crankshaft.

Tire Load Capacity: The maximum recommended load that may be carried by the tires. Altering the size of the tires on a vehicle will have a direct bearing on the load that can be carried.

TL (Trailer Length): Front of body to bumper.

Torque Converter: A torque converter is made up of a pump, a turbine, and a stator. It multiplies engine torque. When torque multiplication nears a one-to-one ratio, the converter acts as a fluid coupling between the engine and the transmission. At all other pump-turbine ratios, torque is automatically multiplied according to the load imposed on the vehicle, within the limits of the converter.

Torque, Engine: Engine torque is the amount of twisting effort exerted at the crankshaft by an engine. The unit of measure is a pound-foot, which represents a force of one pound acting at right angles at the end of an arm one foot long.

Torque, Gross: The maximum torque developed by an engine without allowing for the power absorbed by the engine's accessory units such as the fan, water pump, generator and exhaust system. Gross torque is used to determine gross horsepower.

Torque, Net: The torque available at the flywheel of the engine after the power required by the engine accessories (fan, water pump, generator, etc.) has been provided.

Tractive Effort: See Rim Pull.

Tractor (Highway): Vehicle designed for pulling loads greater than weight actually applied to the vehicle. Most heavy-duty trucks are designed for either tractor or truck service.

Optional equipment is available to adapt each unit for the particular tractor or truck application for which it is to be used. GCW rating indicates total pulling capacity of a unit including its own weight when used as a tractor in a specified type of service. GVW rating also must not be exceeded.

Transmission: A transmission contains a number of gears that, when a connection is made between a specific set, provide a choice of ratio.

Connection is made by sliding the teeth of one gear into mesh with another, or by engaging a tooth-type clutch that has one part fastened to a gear already meshed to another, and the other part splined to a shaft. Synchromesh transmissions use gear speed synchronizers to ease engagement.

Tread Width: The distance between the centers of tires at the points where they contact the road surface. Duals are measured from the center of dual wheels. Truck: Vehicle designed for carrying entire load; GVW rating indicates truck capacity. GCW will also apply if a trailer is to be pulled behind the truck. GVW and GCW ratings are maximum at the ground including vehicle, payload and all equipment. A load capacity chart for each model indicates basic equipment needed for each GVW and GCW.

Turbocharger: A rotary compressor that pressurizes engine intake air driven by the flow of exhaust gases. It raises the pressure in the combustion chamber to increase the power of the engine.

Turning Radius: Half the distance across the smallest circle in which a truck will turn. Can be measured from the centerline of the outside front tire or the outside of the front bumper.

Universal Joint: A particular coupling that permits a driving shaft to operate between two power train units that are not always in alignment with each other or subject to movement. For example, between a frame-mounted transmission and a spring-mounted rear axle, a universal joint will usually angle. When installed on a propeller shaft, it allows the shaft to rotate through an angle.

#### Vacuum Assist (Power) Brakes:

Standard-type hydraulic brakes with a pressure assist cylinder having a vacuum chamber that, when atmospheric pressure is allowed to one side of the piston or diaphragm, drives a plunger in the hydraulic system, increasing the effect of pedal pressure.

WB (Wheelbase): The distance between the centerlines of the front and rear axles. For trucks with tandem rear axles, the centerline is midway between the two rear axles.

Weight Distribution: Portions of total weight of a vehicle that will be supported by each axle. Proper predetermination of the distribution of vehicle, equipment, and payload weight is one of the most important requirements in selecting a truck or tractor for a particular operation.

Weight, Sprung: The weight of those things supported by the springs, such as frame, engine, body, payload, etc.

Weight, Unsprung: The weight of components such as tires, wheels, and axles that are not supported by the springs.

#### Wheels:

DRW: Dual Rear Wheels SRW: Single Rear Wheels

Yield Strength: Yield strength is the maximum amount of stress in pounds per square inch to which material, for example, as in a frame, may be subjected through loading and return to its original shape upon removal of the stress; i.e., no deformation remains.



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