

THE FUTURE OF HEAVY-DUTY TRUCKS SUPER DUTY CHASSIS CABS

The 2019 Super Duty Chassis Cab F-350/F-450/F-550s bring smart, tough and capable to a whole new level. They reinforce the tradition of Built Ford Tough and continue to handle hard-line towing jobs and aggressive payloads.

The purpose-built Ford powertrains help deliver excellent performance and torque. With a maximum towing capability of 31,900 lbs. for 5th-wheel trailers and 18,500 lbs. for conventional trailers, Super Duty is designed to conquer even the most challenging jobs.

Powerful Ford 6.8L 3V SOHC V10

The V10 gas powerplant gets your heavy loads moving with up to 424 lb.-ft. of torque and 288 horsepower on F-450 and F-550 It's paired with a TorqShift® 6-speed automatic transmission featuring a massive torque converter, beefy gear sets and a selectable tow/haul mode The CNG/Propane Gaseous Engine Prep Package includes hardened valves and valve seats to help ready your Super Duty for alternative-fuel upfits

CNG/Propane Gaseous Engine Prep Package Available on F-350 with 6.2L V8 Gas Engine and on F-450 & F-550 with 6.8L V10 Gas Engine.

Frontal Area Considerations

	Frontal Area Limitations/ Considerations	With
F-350/F-450/F-550 Super Duty	75 sq. ft.	All 5th-Wheel and Gooseneck Applications
	60 sq. ft.	All Other Applications

Frontal Area is the total area in square feet that a moving vehicle and trailer exposes to air resistance. The chart above shows the maximum trailer frontal area that must be considered for a vehicle/trailer combination. Exceeding these limitations may significantly reduce the performance of your towing vehicle.

Required Equipment Includes items that must be installed.* Your New

Vehicle Limited Warranty (see your dealer for a copy) may be voided if you tow without them.

For 40,000-pound GCWR on F-550; 35,000pound GCWR on F-450 – High-Capacity Trailer Tow Package

*Check with your dealer for additional requirements, restrictions and limited warranty details.

Trailer Towing Package

Model (Option Code)	I	350/F-450/F-550 Super Duty Chassis Cab (531) ⁽¹⁾⁽²⁾	F-450/F-550 Super Duty Chassis Cab (535)
Trailer Brake Wiring/Feed Kit		Х	X(1)
Upgraded Rear Axle		-	Х
Increased GCW (6.7L)		-	Х

(1) Not included if Trailer Brake Controller is ordered. (2) XL model only.

 Notes: Content may vary depending on model, trim and/or powertrain. See your dealer for specific content information.
Trailer Towing Package recommended for all light trucks that will be used for towing to help ensure easy, proper connection of trailer lights.

Rear Axle Ratio Codes

If you do not know the axle ratio of your vehicle, check its Truck Safety Compliance Certification Label (located on the left front door lock facing or the door latch post pillar). Below the bar code, you will see the word AXLE and a two-digit code. Use this chart to find the axle ratio that corresponds to that code:

	Rear Axle Ratio	Non-Limited Slip	Limited Slip	Electronic Locking
Super Duty	3.73	37	Not Available	ЗE
	4.10	41	4N/4W ⁽¹⁾	Not Available
	4.30	Not Available	4L	4M
	4.88	48	8L	Not Available

(1) Wide rear axle on F-350 DRW Chassis Cab with Ambulance Package.





F-350 SUPER DUTY CHASSIS CABS CONVENTIONAL TOWING⁽¹⁾

Maximum Loaded Trailer Weight (lbs.)

Trailer weights shown assume 400-lb.-800-lb. second-unit body weight. Be sure combined weight of vehicle and trailer does not exceed listed GCWR.

Autom			RE	GULAR C	AB CHASS	SIS		S	UPERCA	B CHASSI	S	CREW CAB CHASSIS					
Transm	nission	F-350	F-350	F-350	F-350	F-350	F-350	F-350	F-350	F-350	F-350	F-350	F-350	F-350	F-350		
	Axle GCWR	4x2 SRW	4x4 SRW	4x2 DRW	4x2 DRW	4x4 DRW	4x4 DRW	4x2 SRW	4x4 SRW	4x2 DRW	4x4 DRW	4x2 SRW	4x4 SRW	4x2 DRW	4x4 DRW		
Engine	Ratio (lbs.)	145 WB	145 WB	145 WB	169 WB	145 WB	169 WB	168 WB	168 WB	168 WB	168 WB	179 WB	179 WB	179 WB	179 WB		
6.2L Sohc Ve	^{3.73} 19,500	13,200/ 13,100(2)	12,700	-	-	-	-	12,800(2)/ 12,900	12,400	-	-	12,600	12,100(2)/ 12,200	-	-		
	20,000	-	-	13,300	13,200	12,900	12,800	-	-	12,900	12,500	-	-	12,800	12,400		
	4.30 23,000	13,500	13,500	-	-	-	-	13,500	13,500	-	-	13,500	13,500	-	-		
	23,500	-	-	16,800	16,700	16,400	16,300	-	-	16,400	16,000	-	-	16,300	15,900		
6.7L	3.73 26,500	13,500	13,500	-	-	-	-	13,500	13,500	-	-	13,500	13,500	-	-		
Diesel	31,000	-	-	17,500	17,500	17,500	17,500	-	-	17,500	17,500	-	-	17,500	17,500		
	4.10 32,000	-	-	17,500	17,500	17,500	17,500	-	-	17,500	17,500	-	-	17,500	17,500		

F-350 SUPER DUTY CHASSIS CABS 5th-WHEEL TOWING

6.2L Sohc V8	3.73 19,500	13,100	12,600(2)/ 12,700	-	-	-	-	12,800	12,400/ 12,300(2)	-	-	12,600/ 12,500(2)	12,200/ 12,100(2)	-	-
	20,000	-	-	13,200	13,200	12,800	12,800	-	-	12,900	12,500	-	-	12,700	12,300
	4.30 23,000	16,600	16,100(2)/ 16,200	-	-	-	-	16,300	15,800(2)/ 15,900	-	-	16,000(2)/ 16,100	15,600(2)/ 15,700	-	-
	23,500	-	-	16,700	16,700	16,300	16,300	-	-	16,400	16,000	-	-	16,200	15,800
6.7L Diesel	^{3.73} 26,500	19,200(2)/ 18,000	18,700(2)/ 15,100	-	-	-	-	18,800(2)/ 15,700	18,400(2)/ 13,800	-	-	18,600(2)/ 14,100	18,200(2)/ 12,300	-	-
	31,000	-	-	23,500	23,400	23,100	23,000	-	-	23,100	22,700	-	-	23,000	22,600
	4.10 32,000	-	-	24,500	24,400	24,100	24,000	-	-	24,100	23,700	-	-	24,000	23,600

(1) Super Duty Chassis Cab does not offer a conventional hitch receiver as a factoryinstalled option. (2) 18" Tires. Note: Trailer tongue (trailer king pin for 5th-wheel towing) load weight should be 10% (15% for 5th-wheel towing) of total loaded trailer weight. Make sure vehicle payload (reduce by option weight) will accommodate trailer tongue (trailer king pin for 5th-wheel towing) load weight and weight of passengers and cargo added to towing vehicle. Addition of trailer tongue (trailer king pin for 5th-wheel towing) load weight and weight of passengers and cargo must not cause vehicle weights to exceed rear GAWR or GVWR. These ratings can be found on the vehicle Safety Compliance Certification Label.





F-450 SUPER DUTY CHASSIS CABS CONVENTIONAL TOWING (1)

Maximum Loaded Trailer Weight (lbs.)

Trailer weights shown assume 400-lb.–800-lb. second-unit body weight. Be sure combined weight of vehicle and trailer does not exceed listed GCWR.

Automa				REG	JULAR C	AB CHAS	SIS		รเ	JPERCAI	3 CHASS	IS	CREW CAB CHASSIS				
Transm	lission	F-450	F-450	F-450	F-450	F-450	F-450	F-450									
	Axle GCWR	4x2 DRW	4x2 DRW	4x2 DRW	4x2 DRW	4x4 DRW	4x4 DRW	4x4 DRW	4x4 DRW	4x2 DRW	4x2 DRW	4x4 DRW	4x4 DRW	4x2 DRW	4x2 DRW	4x4 DRW	4x4 DRW
Engine	Ratio (lbs.)	145 WB	169 WB	193 WB	205 WB	145 WB	169 WB	193 WB	205 WB	168 WB	192 WB	168 WB	192 WB	179 WB	203 WB	179 WB	203 WB
6.8L Sohc V10	4.88 28,000	17,500	17,500	17,500	17,500	17,500	17,500	17,500	17,500	17,500	17,500	17,500	17,500	17,500	17,500	17,500	17,500
6.7L	4.10 32,000	17,500	17,500	17,500	17,500	17,500	17,500	17,500	17,500	17,500	17,500	17,500	17,500	17,500	17,500	17,500	17,500
Diesel	4.30 34,500	17,500	17,500	17,500	17,500	17,500	17,500	17,500	17,500	17,500	17,500	17,500	17,500	17,500	17,500	17,500	17,500

F-450 SUPER DUTY CHASSIS CABS 5th-WHEEL TOWING

6.8L Sohc VI	4.88 28,000	20,600	20,400	20,100	19,900	20,300	20,100	19,800	19,600	20,300	20,000	20,000	19,700	20,200	19,900	19,900	19,600
6.7L V8	4.10 32,000	23,900	23,700	23,300	23,200	23,600	23,300	23,000	22,900	23,600	23,200	23,200	22,900	23,400	23,100	23,100	22,800
Diesel	4.30 34,500	26,400	26,200	25,800	25,700	26,100	25,800	25,500	25,400	26,100	25,700	25,700	25,400	25,900	25,600	25,600	25,300

 Super Duty Chassis Cab does not offer a conventional hitch receiver as a factoryinstalled option. Note: Trailer tongue (trailer king pin for 5th-wheel towing) load weight should be 10% (15% for 5th-wheel towing) of total loaded trailer weight. Make sure vehicle payload (reduce by option weight) will accommodate trailer tongue (trailer king pin for 5th-wheel towing) load weight and weight of passengers and cargo added to towing vehicle. Addition of trailer tongue (trailer king pin for 5th-wheel towing) load weight and weight of passengers and cargo must not cause vehicle weights to exceed rear GAWR or GVWR. These ratings can be found on the vehicle Safety Compliance Certification Label.



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F-550 SUPER DUTY CHASSIS CABS CONVENTIONAL TOWING⁽¹⁾

Maximum Loaded Trailer Weight (lbs.)

Trailer weights shown assume 400-lb.-800-lb. second-unit body weight. Be sure combined weight of vehicle and trailer does not exceed listed GCWR.

Automatic				REG	JULAR C	AB CHAS	SIS			S	UPERCA	B CHASS	is	CREW CAB CHASSIS				
Transmissi	ion	F-550	F-550	F-550	F-550													
Axle	e GCWR	4x2 DRW	4x2 DRW	4x2 DRW	4x2 DRW	4x4 DRW	4x4 DRW	4x4 DRW	4x4 DRW	4x2 DRW	4x2 DRW	4x4 DRW	4x4 DRW	4x2 DRW	4x2 DRW	4x4 DRW	4x4 DRW	
Engine Ratio	io (lbs.)	145 WB	169 WB	193 WB	205 WB	145 WB	169 WB	193 WB	205 WB	168 WB	192 WB	168 WB	192 WB	179 WB	203 WB	179 WB	203 WB	
6.8L SOHC V10 4.88	8 28,000	18,500	18,500	18,500	18,500	18,500	18,500	18,500	18,500	18,500	18,500	18,500	18,500	18,500	18,500	18,500	18,500	
6.7L 4.10	0 32,000	18,500	18,500	18,500	18,500	18,500	18,500	18,500	18,500	18,500	18,500	18,500	18,500	18,500	18,500	18,500	18,500	
Diesel 4.30	0 35,000	18,500	18,500	18,500	18,500	18,500	18,500	18,500	18,500	18,500	18,500	18,500	18,500	18,500	18,500	18,500	18,500	
4.88	8 32,000	18,500	18,500	18,500	18,500	18,500	18,500	18,500	18,500	18,500	18,500	18,500	18,500	18,500	18,500	18,500	18,500	
	40,000(2)	18,500	18,500	18,500	18,500	18,500	18,500	18,500	18,500	18,500	18,500	18,500	18,500	18,500	18,500	18,500	18,500	

F-550 SUPER DUTY CHASSIS CABS 5th-WHEEL TOWING

6.8L Sohc V1	0 4.88 28,000	20,600	20,400	20,100	19,900	20,300	20,100	19,800	19,600	20,300	20,000	20,000	19,700	20,200	19,900	19,900	19,600
6.7L V8	4.10 32,000	23,900	23,700	23,300	23,200	23,600	23,300	23,000	22,900	23,600	23,200	23,200	22,900	23,400	23,100	23,100	22,800
Diesel	4.30 35,000	26,900	26,700	26,300	26,200	26,600	26,300	26,000	25,900	26,600	26,200	26,200	25,900	26,400	26,100	26,100	25,800
	4.88 32,000	23,900	23,600	23,300	23,100	23,500	23,300	23,000	22,800	23,500	23,200	23,200	22,900	23,400	23,100	23,100	22,800
	40,000(2)	31,900	31,600	31,300	31,100	31,500	31,300	31,000	30,800	31,500	31,200	31,200	30,900	31,400	31,100	31,100	30,800

(1) Super Duty Chassis Cab does not offer a conventional hitch receiver as a factoryinstalled option. (2) Available with High-Capacity Trailer Tow Package only. Note: Trailer tongue (trailer king pin for 5th-wheel towing) load weight should be 10% (15% for 5th-wheel towing) of total loaded trailer weight. Make sure vehicle payload (reduce by option weight) will accommodate trailer tongue (trailer king pin for 5th-wheel towing) load weight and weight of passengers and cargo added to towing vehicle. Addition of trailer tongue (trailer king pin for 5th-wheel towing) load weight and weight of passengers and cargo must not cause vehicle weights to exceed rear GAWR or GVWR. These ratings can be found on the vehicle Safety Compliance Certification Label.



KNOW BEFORE YOU TOW

BEFORE YOU BUY

If you are selecting a vehicle that will be used for towing, you should determine the approximate weight of the trailer you intend to tow, including the weight of any additional cargo and fluids that you will be carrying in the trailer. Also, be sure the vehicle has the proper optional equipment. Keep in mind that performance can be severely affected in hilly terrain when the minimum acceptable powertrain combination is selected. Consider purchasing a vehicle with a more powerful engine.

Brakes

Many states require a separate braking system on trailers with a loaded weight of more than 1,500 pounds. For your safety, Ford Motor Company recommends that a separate functional brake system be used on any towed vehicle, including those dolly-towed or towbar-towed. There are several basic types of brake systems designed to activate trailer brakes:

Electronically Controlled Brakes usually provide automatic and manual control of trailer brakes. They require that the tow vehicle be equipped with a controlling device and additional wiring for electrical power. These brakes typically have a control box installed within reach of the driver and can be applied manually or automatically.

Electric-Over-Hydraulic (EOH) Trailer Brakes are operated by an electrically powered pump that pressurizes a hydraulic fluid reservoir built into the trailer's brake system. Many of the available EOH trailer brake models are compatible with the Ford factory installed, dash-integrated Trailer Brake Controller (TBC).

Surge Brakes are independent hydraulic brakes activated by a master cylinder at the junction of the hitch and trailer tongue. They are not controlled by the hydraulic fluid in the tow vehicle's brake system and the tow vehicle's hydraulic system should never be connected directly to the trailer's hydraulic system.

Be sure your trailer brakes conform to all applicable state regulations. See Safe Towing for All Vehicles on the last page for additional braking information.

AFTER YOU BUY

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Before heading out on a trip, check your vehicle's Owner's Manual for break-in and severe-duty maintenance schedules (do not tow a trailer until your vehicle has been driven at least 1,000 miles). Be sure to have your fully-loaded vehicle (including passengers) and trailer weighed so as not to exceed critical weight limits. If any of these limits are exceeded, cargo should be removed from the vehicle and/or trailer until all weights are within the specified limits.

Trailer Lamps

Make sure the trailer is equipped with lights that conform to all applicable government regulations. The trailer lighting system should not be connected directly to the lighting system of the vehicle. See a local recreational vehicle dealer or rental trailer agency for correct wiring and relays for the trailer and heavyduty flashers.

Safety Chains

- Always use safety chains when towing. Safety chains are used to retain connection between the towing and towed vehicle in the event of separation of the trailer coupling or ball
- Cross chains under the trailer tongue to prevent the tongue from contacting the ground if a separation occurs. Allow only enough slack to permit full turning – be sure they do not drag on the pavement
- When using a frame-mounted trailer hitch, attach the safety chains to the frame-mounted hitch using the recommendations supplied by the hitch manufacturer
- See your vehicle's Owner's Manual for safety chain attachment information
- For rental trailers, follow rental agency instructions for hookup of safety chains

Trailer Wiring Harness

- Some vehicles equipped with a factory-installed Trailer Tow Package include a trailer wiring harness and a wiring kit
- This kit includes one or more jumper harnesses (to connect to your trailer wiring connector) and installation instructions

SAFE TOWING FOR ALL VEHICLES

Towing a trailer is demanding on your vehicle, your trailer and your personal driving skills. Follow some basic rules that will help you tow safely and have a lot more fun.

For the latest RV & Trailer Towing information, check out www.fleet.ford. com/towing-guides or go to esourcebook. dealerconnection.com.

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Many of the recreational vehicles shown in this brochure are modified or manufactured by companies other than Ford Motor Company. Ford assumes no responsibility for such modifications or manufacturing.

Weight Distribution

For optimum handling and braking, the load must be properly distributed

Keep center of gravity low for best handling

Approximately 60% of the allowable cargo weight should be in the front half of the trailer and 40% in the rear (within limits of tongue load or king pin weight)

Load should be balanced from side-toside to optimize handling and tire wear

Load must be firmly secured to prevent shifting during cornering or braking, which could result in a sudden loss of control

Before Starting

Before setting out on a trip, practice turning, stopping and backing up your trailer in an area away from heavy traffic

Know clearance required for trailer roof

Check equipment (make a checklist)

Backing Up

Back up slowly, with someone spotting near the rear of the trailer to guide you

Place one hand at bottom of steering wheel and move it in the direction you want the trailer to go

Make small steering inputs – slight movement of steering wheel results in much greater movement in rear of trailer

Turning

When turning, be sure to swing wide enough to allow trailer to avoid curbs and other obstructions.

Braking

Allow considerably more distance for stopping with trailer attached

Remember, the braking system of the tow vehicle is rated for operation at the GVWR, not GCWR

If your tow vehicle is an F-150, F-Series Super Duty®, Transit or Expedition and your trailer has electric brakes, the optional Integrated Trailer Brake Controller (TBC) assists in smooth and effective trailer braking by powering the trailer's electric or electric-over-hydraulic brakes with proportional output based on the towing vehicle's brake pressure

If you are experiencing trailer sway and your vehicle is equipped with electric brakes and a brake controller, activate the trailer brakes with the brake controller by hand. Do not apply the tow vehicle brakes as this can result in increased sway

Towing On Hills

Downshift the transmission to assist braking on steep downgrades and to increase power (reduce lugging) when climbing hills With TorqShift® transmission, select tow/ haul mode to automatically eliminate unwanted gear search when going uphill and help control vehicle speed when going downhill

Parking With A Trailer

Whenever possible, vehicles with trailers should not be parked on a grade. However, if it is necessary, place wheel chocks under the trailer's wheels, following the instructions below.

Apply the foot service brakes and hold

Have another person place the wheel chocks under the trailer wheels on the downgrade side

Once the chocks are in place, release brake pedal, making sure the chocks will hold the vehicle and trailer

Apply the parking brake

Shift automatic transmission into park, or manual transmission into reverse

With 4-wheel drive, make sure the transfer case is not in neutral (if applicable)

Starting Out Parked On A Grade

Apply the foot service brake and hold

Start the engine with transmission in park (automatic) or neutral (manual)

Shift the transmission into gear and release the parking brake

Release the brake pedal and move the vehicle uphill to free the chocks

Apply the brake pedal while another person retrieves the chocks

Acceleration And Passing

The added weight of the trailer can dramatically decrease the acceleration of the towing vehicle – exercise caution.

When passing a slower vehicle, be sure to allow extra distance. Remember, the added length of the trailer must clear the other vehicle before you can pull back in

Signal and make your pass on level terrain with plenty of clearance

If necessary, downshift for improved acceleration

Driving With An Automatic Overdrive Transmission

With certain automatic overdrive transmissions, towing – especially in hilly areas – may cause excessive shifting between overdrive and the next lower gear.

To eliminate this condition and achieve steadier performance, overdrive can be locked out (see vehicle Owner's Manual)

If excessive shifting does not occur, use overdrive to optimize fuel economy

Overdrive may also be locked out to obtain engine braking on downgrades

When available, select tow/haul mode to automatically eliminate unwanted gear search and help control vehicle speed when going downhill

Driving With Cruise Control

Turn off the cruise control with heavy loads or in hilly terrain. The cruise control may turn off automatically when you are towing on long, steep grades. Use caution while driving on wet roads and avoid using cruise control in rainy or winter weather conditions.

Tire Pressure

Underinflated tires get hot and may fail, leading to possible loss of vehicle control

Overinflated tires may wear unevenly and compromise traction and stopping capability

Tires should be checked often for conformance to recommended cold inflation pressures

Spare Tire Use

A conventional, identical full-size spare tire is required for trailer towing (mini, compact and dissimilar full-size spare tires **should not** be used; always replace the spare tire with a new road tire as soon as possible).

On The Road

After about 50 miles, stop in a protected location and double-check:

Trailer hitch attachment

Lights and electrical connections

Trailer wheel lug nuts for tightness

Engine oil – check regularly throughout trip

High Altitude Operation

Gasoline engines lose power by 3-4% per 1,000 ft. elevation. To maintain performance, reduce GVWs and GCWs by 2% per 1,000 ft. elevation starting at the 1,000 ft. elevation point.

Powertrain/Frontal Area Considerations

The charts in this Guide show the minimum engine size needed to move the GCW of tow vehicle and trailer.

Under certain conditions, however, (e.g., when the trailer has a large frontal area that adds substantial air drag or when trailering in hilly or mountainous terrain) it is wise to choose a larger engine

Selecting a trailer with a low-drag, rounded front design will help optimize performance and fuel economy

Note: For additional trailering information pertaining to your vehicle, refer to the vehicle Owner's Manual.