



# LINCOLN TOWING GUIDE



2022



## LINCOLN TOWING GUIDE

# Purposeful technology and effortless performance.

From light to heavy loads, Lincoln incorporates effortless performance and advanced technology to help you work harder and make playing more fun, too. Crossovers, like the Aviator, can tow up to 5600 lbs. when properly equipped. Navigator lets you enhance your adventures with an available tow rating of 8300 lbs.<sup>1</sup> for piloting even the toughest towing challenges. And available driver-assist towing technologies let you tow your boat, camper or other road-trip essentials with the utmost of ease and confidence.

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### SAE TOWING STANDARD

The Society of Automotive Engineers (SAE) testing standard J2807<sup>®</sup> defines procedures and requirements to determine gross combined weight ratings (GCWR) and to calculate the trailer weight rating (TWR) for any tow vehicle. This standard establishes minimum performance conditions to allow for consistent comparisons between similar class vehicles.

<sup>1</sup> Standard-length Navigator only; Navigator L is rated at 8100 lbs.

## TRAILER TOWING SELECTOR

### AUTOMATIC TRANSMISSION

### MAXIMUM LOADED TRAILER WEIGHT (lbs.)<sup>1</sup>

Engine	Axle Ratio	GCWR (lbs.)	NAVIGATOR	NAVIGATOR L
			4x4	4x4
Twin-Turbocharged 3.5L V6	3.73	12,700	6200	
				6600
			8300	
				8100

<sup>1</sup>Maximum loaded trailer weight requires weight-distributing hitch. See page 9 for additional information.

<sup>2</sup>Requires available Class IV Heavy-Duty Trailer Towing Package (536).

**Notes:** • Navigator calculated with SAE J2807<sup>®</sup> method.

- Trailer tongue load weight should be 10% of total loaded trailer weight. **Make sure vehicle payload (reduced by option weight) will accommodate trailer tongue load weight and weight of passengers and cargo added to towing vehicle.** Addition of trailer tongue load weight and weight of passengers and cargo cannot cause vehicle weights to exceed rear GAWR or GVWR. These ratings can be found on the vehicle Safety Compliance Certification Label.
- Combined weight of vehicle and trailer cannot exceed listed GCWR.
- Do not exceed the Maximum Loaded Trailer Weight listed.

## 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.

## REAR AXLE RATIO CODE

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.

## AVAILABLE TRAILER TOWING PACKAGE

EQUIPMENT	Standard	Option Code	
		536	62E
7-Wire Harness and 4-/7-Pin Connector	X	S	
Class IV Hitch Receiver	X	S	
Trailer Sway Control	X	S	
Smart Trailer Tow	X	S	
Heavy-Duty Radiator		X	
2-Speed Transfer Case (4x4)		X	
Trailer Reverse Guidance		X	
Pro Trailer Backup Assist <sup>™</sup> 2.0		X	
Trailer Brake Controller (TBC)		X	
Front Tow Hooks		X	
Tiered Cargo Area Management System		X	
Electronic Traction Assist (eLSD)			X

Rear Axle Ratio	Non-Limited Slip	Electronic Limited Slip (eLSD)
3.73	3N	3L

## FRONTAL AREA CONSIDERATIONS

Frontal Area is the total area in square feet that a moving vehicle and trailer exposes to air resistance. The chart below 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.

### TRAILER FRONTAL AREA LIMITATIONS/CONSIDERATIONS

55 sq. ft.	Without Heavy-Duty Trailer Towing Package
60 sq. ft.	With Heavy-Duty Trailer Towing Package

# 2022 NAVIGATOR



Metric Conversion – To obtain information in kilograms, multiply pounds by .45; to obtain information in square metres, multiply square feet by .09.

Navigator Reserve with available features in Flight Blue Metallic Clearcoat

## FACTORY-INSTALLED TRAILER HITCH RECEIVER OPTION

Standard on Navigator.

The chart below shows the weight-carrying and weight-distributing capacities of these hitch receivers. (These capacities also are shown on a label affixed to each receiver.)

VEHICLE	Weight-Carrying Max. Trailer Capacity (lbs.) <sup>3</sup>	Max. Tongue Load (lbs.)	Weight-Distributing Max. Trailer Capacity (lbs.) <sup>3</sup>	Max. Tongue Load (lbs.)
<b>Navigator</b>	6200	620	8300	830
<b>Navigator L</b>	6600	660	8100	810

<sup>3</sup>Hitch receivers do not include a hitch ball or ball mounting. You are responsible for obtaining the proper hitch ball, ball mounting, weight-distributing equipment (e.g., equalizing arms and snap-up brackets, sway control system) and other appropriate equipment to tow both the trailer and its cargo load.



## TRAILER TOWING SELECTOR

AUTOMATIC TRANSMISSION		MAXIMUM LOADED TRAILER WEIGHT (lbs.)
Engine	Axle Configuration	NAUTILUS
Turbocharged 2.0L I-4	AWD	1500
		3500 <sup>1,2</sup>
Twin-Turbocharged 2.7L V6	AWD	2000
		3500 <sup>1,2</sup>

<sup>1</sup>Requires Class II Trailer Towing Package (53G). <sup>2</sup>Requires Cargo Utility Package (51U).

**Notes:** • Nautilus calculated with SAE J2807® method.

- Do not exceed the Maximum Loaded Trailer Weight listed.
- Certain Canadian provinces and territories (as well as American states) require electric trailer brakes for trailers over a specified weight. Be sure to check local regulations for this specified weight.

**WARNING:** Do not tow a trailer fitted with electric trailer brakes unless your vehicle is fitted with a compatible aftermarket electronic trailer brake controller. Failure to follow this instruction could result in the loss of control of your vehicle, personal injury or death. For additional information and assistance, we recommend that you contact an authorized dealer.

### 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 towing capacity over 1500 pounds with 2.0L I-4 engine – Class II Trailer Towing Package (53G).

For towing capacity over 2000 pounds with 2.7L V6 engine – Class II Trailer Towing Package (53G).

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

### FRONTAL AREA CONSIDERATIONS

Frontal Area is the total area in square feet that a moving vehicle and trailer exposes to air resistance. The chart below 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.

#### TRAILER FRONTAL AREA LIMITATIONS/CONSIDERATIONS

20 sq. ft. (Base Vehicle Frontal Area)	Without Class II Trailer Towing Package
30 sq. ft.	With Class II Trailer Towing Package

### FACTORY-INSTALLED TRAILER HITCH RECEIVER OPTION

Included with Class II Trailer Towing Package – Option Code 53G

The chart below shows the weight-carrying capacity of this hitch receiver. (This capacity also is shown on a label affixed to the receiver.)

Weight-Carrying Max. Trailer Capacity (lbs.) <sup>3</sup>	Max. Tongue Load (lbs.)
3500	350

<sup>3</sup>Hitch receivers do not include a hitch ball or ball mounting. You are responsible for obtaining the proper hitch ball, ball mounting, and other appropriate equipment to tow both the trailer and its cargo load.

# 2022 NAUTILUS



Nautilus Reserve with available features in Gilded Green Metallic Clearcoat

**M** Metric Conversion – To obtain information in kilograms, multiply pounds by .45; to obtain information in square metres, multiply square feet by .09.

## TRAILER TOWING SELECTOR

AUTOMATIC TRANSMISSION

MAXIMUM LOADED TRAILER WEIGHT (lbs.)

Engine	Final Drive Ratio	GCWR (lbs.)		CORSAIR	
		AWD	eAWD	CORSAIR	CORSAIR GRAND TOURING PLUG-IN HYBRID
Turbocharged 2.0L I-4	3.81	7280		2000 <sup>1</sup> /3000 <sup>2</sup>	
Turbocharged 2.3L I-4	3.81	7289		3000 <sup>2</sup>	
Atkinson-cycle 2.5L I-4	2.91		7839		3000 <sup>2</sup>

<sup>1</sup>Dealership or aftermarket hitch receiver installation can only be rated at 2000 lbs. (maximum trailer tow capacity on 2.0L engine application). <sup>2</sup>Requires factory-installed Class II Towing Package (18C).

- Notes:**
- Corsair calculated with SAE J2807<sup>®</sup> method.
  - Combined weight of vehicle and trailer cannot exceed listed GCWR.
  - Do not exceed the Maximum Loaded Trailer Weight listed.
  - Certain Canadian provinces and territories (as well as American states) require electric trailer brakes for trailers over a specified weight. Be sure to check local regulations for this specified weight.
- WARNING:** Do not tow a trailer fitted with electric trailer brakes unless your vehicle is fitted with a compatible aftermarket electronic trailer brake controller. Failure to follow this instruction could result in the loss of control of your vehicle, personal injury or death. For additional information and assistance, we recommend that you contact an authorized dealer.

### 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 trailers over 2000 pounds – Class II Towing Package (18C).

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

### AVAILABLE TOWING PACKAGE

EQUIPMENT	Option Code 18C
Trailer Harness (4-Pin)	X
Trailer Sway Control	X
Hitch Receiver	X

**Note:** Trailer Towing Equipment recommended for all vehicles that will be used for towing to help ensure easy, proper connection of trailer lights. Items must be purchased separately to comply with towing weight capacity.

### FRONTAL AREA CONSIDERATIONS

Frontal Area is the total area in square feet that a moving vehicle and trailer exposes to air resistance. The chart below 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.

#### TRAILER FRONTAL AREA LIMITATIONS/CONSIDERATIONS

20 sq. ft. (Base Vehicle Frontal Area)	Without Class II Towing Package
30 sq. ft.	With Class II Towing Package

### FACTORY-INSTALLED TRAILER HITCH RECEIVER OPTION

The chart below shows the weight-carrying capacity of this hitch receiver. (This capacity also is shown on a label affixed to each receiver.)

Weight-Carrying Max. Trailer Capacity (lbs.) <sup>3</sup>	Max. Tongue Load (lbs.)
3000	300

<sup>3</sup>Hitch receivers do not include a hitch ball or ball mounting. You are responsible for obtaining the proper hitch ball, ball mounting and other appropriate equipment to tow both the trailer and its cargo load.

# 2022 CORSAIR



Corsair Grand Touring with available features in Pristine White Metallic Tri-Coat

**M** Metric Conversion – To obtain information in kilograms, multiply pounds by .45; to obtain information in square metres, multiply square feet by .09.

## FOUR-WHEEL-DOWN TOWING

Many motorhome owners prefer the practicality of having another vehicle along when they travel. In fact, towing another vehicle behind the motorhome has become more and more popular in recent years. Furthermore, many of those who want to tow another vehicle prefer one that can be easily towed without a dolly or trailer. For safe operation, towed vehicles (or dollies or trailers carrying them) should be equipped with a separate functional brake system. See last page for additional brake information.



Individual vehicles have different restrictions and towing procedures. Contact your dealer for complete details.

# Towing your Lincoln vehicle behind a motorhome.

## TOW-DOLLY TOWING

Tow-dollies allow you to tow your vehicle behind a RV or motorhome if you are unable to four-wheel-down your car, CUV or SUV. Tow-dollies work by elevating the front drive wheels of the vehicle to rest securely on it while the back two wheels stay on the ground. They are not as long as the traditional trailers, which helps make turning corners easier. As all gasoline-powered Lincoln models sold in Canada are 4WD/AWD, dolly-towing is **not** allowed. Only Corsair Grand Touring, which uses a mechanically different eAWD system, allows Dolly-Towing. Consult the vehicle Owner's Manual for specific procedures and recommendations.

Before using the tow-dolly there are a few things you must know before towing. Read the manufacturer's instructions that came with the tow-dolly before towing, loading or unloading the dolly. Attach the appropriate trailer hitch and drawbar hardware to the vehicle for the tow-dolly. Attach the dolly to the drawbar. The dolly should be completely secure and on level ground before the vehicle to be towed is put on or taken off the dolly. Drive the vehicle onto the dolly with its front wheels. Secure the vehicle to the tow-dolly according to the manufacturer's instructions. Follow the instructions for attaching and connecting the auxiliary lights to the back of the vehicle being towed. Test the auxiliary lights to make sure that the turn signals, stop lamps and running lights work properly.

## 2022 LINCOLN ELECTRIFIED VEHICLES Automatic Transmission

Corsair Grand Touring	No
Aviator Grand Touring	No

## 2022 LINCOLN CUVs/SUVs

Corsair	No
Nautilus Turbocharged 2.0L	No
Nautilus Twin-Turbocharged 2.7L	Yes <sup>1,2,3</sup>
Aviator	No
Navigator/Navigator L 4x4	Yes <sup>4,5</sup>

<sup>1</sup>Maximum speed with automatic transmission is 105 km/h (65 mph). <sup>2</sup>Start the engine and allow it to run for five (5) minutes at the beginning of each day and every six (6) hours thereafter. <sup>3</sup>Activate Manual Park Release (MPR) – refer to Owner's Manual transmission section to follow procedure. <sup>4</sup>Vehicle equipped with optional Heavy-Duty Trailer Towing Package and 2-speed transfer case. <sup>5</sup>Shift the transfer case in neutral. Refer to Owner's Manual to follow procedure.

**Note:** Some aftermarket camper centres offer kits that may allow vehicles with automatic transmissions to be flat-towed. Check your new vehicle Warranty Guide, as this could void the warranty of your vehicle.

## 2022 LINCOLN VEHICLES AWD/4WD<sup>1</sup>

Corsair	No
Corsair Grand Touring	No
Nautilus	No
Aviator	No
Navigator / Navigator L	No

<sup>1</sup>AWD/4WD vehicles cannot be towed with two wheels lifted off the ground.

<sup>2</sup>Maximum speed with hybrid transmission is 112 km/h (70 mph).

# What to 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 (refer to pages 3–6). Keep in mind that performance can be severely affected on hilly terrain when the minimum acceptable powertrain combination is selected. Consider purchasing a vehicle with a more powerful engine.

## AFTER YOU BUY

Before heading out on a trip, check your vehicle owner's manual for break-in and severe-duty maintenance schedules (do not tow a trailer until your vehicle has been driven at least 1600 km). Be sure to have your fully-loaded vehicle (including passengers) and trailer weighed so as not to exceed critical weight limits (refer to page 11). 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.

## BRAKES

Many Canadian provinces and territories (as well as American states) require a separate braking system on trailers with a loaded weight of more than 1500 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 Lincoln 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 local governmental regulations. See *Towing Basics* on the last page for additional braking information.

## 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 heavy-duty 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.

Refer to your 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.

# Trailer Classes

## Class I LIGHT-DUTY

2000-lb. maximum weight (trailer and cargo combined).  
Small folding camping trailers and trailers for small boats, motorcycles and snowmobiles.  
Many Lincoln vehicles can handle easily.  
Conventional weight-carrying hitch.

## Class II MEDIUM-DUTY

2001–3500-lb. gross trailer weight.  
Large folding camping trailers, single-axle, small- to medium-length (up to 18-ft.) trailers.  
Lincoln compact SUVs can be equipped to tow these trailers<sup>1</sup>.  
Conventional weight-distributing hitch not required unless specified for a particular vehicle.

## Class III HEAVY-DUTY

3501–5000-lb. gross trailer weight.  
Dual-axle or large single-axle travel trailers.  
Only properly equipped Lincoln SUVs can tow them<sup>1</sup>.  
Conventional weight-distributing hitch not required unless specified for a particular vehicle.

## Class IV EXTRA-HEAVY-DUTY

Over 5000-lb. gross trailer weight.  
Largest travel trailers made for recreation.  
Only Aviator and Navigator can be equipped to handle trailer weights in this class<sup>1</sup>.  
Most applications require a conventional weight-distributing hitch.  
<sup>1</sup>Refer to pages 3–6 for required equipment.

# Hitches



## WEIGHT-CARRYING (NON-WEIGHT-DISTRIBUTING)

A weight-carrying (non-weight-distributing) hitch is commonly used to tow small- and medium-sized trailers. Choose a proper hitch and ball, and make sure its location is compatible with that of the trailer. Use a good weight-carrying hitch that uniformly distributes the trailer tongue loads through the bumper and frame (bumper hitch not available with Navigator). Lincoln hitch receivers provide weight-carrying capacities as shown in each chart (refer to pages 3–6). (A label affixed to the hitch receiver provides both the weight-carrying and weight-distributing capacities for each receiver.) You are responsible for obtaining the proper hitch ball, ball mounting and other appropriate equipment to tow both the trailer and load that will be towed.

## WEIGHT-DISTRIBUTING

A weight-distributing hitch is used in conjunction with a hitch platform (receiver) to distribute tongue load to all towing vehicle and trailer wheels. Required for certain Class III and all Class IV applications (refer to each chart on pages 3–6).

Weight-distributing hitch platforms are welded or bolted to the vehicle frame. Bolt-on types are recommended because they can be removed.

A properly installed bolt-on weight-distributing hitch platform should not weaken the vehicle or underbody as heat of welding might.

Equalizing arms are connected from the hitch to the trailer's A-frame. They can be adjusted for best towing performance. Lengths of chain are pulled up and tightened to bend spring bars upward, which lifts some of the weight from the rear wheels and transfers weight to the other wheels of the vehicle and trailer.



# Trailer Types

## FOLDING CAMPING TRAILER

**These are very cost effective units providing campers with a comfortable, dry, mobile shelter, plus these added benefits:**



Lightweight for easy towing.  
Simple conventional weight-carrying hitch is usually sufficient for towing.  
Compact, low-profile traveling package.  
Easily manoeuvrable – generally 8 to 16 feet long.

## CONVENTIONAL TRAVEL TRAILER

**Generally larger, rigid construction units offering more of the conveniences of home, including such features as kitchen sink, dinette, shower, refrigerator and flush toilet. Additional benefits include:**



Widely varied levels of roominess, comfort and luxury – depending on the towing capacity of your vehicle and your budget.  
Sizes usually range from 12 to 35 feet long.  
Normally towed with a conventional weight-distributing hitch, depending on weight.

# Calculating weight distribution.

## WEIGHT DISTRIBUTION HITCH SETUP

VEHICLE	WEIGHT DISTRIBUTION CORRECTION FACTOR
Corsair	Not Required
Nautilus	Not Required
Aviator	Not Required
Navigator	50%

### CALCULATION

Vehicle =	
H1 =	
H2 =	
Correction Factor =	
Height Change =	(H2) minus (H1)
Reduction Amount =	(Height Change) times (Correction Factor)
Height Change =	(H2) minus (Reduction Amount)
Target Height =	

### CALCULATION EXAMPLE

Vehicle =	<b>Navigator</b>
H1 =	<b>37 inches</b>
H2 =	<b>38 inches</b>
Correction Factor =	<b>50%</b>
Height Change =	<b>38" - 37" = 1 inch</b>
Reduction Amount =	<b>1" x 50% = .50 inch</b>
Height Change =	<b>38" - .50" = 37.50 inches</b>
Target Height =	<b>37.50 inches</b>

- 1 Load trailer similar to the way it will be loaded for the trip with 10% tongue load and park on level ground.
- 2 Adjust trailer tongue jack to get trailer level or just slightly nose down.
- 3 Load tow vehicle similar to the way it will be used for the trip and park vehicle on level ground.
- 4 Adjust and secure weight distribution ball mount height per manufacturer's instructions so tow ball is the same height as trailer coupler when trailer is not connected to tow vehicle.
- 5 Measure top of front fender lip above the centre of the wheel to ground.
- 6 Record this value as "H1."



- 7 Connect trailer to tow ball with no weight distribution bars attached (make sure tongue jack is fully retracted).
- 8 Measure top of front fender lip above the centre of the wheel to ground.
- 9 Record this value as "H2."



- 10 Adjust weight distribution bars per manufacturer's instructions to get tow vehicle top front of fender lip to "Target Height" and make sure trailer is level to slightly nose down.
- 11 Complete coupler latching, electrical connections, safety chains and emergency braking system attachments.



# Weight Limits.

**Base Curb Weight** is the weight of the vehicle including a full tank of fuel and all standard equipment. It does not include passengers, cargo or any optional equipment. Your dealership sales consultant can give you this number for the vehicle(s) you are considering.

**Cargo Weight** includes all weight added to the Base Curb Weight, including cargo and optional equipment (check with your sales consultant). When towing, trailer tongue load weight is also part of the Cargo Weight.

**Payload** is the combined maximum allowable weight of cargo and passengers that the vehicle is designed to carry. It is the Gross Vehicle Weight Rating minus the Base Curb Weight.

$$\text{Base Curb Weight} + \text{Cargo Weight} + \text{Passenger Weight} = \text{Gross Vehicle Weight (GVW)}$$

GVW must not exceed GVWR (obtain from Safety Compliance Certification Label on the left front door lock facing or the door latch post pillar).

$$\text{GVW} + \text{Loaded Trailer Weight} = \text{Gross Combination Weight (GCW)}$$

GCW must not exceed GCWR (obtain from charts on pages 3 and 6 or your vehicle Owner's Manual).

**Gross Vehicle Weight (GVW)** is the Base Curb Weight plus actual Cargo Weight plus Passengers. It is important to remember that GVW is not a limit or specification – it is the actual weight that is obtained when the fully-loaded vehicle is driven onto a scale.

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

**Gross Axle Weight (GAW)** is the total weight placed on each axle (front and rear). To determine the Gross Axle Weights for your vehicle and trailer combination, take your loaded vehicle and trailer to a scale. With the trailer attached, place the front wheels of the vehicle on the scale to get the front GAW. For rear GAW, weigh the towing vehicle with trailer attached, but with just the four wheels of the vehicle on the scale. Subtracting front GAW from that amount gives you rear GAW.

**Gross Axle Weight Rating (GAWR)** is the maximum weight to be carried by a single axle (front or rear). These numbers are also shown on the Safety Compliance Certification Label. **The total load on each axle must never exceed its GAWR.**

# Know Your Weights.

**Gross Combination Weight (GCW)** is the weight of the loaded vehicle (GVW) plus the weight of the fully-loaded trailer. It is the actual weight obtained when the vehicle and trailer are weighed together on a scale.

**Gross Combination Weight Rating (GCWR)** is the maximum allowable weight of the towing vehicle and the loaded trailer – including all cargo and passengers – that the vehicle can handle without risking damage. (Important: The towing vehicle's brake system is rated for operation at the GVWR – NOT GCWR. Separate functional brake systems should be used for safe control of towed vehicles and for trailers weighing more than 1500 lbs. when loaded.) The measured GCW must never exceed the GCWR.

**Maximum Loaded Trailer Weight** is the highest possible weight of a fully-loaded trailer the vehicle can tow (as shown in the Trailer Towing Selector charts on pages 3–6), based on a minimum towing vehicle GVW. It assumes a towing vehicle with any mandatory options, no cargo, tongue load of 10% weight and driver and passenger (150 lbs. each). Weight of additional options, passengers, cargo and hitch must be deducted from this weight.

**Tongue Load Weight** is another critical measurement that must be made before towing. It refers to the amount of the trailer's weight that presses down on the trailer hitch. Too much tongue load weight can cause suspension/drivetrain damage, and can press the vehicle down in back causing the front wheels to lift to the point where traction, steering response and braking can be severely decreased. Too little tongue load weight can reduce rear-wheel traction and cause instability, which may result in tail wagging or jackknifing.

Tongue load weights must meet the following requirements:\*

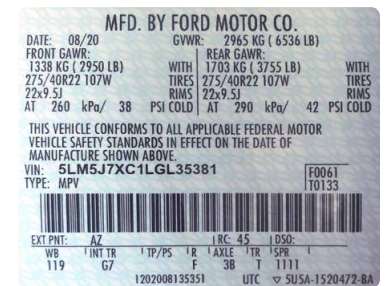
For trailers up to 2000 lbs., tongue load not to exceed 200 lbs.

For conventional trailers over 2000 lbs., tongue load is 10% of loaded trailer weight

**Example:** For a 5000-lb. conventional trailer, multiply 5000 by .10 to obtain a proper tongue load of 500 lbs.

**Note:** Be sure the addition of tongue load weight does not cause the key towing vehicle weight limits (GVWR and Rear GAWR) to be exceeded. Remember, GVWR and GAWR are found on the vehicle's Safety Compliance Certification Label (shown at right). If either of these limits is exceeded, you should go with a larger vehicle or a smaller trailer.

\*Refer to the charts on vehicle pages 3–6 for tongue load recommendations with Lincoln factory-installed trailer hitch receivers.



## MEASURING TONGUE LOAD WITH COMMERCIAL SCALE

To measure actual tongue load weight, disconnect the trailer and place only the tongue on a scale (at hitch ball receiver height). If the tongue load weight exceeds the upper weight limit, move more of the trailer contents rearward to achieve the recommended tongue load weight. If the tongue load weight is less than the lower limit, shift the load forward.

# Towing Basics.

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.

The content provided on this page is not “vehicle specific” and should be considered as basic towing information.

## CARGO AND WEIGHT DISTRIBUTION

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

Keep centre 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 weight).

Load should be balanced from side-to-side 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, practise 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 a Navigator 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.

## 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.

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.

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.

## TOWING ON HILLS

Downshift the transmission to assist braking on steep downgrades and to increase power (reduce lugging) when climbing hills.

## 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 (refer to the Owner's Manual).

If excessive shifting does not occur, use overdrive to enhance performance.

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 80 km, 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

Your vehicle may have reduced performance when operating at high altitudes and when heavily loaded or towing a trailer. While driving at elevation, in order to match driving performance as perceived at sea level, reduce GVWs and GCWs by 2% per 1000 ft. of elevation.

## POWERTRAIN/FRONTAL AREA CONSIDERATIONS

The charts in this Guide show the minimum powertrain needed to achieve an acceptable towing performance for the listed 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 vehicle with a higher rating.

Towing performance is maximized with a low-drag, rounded front design trailer.

## SELECTING A TRIM SERIES

Your specific vehicle's tow capability could be reduced based on weight of selected trim series and option content.

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