Frontal Area Considerations

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

Maximum payload and towing capabilities are for properly equipped base vehicles with required equipment and a 150-lb. driver and vary based on cargo, vehicle configuration, accessories and number of passengers. See label on door jamb for carrying capacity of a specific vehicle. Horsepower, torque, payload and towing are independent attributes and may not be achieved simultaneously. For additional information, see your Ford Dealer.
Cargo and 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-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, practice turning, stopping and backing up your trailer in an area away from heavy traffic.

Check equipment (make a checklist)

Back 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 towing 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 help 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 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 your 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 1,000 ft. 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.