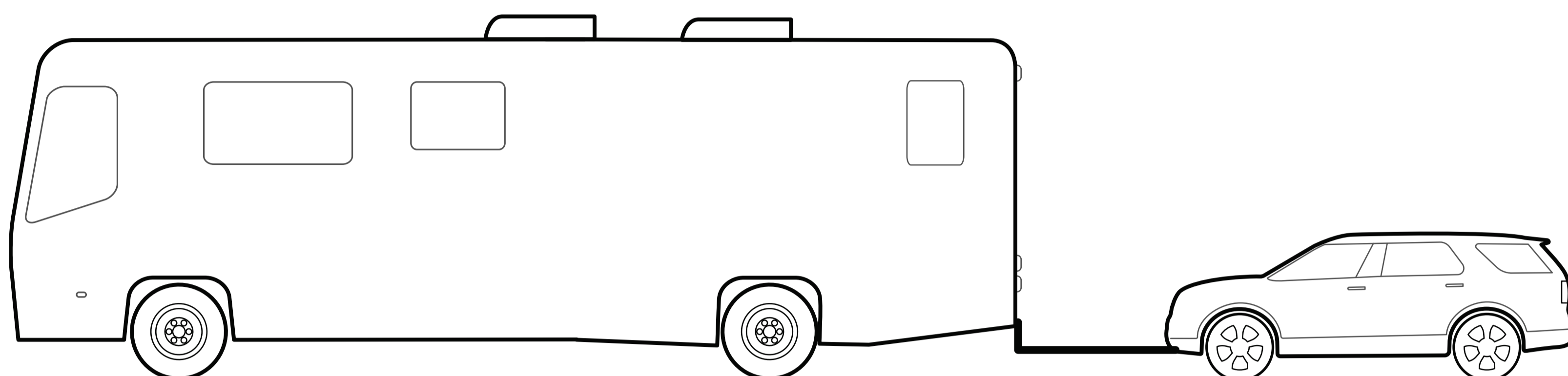


Flat Towing With Your FCCC Chassis

At Freightliner Custom Chassis, we understand there is a lot of information floating around the internet about flat towing a car with your motorhome. We put together the following to help simplify terminology, help owners of coaches powered by FCCC chassis find clarity in their towing calculations, and ultimately build their confidence when towing with their coach. We hope you'll find it helpful.

Towing Capacity Calculation



$$\text{GCWR (lbs)} - \text{Total Weight of Coach *(lbs)} = \text{Tow Capacity}$$

*Not to exceed GVWR

⚠ Safety Check: Confirm tow capacity is less than or equal to Tow Hitch Rating.

Important Flat Towing Terms

Before we calculate your towing capacity, let's quickly define a few terms we'll be using.

Flat Towing

Towing a vehicle with all four wheels on the ground. The most common tow solution is flat towing. Flat towing is towing a vehicle with all four tires positioned on the ground, rather than elevating the front two wheels on a tow dolly or pulling a car on a trailer. When flat towing, a tow bar connects to the front of the tow vehicle and is pulled behind the RV.

GVWR (Gross Vehicle Weight Rating)

This is the maximum loaded weight under which a vehicle can safely operate when weighing your coach with passengers, fuel and fluids, optional accessories and equipment, cargo, and the "tongue weight" of a tow trailer. This maximum weight is set by the manufacturer.

Actual Weight (Travel Weight)

The total weight of your loaded coach, including passengers, fuel and fluids, optional accessories and equipment, and cargo.

GAWR (Gross Axle Weight Rating)

This is the maximum allowable weight for one axle of your coach. Each axle on your coach has its own GAWR, and this weight must not be exceeded when you load your coach, or it will be considered unsafe.

GCWR (Gross Combination Weight Rating)

This is the total potential weight rating for a fully loaded coach combined with the weight of the tow vehicle.

Tow Hitch Rating

The tow hitch manufacturer's weight rating for the tow bar hitch itself. This is the maximum amount the coach could tow, if the calculated towing capacity is available. This rating is for the tow bar only and does not take into account actual GCWR, so it may not be an accurate representation of how much your specific coach can tow.

OEM - Original Equipment Manufacturer.

Flat Towing With Your FCCC Chassis

How much can you flat tow?

Your towing capacity is the weight your coach can tow when loaded and ready for travel. This means you will need to weigh your coach loaded, as you plan to travel: have at least 75% fuel in the tank; if you travel with water tanks full, fill them; and add all your camping cargo. To calculate your coach's maximum towing capacity, you need to know:

1. The GCWR of your coach. This number is provided by your OEM on the interior decal.
2. The **actual weight** of your coach. You can obtain this by weighing your coach with all cargo and items you plan on traveling with.
3. The hitch rating. This number is available on the hitch and is provided by either the OEM or FCCC.

To calculate maximum towing capacity, subtract the actual weight from the GCWR.

$$\text{GCWR} - \text{Actual Weight of Coach} = \text{Flat Towing Capacity}$$

Example: • Total GCWR: 33,000 lbs
• Actual weight: 25,842 lbs

$$\begin{aligned} \text{GCWR} - \text{Actual Weight} &= \text{Towing Capacity} \\ \mathbf{33,000 \text{ lbs} - 25,842 \text{ lbs}} &= \mathbf{7,158 \text{ lbs Towing Capacity}^*} \end{aligned}$$

*The calculated towing capacity can be no higher than the rating of your hitch.

⚠ Safety Check: Make sure the total actual weight of your coach **does not exceed the Gross Vehicle Weight Rating (GVWR) or the Gross Axle Weight Rating (GAWR).**

Estimating Average Towable Vehicle Weights

To tow your vehicle with your coach, your vehicle must weigh less than the towing capacity. If you don't know the weight of your specific vehicle, it's helpful to know that the average weight of a midsize SUV or truck is 4,259 lbs.*

***Reference:** cars.lovetoknow.com/List_of_Car_Weights

Flat Towing With Your FCCC Chassis

Flat Towing with Your Coach

The most common tow solution is flat towing. Flat towing is towing a vehicle with all four tires positioned on the ground, rather than elevating the front two wheels on a tow dolly. When flat towing, a vehicle tow bar connects to the front of the tow vehicle and is pulled from behind the RV.

Loaded Towing Capacity Worksheet

Weigh your coach at each tire position or (at minimum) each axle position.

	LEFT FRONT <input type="text"/> lbs	+	RIGHT FRONT <input type="text"/> lbs	=	TOTAL FRONT AXLE <input type="text"/> lbs
	LEFT REAR <input type="text"/> lbs	+	RIGHT REAR <input type="text"/> lbs	=	TOTAL DRIVE AXLE <input type="text"/> lbs
If equipped with a Tag...	LEFT TAG <input type="text"/> lbs	+	RIGHT TAG <input type="text"/> lbs	=	TOTAL TAG AXLE <input type="text"/> lbs

⚠ Safety Check: _____
 Confirm Total Axle Weights are no higher than the GAWR's. Make sure the Actual Weight is no higher than the GVWR.

+ Add Totals

ACTUAL WEIGHT OF COACH lbs

Towing Capacity Calculation

GCWR lbs

ACTUAL WEIGHT OF COACH lbs

⚠ Safety Check: _____
 *Confirm tow capacity is less than or equal to Tow Hitch Rating.

- Subtract Difference

TOW CAPACITY* lbs

The towing guidelines described above are for informational purposes only. It is not intended as a substitute for professional advice. Accordingly, Freightliner Custom Chassis Corp. and its affiliates disclaim any and all liability and responsibility for any damages, loss, or injury resulting from towing operations, miscalculations, wiring of tow vehicles, or any other use or misuse of these guidelines.