# **Understanding Towing**

When making decisions about your towing needs, always consult the vehicle owner's manual for vital information about the vehicle's capacities and limitations.

### **Hitch Towing Capacities**

Use this chart to determine the minimum capacity of hitch that is required. The figures shown are representative only and do not reflect actual hitch capacities. Always refer to the sticker (examples below) on the hitch for maximum hitch rating.

lbs. >>	1k	2k	3k	3.5k	4k	5k	6k	7k	8k	9k	10k	11k	12k	13k	14k	15k	16k	17k	18k
CLASS I (1	-1/4")																		
CLASS II (1-1/4")																			
CLASS III	(2")																		
CLASS IV	(2")																		
CLASS V (	2")																		
CLASS V (	2-1/2"	)																	
Note: Always refer to the (WC) & (WD) ratings on the hitch label. Some CLASS V Receivers exceed the above chart.													art.						

#### Weight Carrying Capacity (WC)

The weight carrying capacity is total weight a trailer hitch can safely tow without adding a weight distribution system.

#### Weight Distribution Capacity (WD)

The weight distribution capacity is the maximum amount of weight a trailer hitch can safely tow with a weight distribution hitch installed.

#### **Gross Trailer Weight (GTW)**

The gross trailer weight is the total weight of a trailer and it's cargo.

#### Tongue Weight (TW)

Tongue weight is the weight of a trailer exerted at the vehicle-trailer coupling point when the trailer is fully loaded and hooked up for towing. The trailer tongue weight should be about 10-15% of it's gross weight







# **Specialized Towing**

In the towing Industry, there are times when more specialized equipment is required to meet the demands of towing a heavy load. The following items will provide a safer and more enjoyable towing experience.

An excessive amount of tongue weight on the rear of a vehicle causes the front end to raise, this puts a strain on the control you have and increases the stopping distance of the vehicle. There is a way to maintain safety on the road and reduce the stress on your vehicle in one unique product.

Weight Distribution Hitches



There are many styles of Weight Distribution Hitches available to resolve this issue. Capacities range from 5,000 lbs. GTW / 500 lbs. TW to 18,000 lbs. GTW / 1,800 lbs. TW When using a W/D hitch always stay within the noted capacity and rating.









(GTW) Gross Trailer Weight – (TW) Tongue Weight – (WC) Weight Carrying – (WD) Weight Distribution











# **Specialized Towing**

A 5<sup>th</sup> Wheel Trailer Hitch is designed to mount into the pickup truck bed over the rear axle. This type of hitch can handle up to 25,000 lbs. 5<sup>th</sup> wheel hitches provide a wider turn radius and an over all smoother and more comfortable ride.

Hitch capacities range from 15,000 lbs. to 25,000 lbs.

## 5<sup>th</sup> Wheel Hitches

- Entry level hitches have a slide jaw and are normally 15,000 lbs. to 16,000 lbs.
- Better hitches come with a wrap around jaw
- Rails in the bed are referred to as "ISR" Industry Standard Rails
- Newer model trucks may offer an OEM trailer tow package with a "Puck System"



### Can I tow a 5<sup>th</sup> wheel trailer with a short bed pickup?

The answer is a cautionary yes!

If the truck bed is less then eight feet long, You should install a slider/roller 5<sup>th</sup> wheel hitch assembly. These hitches are available in both manual and automatic sliders, automatic units can be very heavy.







# **Electronic Brake Controllers**

Electric Brake Controllers supply power from the tow vehicle to the trailers electric brakes. There are many styles available that can handle from 2 to 8 brakes (1 to 4 axles). Newer model trucks are prewired for easy installation of brake controls. Some new model trucks may have a controller built into the dashboard. There are two main groups to choose from. *Time Delayed Brake Controllers, or Proportional Brake Controllers* 

### **Time Delayed Controllers**

Time-based controls are a great choice for your basic, economical, and light duty towing needs. They have solid state electronics and can be mounted in any position. When you step on the vehicle brakes a predetermined amount of braking power is sent to the trailer and then there is a delay as the unit ramps up to full braking power. Benefits of the timed brake controllers are easy installation and easy customer use.

### **Proportional Controllers**

Proportional-based controls offer a smooth braking response to almost any stop. Through the use of a sensing device, the brake control can determine the tow vehicle's rate of deceleration and then apply the trailer brakes to match. To operate properly It is very important that these controls be mounted within the manufacturers specs. Benefits of the proportional brake controllers are increased braking efficiency and reduced brake wear.

- Basic models have LED indicators
- Better models have digital displays
- The best models have triple accelerometers

**OEM in dash style** Varies by make & model



