# SWIVELWHEEL TOWING REQUIREMENTS

All Swivelwheel products require the use of a Class-III or Class-IV receiver hitch installed onto the tow vehicle. All systems include a standard Single Receiver Hitch.

You must evaluate the capabilities of the tow vehicle chassis frame. The systems may be towed behind any full size pickup, full size SUV, motor home, and selected fifth wheel travel trailers.

The current Swivelwheel product line was not designed for bumper pull travel trailers, compact pickups, or vehicles with a short narrow wheelbase i.e.: jeeps.

With that being said, we have had people install the Swivelwheel-46 system for generators, scooters, etc. behind their bumper pull trailer. They were utilizing the **Hensley Arrow Advanced Towing System**. They swear that they cannot get the trailer to sway from side to side with this hitch system installed, as stated by the manufacturer. Other than the Hensley Arrow equipped system, we do not recommend the use of the Swivelwheel system behind travel trailers. If there are other hitch assemblies that are similar we would like to know. Hitch weights are critical on the handling of travel trailers. When weight is added to the rear of the trailer, it takes weight off of the ball hitch, creating dangerous sway issues. There are new products that we are working on for the 2008 season that will address the vehicles with short narrow wheelbases and the compact pickup market.

If a fifth wheel travel trailer is to be used to tow the Swivelwheel system, *you must be sure that the trailer chassis frame can handle the weights associated with the system and the loads applied to it.* Not all fifth wheel trailers can support these weights. This is a decision that you as the owner of the fifth wheel travel trailer are going to have to make.

The Swivelwheel-78, Swivelwheel-58, and Swivelwheel-58DW systems should not be used on fifth wheel travel trailers with a length less than 30 feet, and under 10,000 pound dry weight.

Fast Master Product's, Inc. can inform you as to the trailers that systems were sold for, but cannot guarantee that the chassis frame could support the weights. If the chassis frame cannot handle the associated loads, it may bend causing the slides to malfunction.

The Swivelwheel-78 Transport system has a load split of approx. *60/40*. This means that *40%* of the total weight of system and load will be transferred to the tow vehicles receiver hitch. *60%* will transfer to the Swivelwheel tire. If you have 1300 pounds of weight, 520 lbs will be the tongue weight while 780 lbs will be at the tire.

The Swivelwheel-58 system will have about a *50/50* split. With the system at load capacity of 1000 pounds, this would relate to 650 lbs at the tire and 650 lbs at the receiver hitch.

The Swivelwheel-58DW will have the same *50/50* split as the Swivelwheel-58 and give a tongue weight and tire load of around 795 lbs at maximum load capacity

The Swivelwheel-46 system loaded to capacity of 600 pounds would have the same *50/50* split. The tongue weigh and tire load would both be around 450 lbs.

We receive calls every month or so to build a system to handle two full size motorcycles. This load could be up to, or over 1800 pounds. Problem is, there is not a fifth wheel trailer out there that would handle the associated weights. That is something that we have no control over.

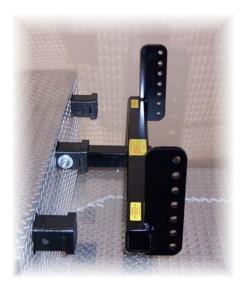
Fast Master Products, Inc. is not responsible for damage to the fifth wheel trailer or other chassis frames due to overloading. If the tow vehicle cannot handle the associated loads, do not use the system. Do we like to sell the Swivelwheel system? Yes, but not by giving someone false or poor information. Bad information could cost a customer thousands of dollars and it may not be recoverable. We would rather loose a sale after being honest, than have a problem due to bad representation. We'll leave that up to the other guys.

The Swivelwheel systems were not designed to be attached and pulled behind a towed vehicle, such as from behind a motorhome.

#### **GENERAL INFORMATION**

Below is some basic information about some of the components associated with all Swivelwheel systems.

### SINGLE RECEIVER HITCH



The standard Single Receiver Hitch supplied with the *Swivelwheel-46*, *Swivelwheel-58*, and *Swivelwheel-78*Transport systems plug directly into the tow vehicles Class-III or Class-IV receiver. There is a solid 2" x 2" steel insert that is bolted into the receiver. The hole in this insert is threaded. By bolting, the excess play in the receiver is removed. The Swivelwheel system connects to the two adjustment plates via 5/8" bent hitch pins. This allows the system to pivot up and down while going over road and driveway transitions.

#### **DUAL RECEIVER HITCH**



There is an optional Dual Receiver Hitch available for the above systems. This hitch utilizes two Class-III receivers. The receivers must be mounted 30" apart. (Center to Center) It is best to have the receivers mounted to the tow vehicle with the hitch available. If the receivers are not welded into position properly, and off dimension just slightly, the hitch will not slide into them. Two Class-III receiver tubes are shipped with each dual receiver hitch. This hitch allows for a more stable deck while riding up onto it



#### **ROTATIONAL HITCH**

The *Swivelwheel-58DW* (Dual Wheel) Transport system utilizes a Dual Receiver / Rotational Hitch. This hitch allows for the up and down motion at the front of the system for road and driveway transitions, as well as right and left rotation. The right and left rotation keeps both wheels on the ground while turning. This is the only hitch available for the Swivelwheel-58DW system.



#### **SUSPENSION**

All Swivelwheel systems are shipped with a Torsion suspension system. This suspension allows for the best possible ride for whatever is transported on the deck. The torsion suspension does not rebound like spring assemblies. The assembly dampens the rebound attempt. All torsion suspensions are complimented with a friction rotor brake. We have never had a problem with caster flutter while driving down the highway. This friction break assures that the tire will never flutter even if it wanted to.



#### WHEEL & TIRE

The tire used with the Swivelwheel systems is not the tire that most people assume it is. Most think that the  $8^{\prime\prime}$  wheel that is used on small boat trailers and such is the tire that we use. Those boat trailer tires are usually a 4.80 x 8, 6-Ply, C-Rated tire, with a capacity of 745 pounds @ 90 psi cold. It utilizes a low-pressure, rubber valve stem.

(\*\*) The tire used with the Swivelwheel system is a  $5.70 \times 8$ , 8-Ply, D-Rated tire, with a capacity of 1075 pounds @ 100 psi cold. This tire has a high-pressure, steel valve stem. This tire is wider and has a greater diameter. The photos below show the differences between the two tires. As with all other standard trailer tires, this tire is rated for 65 mph, not 75 mph.

We tried to incorporate a 12" Radial tire into the system, but that tire raised the deck height 5", from 26" to 31". This was not acceptable for loading motorcycles.



Right Tire = 4.80 x 8, C-Rated, 6-Ply
\*\*Left Tire = 5.70 x 8, D-Rated, 8-Ply

Front Tire = 4.80 x 8, C-Rated, 6-Ply
\*\*Rear Tire = 5.70 x 8, D-Rated, 8-Ply



## **JACK STAND LEGS**

All systems are shipped with jack stand legs with wheels. These legs allow the system to be moved around while disconnected from the tow vehicle.

#### **NOTE:**

Under no circumstances are any Swivelwheel Transport systems to be loaded or unloaded while the system is disconnected from the tow vehicle. The system is not to be disconnected from the tow vehicle while loaded.



#### **DOT LIGHTING**

All Swivelwheel Transport systems are shipped standard with regulation DOT lighting. Lighting includes RT Turn, LT Turn, Running, and Brake lights. The DOT states that any device that extends greater than <u>48" from the tow vehicles tail lights</u>, must be flagged or lighted during the daylight hours, and lighted during the hours of darkness.



#### **STAKE BED RECEIVERS**

All systems include 2" x 2" ID stake bed receivers welded to the base frame. These are used for the jack stand legs, as well as tiedown positions. You could build a rail system around the deck if need be. There are holes in the receivers to pin the jack stand legs into position.



Swivelwheel-46 = 4 Total Receivers

(2ea Front & 2ea Rear)

Swivelwheel-58 = 6 Total Receivers

(3ea Front & 3ea Rear)

Swivelwheel-58DW = 6 Total Receivers

(3ea Front & 3ea Rear)

Swivelwheel-78 =8 Total Receivers

(2ea Front & 3ea Sides)

#### **FLIP UP FEATURE**

The Swivelwheel-58 system has a flip up feature included. When not in use, the system may be flipped up vertically for short RV spaces or storage. **Not available on Swivelwheel-58DW systems.** 

The motorcycle loading ramps are a three piece assembly. The two outside ramps have a 750 lb load rating, while the center ramp has a 1500 pound rating. All three ramps interlock for safety.



## OPT. MOTORCYCLE LOCKING WHEEL CHOCK

The locking wheel chock is designed to allow the rider to ride onto the deck platform and get off of the bike without having to lower the kickstand.



#### **OPT. LOADING RAMPS**

There is a 3-Piece loading ramp set available. This set includes two outside ramps with a load rating of 750 pounds, and a center ramp with a load rating of 1500 pounds. All three ramps interlock with each other giving a wide base to put your feet when loading.

