

# ANCRA TIE DOWN INSTRUCTIONS FOR BIG BIKES

Large motorcycles come in varying sizes and are outfitted with a variety of standard and optional accessories. The same holds true of trucks and trailers and may require differing tie down methods. Here are a few suggestions to assist in securing motorcycles for the rigors of the highways.

**Transport Vehicle** – The transport vehicle, be it a truck or trailer, should have adequate tie down points spaced adequately apart to limit swaying of the motorcycle during transport. An angle of 30 to 45 degrees is optimal. The tie down points should also be located forward of the motorcycle so the tie downs straps pull the motorcycle forward into the wheel chock. Ancra offers a low profile tie down kit ideal for trucks and trailers.

Transport vehicles should also be outfitted with a good quality wheel chock to prevent the front wheel from inadvertently turning while being transported. If this happens it could cause slack in one or more tie downs and cause the motorcycle could fall.

Rubber friction type stake pocket anchors are not recommended for larger motorcycles or for prolonged distances. Because they are held in place by friction they could easily work their way

out of the stake pocket.

Tie down straps should be of good quality. Depending on accessibility tie downs should always be attached to a solid steel member of the motorcycle (i.e. handlebars, frame, forks, etc.), luggage racks, sissy bars are not always adequate.

For large motorcycles (500cc – 1000 cc) 2 pairs of tie downs are recommended (2 off the front and 2 off the rear). For motorcycles over 1000 cc, 3 pair are recommended, with the third set in the middle. This will help reduce the swaying of these heavier motorcycles and reduce the stress on any given set of straps.

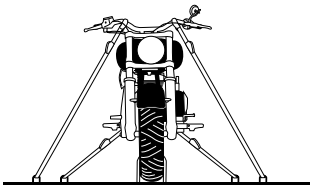
## Types of tie down straps

Although there are a number of different styles of tie down straps on the market they all are made of webbing, hooks (vinyl coating optional) and tensioning buckles. The different types have their own features and benefits for specific applications. Look at your own application to determine the best tie down for your needs. Here are a few of the different types of tie downs on the market.

## Standard Cam buckle tie down

This type of tie down has been on the market since

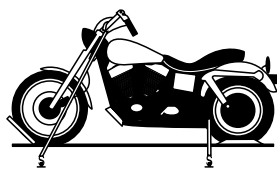
### TIE DOWN METHOD FOR BIG BIKES



Install second set of straps at rear when applicable.

### IN VANS, AND PICKUPS

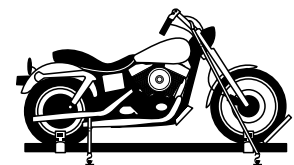
Chock to prevent lateral movement.



Straps in line or slightly behind fork angle.

### IN RAILED TRAILERS

Tie down straps at rear to prevent lateral movement.



Eyebolt or Tie down Ring of sufficient strength. Ancra fitting kit #40890-10 is recommended.

## TIE DOWN SELECTION CHART

| VEHICLE    |                   | TIE DOWN RECOMMENDED  | RECOMMENDED NUMBER |
|------------|-------------------|---|--------------------|
| TYPE       | SIZE              | TIE DOWN  |                    |
| Motorcycle | 500 cc to 1000 cc | Ancra Originals/Classics, Red Snapper, Integra Classics, Rat Pak, Integra Rat Pak | 2 pr.              |
| Motorcycle | Over 1000 cc      | Ancra Originals/Classics, Red Snapper, Integra Classics, Rat Pak, Integra Rat Pak | 3 pr.              |

the early 70's and is by far the easiest to operate. To tension, you simply pull the loose end of the strap through the buckle. To release you depress the cam lever to release the cam teeth from the webbing. When releasing the buckle it is important to hold onto the motorcycle as it could jump from residual tension. Good cam buckles will not slip unless the teeth on the cam become worn from use. Ancra offers their Originals/Classics line of cam buckle tie downs in a variety of webbing colors.

For all railed trailer application use Ancra Wheel Straps to secure wheels. Ancra part #41075-10.

### **The ratchet buckle tie down**

This tie down gives additional mechanical tensioning capabilities. Depending on your application, you take out most or all of the slack out of the webbing and by operating the handle of the buckle you wind webbing around the spreader bars (mandrel). A minimum of 2 to 4 wraps around the spreader bars will prevent the webbing from slipping out of the buckle. Less could result in webbing slippage and more could cause the webbing to overfill the buckle. Ratchet buckles can achieve great pre-loads and it is important not to over tighten. It is easy to put 250 lbs. of preload on the strap without realizing it. Tension should be checked to minimize possible fork damage from over tensioning. Ancra offers their Rat Pak line of ratchet buckle tie downs in red or black webbing.

### **Tie down extensions**

These can be used on motorcycle with fairings or windshields that restrict the attachment of hooks to handlebars where alternate to standard hooks is required. These extensions can be wrapped around handlebars, fork tubes or other frame members where close tolerance is experienced. They also keep hardware from coming in contact with finished or painted surfaces. Ancra offers their Soft Hook tie down extensions in black, orange and lime green webbing colors.

### **Integrated tie downs**

Integras are available in both cam buckle and ratchet buckle styles. These have the tie down extension built into the short end of the strap. You loop the loop strap around the handlebars, fork tubes, frame member and attach the short end hook to the loop. You then tension using the buckle. Ancra has them available in red, black and blue webbing colors.

### **Snapper tie down**

The Snapper is a strap that has a snap hook on the end that attaches to the truck or trailer. The snap hook has a spring-loaded keeper that keeps the hook attached to the closed loop attachment point on the truck or trailer even if slack occurs in the strap.

### **Wheel tie down straps**

These straps are recommended for use in open rail trailers, especially on trailers without a suspension.

These tie down help prevent the wheels from jumping out of the trailer rails when severe bumps are encountered.

### **Assembly strength**

Tie down assembly strengths vary considerably depending on manufacturer and style. For larger motorcycles we recommend a minimum assembly strength of 1200 lbs and a working load of 400 lbs. The assembly strength should take into account the strengths of the complete assembly and is no greater than the weakest component. Webbing strength alone is no indication of the total assembly strength since webbing is normally stronger than the hardware used to compensate for degradation experienced during normal use.

### **Care and Maintenance**

When not in use tie downs should be stored in a dry location, not in the back of your truck or trailer. Moisture can cause corrosion of the hardware, and chemicals, heat and weather will reduce the life and durability of the webbing. A light oil can be used to lubricate the moving parts of the buckles. If the strap comes in direct contact with the truck, trailer or other objects it should be protected. A 1/4" edge cut will reduce the webbing strength by as much as 50%.

Remember; a tie down is only as good as the weakest link in your motorcycle transport system. Please read all of the caution notes carefully.

### **CAUTION**

- Always chock wheels and use wheel tie down straps.
- Attach tie down hooks to handlebar or frame member, where it will not slip.
- Area of attachment to trailer, van or pickup must be of sufficient strength. Ancra fitting kit is recommended.
- For maximum load capacity, hooks and buckles must be in line with direction of pull.
- Protect webbing from sharp edges, hot surfaces, and acids. DO NOT use if webbing is frayed or worn.
- Tie downs are not to be used as personnel restraints or for towing vehicles.
- Ancra International is not responsible for damages or injury which may result from improper use of tie downs.



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For more information contact your local Dealer or:  
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