

Number Placement

The Good, the Bad,
And the Ugly

Ken Hart & Cindi Hart



Why Do Cyclists Wear Racing Numbers (bibs)?

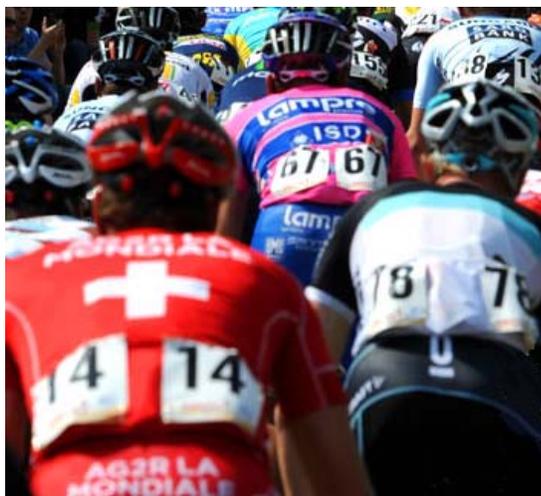
Why, to be identified, and scored, of course!

Having that number allows the officials and events services to place riders in the final results.. The riders want to be able to see their name in the results, which they can forward to teammates and sponsors.

In order to best place numbers on jerseys, we need to know a couple of things:

- 1) What is the traditional number placement for this event?
- 2) Where are the officials and/or photo-timing equipment?

Traditional Number Placement



UCI Number Placement

UCI Number Placement is what we usually see on television. Two, fairly small numbers placed in the pockets on the bottom, back of a jersey. This number placement is used so that the rider numbers can be seen by the TV helicopter, the three commissaires in follow cars, the three officials on motorcycles, and the press motorcycles. In a 3 - 4 hour road race on narrow European roads, these groups of officials and media are typically following behind the riders, so numbers are placed accordingly.

At the finish of a UCI race, chip timing is required, as well as a minimum of 2 finish line cameras, which can also read the required frame number. So from a UCI perspective, the numbers are more important on the road, than they are at the finish.



Typical USA Number Placement

In typical US races, there are no officials or media in follow cars. The races are usually 1 hour or less, and are done on a loop course instead of point-to-point course. The riders pass by the finish line multiple times, where the officials, and finish camera are on the side of the course. All of these things put the need for number placement on the side of a rider, and not the back.

Traditionally numbers are worn based on the event, and the location of the officials and the photo-timing. In larger events, number placement will be described in the race bible. At smaller events, there should be something posted at registration, describing how numbers should be worn at that event.

Where to Pin Your Number

As you look at the following pictures, you can see that as a number gets closer to your back, it becomes more difficult to read, and as numbers get lower on the side, they become easier to read.



Photo: Lowell Kellogg

A good reference for number placement is the side panel of your jersey. Start at the front edge of the side panel, about 2 inches from the armpit seam. Put a pin into the lower corner of the number.

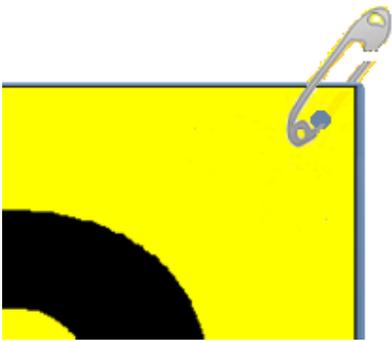
Go to the opposite corner of the number, and tilt the number based on your riding style.

Do you ride with your shoulders high? (Like the 2 pictures on the left). Or are they lower, (like the pictures on the right) where the side panel is tilted.

This will make sure the number is low enough to be seen from the side, but not so low that a camera positioned above couldn't see it. Rider number 125 (top-right) in above photo is a good example of this.



How to Pin Your Number



WRONG !

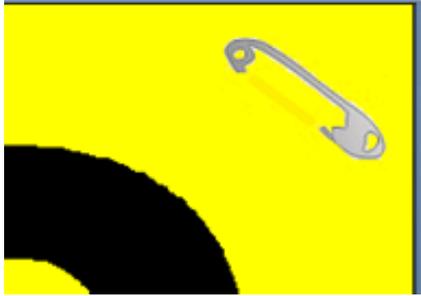
Pinning a number like this has multiple problems. First, it does not hold the number tight against your jersey, allowing it to flap like a sail (see pictures below). Next, the Tyvek can get caught in the spiral of the pin, and the jersey fabric can get caught in the head of the safety pin. Both options cause potential tearing and snagging of the number or jersey.



WRONG !



Flat - Pinning Your Number



RIGHT !



RIGHT !

To pin on numbers, you should not use the provided holes. Instead, we want to “flat-pin” the number. Pull the jersey away from the rider’s body. Push the safety pin into the number and jersey. Once through the jersey, insert the pin about another $\frac{3}{4}$ of an inch, then push the point out through the jersey and number. You can now close the safety pin. This technique has multiple benefits. As mentioned above, this technique will not snag or tear the number or jersey. Also, each pin does 2 pinnings of the number, once as it goes into the jersey, and a second pinning, as it exits the jersey. And finally, the number will not flap when pinned in this manner.

A reminder to your buddy that is pinning on your number, that he will need to pull the jersey away from the skin while inserting the pins. This does the following: 1) It prevents you from getting stabbed by the pins, and 2) you do not want the pins to pass through any undershirt that you might have on, under your jersey. The last thing you want to find out during an urgent trip to the bathroom before your race starts, is that you cannot get your skinsuit off, because it is pinned to your undershirt.

Minimally, 4 to 6 pins should be used. For larger numbers, use 8 pins, one in each corner, and one in the middle of each side. Although this may seem like a lot of pins, it is not. Use enough pins to make sure the number is securely fastened and will not flap in the wind. Some riders try to position their number in a location where they think it is most aerodynamic. This doesn’t really work well. Instead of putting the number in an odd location, put it in the correct location, and use enough pins to prevent the number from flapping. Using the appropriate number of pins will prevent the number from flapping or being a source of wind drag. At every race you go to, you have access to safety pins. Always save your safety pins at the end of the day, creating a stash of pins to keep with your race gear.

At some events, such as cyclocross or road nationals, you may also be given smaller numbers. Find out from the technical guide for the event where the smaller number should go. For cyclocross it is common for this smaller number to go on your left bicep, to be view by the announcer and officials. For road events, these extra numbers are usually put on the shoulder blades. Even though these are smaller numbers, they too, should get 4 to 6 pins.

Trying not to be scored

Rider have a huge investment in their racing. Hours of training, travel time and costs, equipment costs, and registration fees. With all this investment, it surprises me to see riders trying to not be scored. Of course, riders are an ingenious bunch, and have come up with multiple ways to try and not be scored.

Incorrect Number Placement

As mentioned above, having the number in the right location is the best way to get scored.

Upside Down Number Placement

Professional cyclists will sometimes wear #13 upside down. Other than that, there really is no reason to wear a number upside down. If there is a finish line camera, this is less of an issue.



Hiding your Number

There are multiple ways to hide your number:

Hiding it under a windbreaker or vest.

Especially true during spring training events or rainy days.

Hiding it under your hair.

More common with women riders, when hair is not braided.



Photo by <http://gcracingllc.com>



Photo by <http://gcracingllc.com>

Hiding it with your arms.

This is especially common in the faster categories. A rider will sacrifice themselves for a teammate, then sit up in the final sprint, riding across the finish line with their arms at their sides, covering their number.

Wearing the Wrong Number

Nowadays, riders can enter 2-3 events at a race, and possibly receive 2-3 numbers.

Remember to change numbers between events. A handy trick when you are riding multiple events, is to pin all your numbers on top of each other in a stack on your jersey. Your first event is on the top of the stack, your second event is below it, and your third event is on the bottom. When your first race is done, just tear off the top number, exposing the number for your next race. This also saves you from doing multiple pinnings and un-pinnings.

Wearing Multiple Numbers

This rider has number 115 on their back, and frame number 127.



Wearing the Number on the Wrong Side

Remember to check the race bible or registration table to see the number placement for your event. As an official at the starting line it can be difficult to pick out the lone rider that is pinned incorrectly. A quick fix for this is to go to the non-scoring side of the riders during staging. The one or two riders that might have numbers on the wrong side will be immediately apparent.

Crumpled .vs. Un-Crumpled Numbers

There is a small group of riders that, for some reason, believes that there is a benefit to crumpling a Tyvek number. Usually the claim is that the number lies flatter, or is more aerodynamic. Crumpling a Tyvek number has several disadvantages: 1) It is harder to be read by the officials and finish line camera (see photos below). 2) A crumpled number has more edges, and therefore more wind drag than a non-crumpled number. 3) flat-pinning a number allows it to be as close to the jersey as possible, as opposed to a number with multiple folds, which forces the number away from the jersey, and finally, 4) it is illegal to fold your number (see rules listed below). Of course it is a rule that typically is not enforced, and there is a distinction between a wrinkled number .vs. a crumpled number. (After all, just wearing a number will give it wrinkles !).

Example 1

These two teammates are riding together in the same sunlight. The number on the left is crumpled; the number on the right is not. Which one is easier to read?



Example 2

These 2 riders are in the same field, on the same lap. The number on the left is not crumpled, the number on the right, is crumpled. Which one is easier to read?





The Cycling World Champion, with flat-pinned, un-crumpled numbers.

What does he know, that you don't?

The Rules on Numbers

1N7. Racing numbers.

(a) Racing numbers are provided by the organizer, who may require a deposit that shall be refunded on return of the numbers in good order. The figures shall not be hand written, but printed in block letters using black waterproof ink.

Numbers shall be constructed from materials sufficiently durable to last the race without tearing or disintegrating, even in adverse weather. The name of the race or race sponsor may appear on a competitor's number. Promoters who fail to provide numbers meeting the above requirements to all riders shall be fined as specified in the Schedule of Fees.

(b) Riders shall place their numbers as prescribed by the officials and in such a way that they are visible when the rider is in a racing position. When shoulder numbers are provided for cyclocross, they are worn on the upper arm to be visible from the front.

Hip numbers shall be attached securely at least at the four corners with pins and no accessory or hair may obstruct a clear view of the number (riders with misplaced, obscured or unreadable numbers will not be placed).

If shoulder or frame numbers are provided, they too shall be placed as prescribed. Numbers may not be folded, trimmed, crumpled, or otherwise defaced. [Replacement of the numbers at riders' expense if noted before the start, otherwise warning or relegation.]

(c) An administrator may impose additional number requirements.

Alternatives to Tyvek & Safety pins

USA Cloth Numbers

Races that are part of a series will often use cloth numbers, which are used for the whole series.

UCI Cloth Numbers

Numbers used many UCI events are made of white lycra with a tacky adhesive, eliminating the need for pins.

Adhesives

A popular number adhesive in the USA is listed here, and is used by silk screeners to prevent t-shirts from moving around during the screening process.

<http://www.silkscreeningsupplies.com/product/CCTBMIST>

Needle & Thread

For time trials, riders will sometimes use a needle and thread to sew the number onto their jersey / skinsuit, then seal the edges with clear packing tape.

Packing tape

As mentioned above, used to hold down the edges of a number. Does not work well on hot days.

"Reverse" Safety Pins

Time-Trialers will often flat-pin a number from the inside of the jersey, reducing the amount of pin exposed to the wind

Road Events

Will often use 2 numbers.

1 side number for the finish line judges, and 1 hip number for the road referees and follow cars.

