

Now that we're up to speed on the basics, let's finish off with a few double paceline Do's and Don'ts:

Do rotate. The speed advantage of riding in a paceline is 100% due to aerodynamics. It's all about staying out of the wind; the less time each rider in a group is exposed to the wind, the quicker it's possible for the group to go. So don't be a hero; a proper double paceline rotates like a set of meshing gears, and staying on the front just un-meshes the gears of the machine. It also hangs whoever who just did a turn on the front out in the wind to dry as they rotate back, wasting their energy as well as your own. Ease over into the receding line as soon as possible without interfering with the riders behind you. This gets more important the faster you're going. At 30mph +, you're going to need shelter as soon as you can get it.

Don't be a "motor", be a "gear". For double pacelines, it's important that everyone be aware of what speed the overall group is capable of sustaining. If, for example, the average speed is 25mph with all riders' efforts taken into account, you shouldn't dial it up to 30 when you hit the front, even if you can. The idea is for the group *as a whole* to go quicker, and all you'll do with repeated accelerations is ruin the cohesion of the group and eventually destroy the paceline. So stay in sync with the group and you'll all go quicker as a result. Watch your speedometer if you use one, and take your pulls at a speed matching the others. If you don't use a speedo, just maintain the same cadence that you had sitting in the line. Let the reduced pace of the receding line bring you to the front; you don't need to accelerate to get past them.

Do remember the accordion effect. It's the same as in your car at a traffic light; a minor acceleration at the front gets multiplied due to the effect of reaction times as you go back down the line. In a paceline, that means riders 5 or 6 places back will have to accelerate much harder to maintain close gaps in the line, and a rider who's transitioning from the receding to the advancing line will have to sprint to get back on every time. This is *very* taxing, the opposite of efficient and a guaranteed way to split up a group. Most riders who dislike pacelines and think they're really hard feel that way because of this. So make whatever pace changes you *do* make *gradual* ones. While your absolute speed might be very high, your speed changes relative to your fellow riders should be *slow-motion* ones.

Don't stall the motor. If the speed of the group is high enough, sometimes you can find yourself having trouble going fast enough to maintain the tempo of the advancing line. Admit it, we've *all* been there. In these situations, all you're going to accomplish by trying to maintain a set place in the rotation is stalling out the line when you hit the front. It's much better to sit on the back until you're fresh enough to do a proper turn. All you have to do is let the rider ahead in the receding line know to come on over, and leave them room to do it so they don't waste energy figuring out what you're doing. They'll appreciate it, and they'll be glad to have your *smooth* help at the front when you're able to get back up there.

Do look after your mates. If you're at the front, call out any road hazards or turns and give a hand signal so the others can pass the message back. And if you're in the line and see/hear such, make sure the message gets relayed back. One of the most annoying things that can happen in a tight bunch is to get run through a big pothole or over some broken glass just because the riders ahead of you didn't bother to call it out or pass it back. Seriously poor form! Ditto for riders at the back letting the group know about traffic behind if it's not a rolling closure situation. It's never a good idea for passing cars to catch the riders at the front unaware, and often they can't see behind the group. So let them know if there are cars behind the group, and make sure the message makes it to the front. In tight groups, everyone is dependent on each other not to cause a crash, so be smooth and predictable - don't be *that guy*.

Don't get too close. Close is aero, and aero is good; but if you're overlapping wheels, you're asking for trouble and endangering everyone behind you. You have less visibility from being close behind other riders and a reduced reaction time from the tight distance, so even a great bike handler is at a distinct disadvantage when it comes to reacting to the unexpected. This is a judgment call and depends on how well you know the habits of the other riders, but if you've watched the team time trial in the Tour de France you know even the best get into trouble sometimes when they get too close. And they do around 20,000 miles/year together; so be advised!

Do pay attention. Look around enough to get a feel for where everyone is in the group, and get a status update however often you need to. If you're planning to keep your group intact, make sure no one's gotten gapped when you go over hills, and if so, ease up briefly and get them back on before you really have to slow down a lot to regroup. Often those riders will be useful on the flats and waiting a moment will end up quicker than reducing the size of the group.

Don't ride aerobars when you're in the rotation. Ever. This won't be an issue in mass-start races as they're not allowed anyway, but it can occur outside of USCF-sanctioned events. It's fine to use them when you're at the very front of the group and in the wind, which is the only time they're really needed anyway. Not only is your bike handling impaired when you're on aerobars, but so is your ability to quickly get to the brakes if needed. You may be a great bike handler, but you *never know* what's going to happen in front of you. And if the best pros in the world have trouble running tight pacelines on aerobars, we shouldn't even try!
