

## Tech Inspection at the CRA

If you've done a little research, you've noticed that the CRA technical inspection requirements (Section 6 of our rulebook) differ in many ways from those of the AMA or CCS. Generally, our rules are more extensive with respect to safety in general, and safety wiring in particular. For instance, the CRA requires that you safety wire your front axle pinch bolts; the AMA doesn't.

To help you understand those differences, remember that the CRA is an amateur racing club and not a professional racing organization. While some of our racers also compete at AMA events, many if not most of you are here for the fun of it and don't come to the track with a transporter full of spares, a professional crew, and a race resume. Professional racers at AMA events are presumed to have the experience and resources to prepare their race bikes thoroughly, as they are racing to win and to make money. Their bikes are professionally maintained before and during those events, and on-track failures resulting from maintenance or preparation issues are rare. In those organizations the focus of the technical requirements is on defining the boundaries between the racing classes and on enforcing those boundaries through their tech inspection process.

On the other hand, the CRA strives to provide the safest possible venue for amateur racers. The level of vibration, speed, heat, and mechanical stress race bikes endure is far greater than they ever get on the street. Failures not seen in a lifetime of street riding are commonplace on the track. The club must help you ensure that your bike, and every other bike on the track, is as ready as it can be to withstand that treatment. Your bike must not present avoidable risks to you, the other racers, the race workers, or to the racing schedule. The CRA technical requirements are written toward that goal.

All that said, we we make an effort to align our rules with that of other race organizations as much as practical, and we review them annually.

### When do you visit Tech?

There are four occasions when you have to make an appearance:

1. As a new racer, you have to bring your gear through so we can verify it is race quality. This is only necessary for new racers on their first weekend.
2. Prior to your first track session of each race weekend, whether it is a practice session or a race, you have to bring your **race-ready** bike through tech. We will do the safety inspection as well as verify you are sporting the correct wristbands. So don't send your goons; we have to see the bike **and** the rider. Passing bikes get one of three practice stickers: **slow**, **medium**, or **fast**. Your bike is never allowed on the track without one of these stickers.
3. If you are competing for contingency money, we have to verify, on behalf of the sponsors, that you are actually using their products (where possible), and that you have their stickers/decals/patches displayed as required.
4. Following a crash, you have to bring your gear and repaired bike through Tech so you can be re-certified for the track.

Of course, you can always stop in for questions, with or without your bike, at any time.

## Tech Inspection Hours

On race weekends, the Tech Barn is staffed (excepting mandatory rider meetings and lunch) during these hours:

Thursday	7:00 PM – 9:00 PM
Friday	8:00 AM – 2:30 PM 7:00 PM – 9:00 PM
Saturday	8:00 AM – 11:30 AM
Sunday	8:00 AM – 10:30 AM

These are the nominal hours; always check the schedule for the particular race weekend for the exact hours. Outside of the staffed hours you can still track down a tech inspector; either go to race control and ask them to contact the Chief of Tech, or go to the Tech Barn and call an inspector yourself from the radio sitting at the Barn entrance. There will also be a cell phone number posted there. Feel free to call that any time the Barn is not staffed on Friday, Saturday, and Sunday, continuing to the last checkered flag of the day. Any time during the race weekend you can manage to get a tech sticker, get your bike reinspected after a crash, or ask questions. It's why we are there.

### So, what are we looking for?

Refer to the accompanying checklist of items extracted from the CRA Rulebook as you prepare your bike. The tech inspectors mentally run through this when you bring your bike through the Tech Barn.

Of course, there are other things we look for that aren't specifically called out in the rulebook or on this list. The bodywork and all fasteners and brackets must be securely attached and of good integrity. We won't accept fluid leaks of any kind. And wash your bike occasionally! We have to be able to see it to inspect it. If your brakes, tires, or anything else is in bad shape it will not pass.

Individual rules may not apply or not be practical for your bike. For example, on some years of ZX-6Rs, you cannot wire both rear caliper bolts. Many (if not most) modern bikes with fuel injection, sealed batteries, engine vents routed to the airbox, and coolant overflows, do not need a catch bottle.

Last year, as part of a major overhaul of the tech rules, we developed a list spelling out exactly which bikes require aftermarket engine covers or guards, and which covers and guards we accept. This is summarized on a spreadsheet posted on googledocs at

<http://spreadsheets.google.com/ccc?key=t5OIL1d4I1twddTAyyHeRKw>

This will be available directly on the CRA website when the ongoing overhaul of that site is complete.

We really try to make Tech Inspection not like a trip to the DMV. If your bike is out of compliance in some way, we point it out politely. You won't be scolded and you're not in any sort of trouble.

From time to time during the weekend we have to call individual bikes back to the Tech Barn.

Ordinarily this is not to take your tech sticker back or scold you, we probably just want to check an issue the corner workers reported.

We keep a drill press in the Tech Barn for your use. If you need instruction in proper safety wiring techniques or interpretation of the rules for your particular bike, come talk to us. We want you to have fun racing and be safe.

## Tech Inspection Do's and Don'ts

1. For four stroke bikes, **do** remove the lowers, but bring them with you for the inspection. We need to be able to see the engine, and also verify that your lowers are sound and have sufficient fluid-holding capacity.
2. **Don't** show up with a “temporary” sidestand on your race bike. Yes, they are convenient, but what if you forget to take it off before going out on the track?
3. **Do** let your bike do the talking. If you find yourself planning to make an excuse for why your bike isn't completely prepared, then finish preparing it and take it through tech at that time.
4. If you're challenged, **Don't** argue that your bike passes inspection at some other racing organization. We have our own rules. The CRA board and your fellow racers expect us to enforce them. Also, if you are challenged over something we have previously passed, be patient. If a previous inspector missed it, that doesn't get you a free pass for life.
5. **Do** bring your bike to the Tech Barn for inspections. That's where we issue the stickers, and we have ramps there to elevate the bikes where they are easier to inspect thoroughly.
6. If you also need a contingency inspection, **do** be courteous and try to postpone that until during the day Friday. We tend to get very busy with safety inspections Thursday evening and Friday morning.
7. **Do** inform tech when you are in the process of repairing your bike after a crash. Tell us where you are pitted and which race you are targeting. We will track your progress and make sure you get teched when you need it.

## Safety Wiring

You'll have to become familiar with safety wiring techniques and tools. Rather than attempt to explain it here, I'll defer to the 1,300+ hits you'll get if you Google “safety wiring”. This seems like a nice explanation:

<http://www.whizwheels.com/Tips/safetywiring.html>

One tip from personal experience: During bike preparation and maintenance, you will generate many short pieces of scrap wire. Keep track of them and put them in the trash. If you leave them on the ground, your \$200 race tires will pick them up for you.

## A word about Number Plates

In recent years, tailsections have shrunk to slivers of their former selves, while front ends have become bisected by ram air intakes. There simply isn't room for the number plates as described in the rulebook.

So what should we do? Enforce the letter of the rules, and consequently have everyone MacGyver

gigantic plates on their tailsections, and block their ram air?

The AMA rulebook deals with this through a lengthy explanation and an appendix depicting allowable approaches. Even so, their problem is simplified because their corner crews are generally familiar with the competitors – they usually know who is who on the track. We don't always enjoy that advantage.

There are others that rely on the readability of your number: The corner workers, race staff, and the crew that manually record the results of the race, the race tapers. Readable numbers are simply essential for safety and scoring. So think of them when you set up the numbers on your bike. Will they be able to read this as I approach Turn 4? Will the tapers be able to see it as I go in to 10? In the Tech Barn we will attempt to do the same as we inspect your bike. But be aware of this: Even if Tech passes your bike, the corner crews may report they can't read the numbers. They have to do this; it is part of their responsibilities. Also, the corner crews rotate through the corners, plus we have new ones out there all the time. They don't all have the same eyes. So try to be patient if you get pinged about this even if your numbers haven't changed recently.

In that case, I will pay you a visit and we will figure out what to do. The solution will probably involve some temporary changes for that weekend with the expectation of a permanent fix for next time.

## **Your responsibility**

Study and understand the technical requirements as set out in Sections 5 and 6 of the CRA Rule Book, and as described in this document, and figure out how it all applies to your particular bike. Prepare your bike to the best of your ability. Seek help if you need it, from your friends or from me.

You can email me at any time via the CRA website, or directly at [chief.tech.cra@gmail.com](mailto:chief.tech.cra@gmail.com). I try to answer promptly and thoroughly.