



Michigan District

Region D "The Great Lakes Region"

"Friends for Fun, Safety and Knowledge"



RIDER ED DIRECT

June 2010

Director- Rider Education
Gene & Betty Knutson

Region D Educators
John & Laurel Kuehl

District Educators
Randy & Lori Westcott
ranlorwing@charter.net
248-459-2823

Asst. District Educators
Randy & Colette Houtman
letsgoriding@charter.net
616-754-0615

A Monthly Communication to Michigan's Chapter Educators
From your GWRRR Michigan District Rider Ed Team
Volume 4 Number 3

To: All **Chapter Educators**, and **Chapter Directors** *without* an Educator

This newsletter is intended to *support* your Rider Education efforts. If you need a topic idea for your required "Gimme 5" talk at your Gathering or for your chapter newsletter article this month, feel free to use this material in part or in whole. It is **not** mandatory that you use this either for your talk or in your newsletter. If you choose to use it, feel free to change it to suit your audience. If you use this as your article *without change*, however, please credit the MI District Rider Ed Team. *Thanks!*

We have had a busy and hectic Spring and Rider Ed Direct has suffered the consequences. We are planning to get it back on track starting with this June issue. Again, we remind you that there is a location on the GWRRR Rider Education (National) webpage where they have 26 Rider Education articles which you can use for your next Chapter Talk or newsletter article in case we are late again. (With 26 articles, you don't have to repeat yourself too often.) Just remember to give credit to the author. The location is <http://www.gwrra.org/regional/ridered/ChapterTalks.html>.

We would like to ask you to encourage your chapter participants to sign up for the Advanced Rider Courses and Trike Rider Courses being offered in Grayling, July 10 or 11, and at Sault Ste. Marie, July 17 or 18. At this time, these courses are under-subscribed and there is a lot of room for more participation. Without more registrations, these classes are likely to be canceled for this year.

(Possible "Gimme 5" for Chapter Educators for **June, 2010**)

MONTHLY TOPIC: Let's Talk Traction

We teach about traction for a few minutes in the Rider Courses every year, in the Advanced Rider Course we use the traction oval. Let's look at the concept a little closer.

Traction is the friction or the grip your tires have which holds you to the road surface. For a motorcycle, the grip is provided by two patches about the size of your fist when pressed on the table. This friction is split between three forces and a reserve. For the majority, the most commonly recognized need for gripping the road is for braking. Most of us have locked up the tires on a car or motorcycle (before ABS) when braking hard. The second most commonly recognized force requiring grip on the road is the driving force or torque used in acceleration. If you haven't done a little "hot rodding" yourself, you surely have seen someone performing

Our Mission:

**To Save Lives
Through Quality,
World Class
Education**

Our Motto:

"Safety Is For Life"

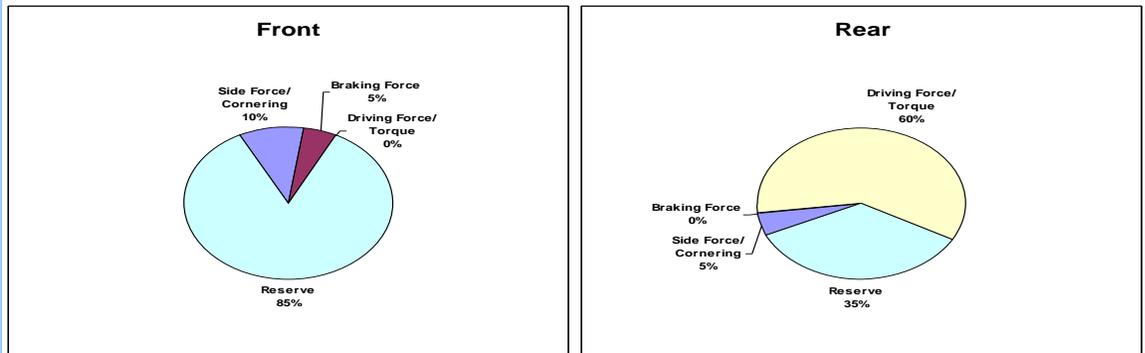
burnouts for show! The third force requiring a grip on the road is side force or cornering. Using too much cornering force can result in spinouts. These three forces combine to use your grip on the road surface, your traction.

The key to our discussion here is actually the reserve. As any of the forces increases, the other forces and the reserve must decrease. When the combination of driving, cornering, and/or braking forces use up all the traction, and there is no reserve, you have no grip on the road and you lose control.

Let's look at a couple of "snapshots in time" of the forces acting on a motorcycle during normal operation.

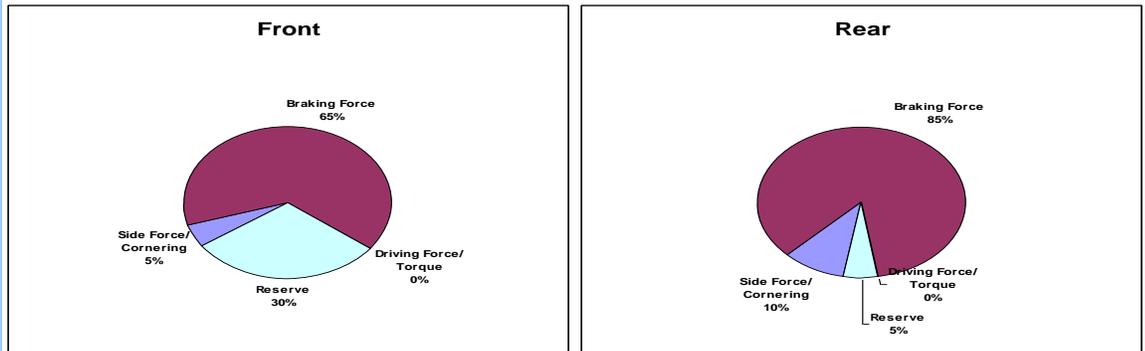
In an acceleration situation, the rear tire primarily is driving the motorcycle forward. There may be a little side force in keeping the bike upright and there is a reasonable amount of reserve. The front tire may use a little side force for steering, and a very small amount of braking force is used as we make the wheel turn, but there is no driving force applied by the front wheel so there is a lot more reserve.

ACCELERATION



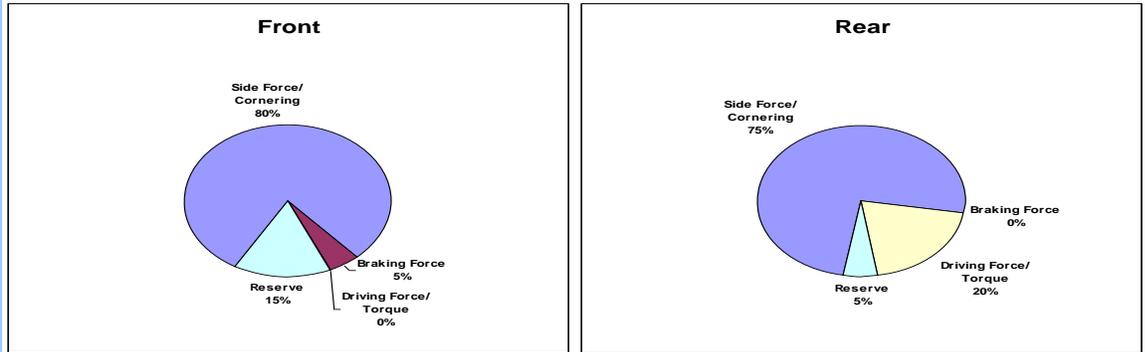
In deceleration or braking, both tires (since we ALWAYS use both brakes, just like we are taught) primarily are applying braking force. (These graphs show a snapshot early the braking process before the weight transfer from the rear to the front.) There is some side force used for steering and keeping the bike upright. As we said earlier, some reserve must remain to stay in control.

DECELERATION OR BRAKING



For our final scenario, we'll look at a high speed turn. Most of our force is used in cornering. Some drive force is required by the rear tire as we gradually accelerate through the turn to stabilize the suspension. Again, the small braking force shown on the front tire is the amount of force necessary to make the wheel turn.

HIGH SPEED TURN



Now, if you can imagine being in the high speed turn and applying the brakes, you can understand how quickly you will use up the reserve of your traction. This is why we coach you to apply the brakes BEFORE you enter a high speed turn and stay off the brakes during the turn. If the situation requires hard braking after you enter a turn, you need to straighten the handlebars, bring the bike upright, and then apply maximum braking force.

We hope this discussion has helped you visualize the forces acting upon your ability to grip the road. Keep in mind that road and weather conditions also have a significant effect on your traction. If you haven't taken a rider course recently, come on out for a little practice in a controlled environment and get a feel for what your motorcycle can do. We're sure it can help you in an emergency and we KNOW it can't hurt.

Planning Reminders:

1. Co-Rider, Team Riding, Road Captain, and other seminars are available for presentation at your chapter. Invite neighboring chapters and share the opportunity for fun and knowledge. The Seminar Request form is available here:
http://www.gwrra-mi.org/RiderEdForms/2010/REQUEST_SEMINAR_FORM.pdf
2. Sanctioned Parking Lot Practices can be used to advance to Level II in the Rider Education Levels Program, or to maintain your current level for one year if you cannot get into a Rider Course this year. The Chapter can set up a Sanctioned PLP and request a Facilitator with the request form available here:
http://www.gwrra-mi.org/RiderEdForms/2010/REQUEST_PLP_FORM.pdf

Thanks for all you do for Rider Education! And remember: **Safety Is For Life!**

Your comments about this communication and your questions about Rider Education can be directed to:

Randy & Lori Westcott, MI District Rider Educators, ranlorwing@charter.net,
or call them at: 248-459-2823

Randy & Colette Houtman, MI Asst. District Rider Educators, letsgoriding@charter.net,
or call them at: 616-754-0615