

A TWIST OF THE WRIST

A TWIST OF THE WRIST

**THE MOTORCYCLE
ROAD RACERS
HANDBOOK**

by Keith Code

First Edition

CODE BREAK

Acknowledgements

Editorial Assistance

Bill Stermer
Michael Church

Help and Encouragement

Cort Sutton
Kawasaki Motors Corp., U.S.A.
Motorcyclist Magazine
Cycle World Magazine
California Superbike School

Design and Illustration

Cameron Ashby Associates, Inc.
Jeff Skrimstad

Important Lessons and Friends

Bob West
Mel Dinesen
Pierre Des Roches
Richard Davis
Griffith Park
L. Ron Hubbard
Judy Code

Photography

Kevin Ashby, page 80
Patrick Behar, pages 3, 74, 75, 79, 94, 95
Rich Chenet, page 82
Mush Emmons, page 17
Freud, page 42
Mary Grothe, back cover action photograph
Motorcyclist Magazine, page 14
Tom Riles, pages 26, 51, 56, 88
John Ulrich, page 109

California Superbike School, Inc.
800 530-3350

Copyright 1983-2002 Code Break, Inc.

ISBN: 0-918226-08-2

Library of Congress
Catalog Card Number
82-73771

All rights reserved. No part of this book may be reproduced in any form or by any means without permission in writing from the author.

Printed in the United States of America

Warning: The riding techniques contained in this book are intended for racing purposes only. The author and publisher accept no responsibility for any accidents resulting in bodily harm or property damage that might occur from the increased speeds and rider ability that may be gained by the use of this material. The author and publisher do not guarantee that readers will attain the same high degree of riding skills that others have by applying these techniques. Supplemental notes and endorsements by noted riders that have used these techniques should not be taken as any guarantee as to safety or competency that might be gained, but merely as personal experience. If expert assistance is required, the services of a state licensed agency should be sought.

Always wear proper protective clothing and observe local speed laws.

Foreword

Even though I've only been road racing for two out of the twelve years of my career, it seems as though I've been doing it all along. Everything goes so smoothly now. If there's a problem, I handle it right away. Things are going right—they must be. I find myself in the winner's circle at almost every race. Of course my dirt track racing helped, but believe me, it wasn't always this easy.

My first time on the asphalt—for more than a couple of laps—was at the California Superbike School. It was really a good experience. I wasn't the fastest guy out there but it gave me the idea of what to do and, more importantly, that I did want to do it. Kawasaki had been helping me with my short track program. There are some great people down there who believed I had some promise, so they gave me a box stock racer and hired Keith Code to work with me for one year.

Here is the part that really surprised me: We spent days going over stuff that Keith had written down about racing. I thought we were going straight to the track, but here I was actually looking up words in the dictionary and talking about riding. After we did get to the track the whole thing turned around and there I was, writing down everything that I was doing on the track. Keith made me think *before* we got to the track, *while* I was on the track, and *after* I got off the bike.

I don't know if everyone can get into the winner's circle as fast as I did, but I know now that being able to think about your riding is important. Get that part done first.

This is where I started. I hope it works for you.

Wayne Rainey

Contents

Foreword
Author's Note
Introduction

CHAPTER ONE

- 2 **The Road You Ride**
The Mysteries of Asphalt Revealed
-

CHAPTER TWO

- 10 **What You Do**
You Become A Scientist
-

CHAPTER THREE

- 14 **The Product**
Developing Precision With Understanding
-

CHAPTER FOUR

- 24 **What You See**
Programming Your Computer Through the Eyes
-

CHAPTER FIVE

- 34 **Timing**
Putting Things in Order
-

CHAPTER SIX

- 42 **Decisions**
Decision Making: Recipe for Skill
-

CHAPTER SEVEN

- 54 **Barriers**
Keys to Improvement
-

CHAPTER EIGHT

- 60 **Braking**
The Art of Regulating Speed
-

CHAPTER NINE

- 76 **Steering**
It Happens Backwards
-

CHAPTER TEN

- 80 **Slipping and Sliding**
Traction: How to Lose It and Use It
-

| | |
|-----|--|
| | CHAPTER ELEVEN |
| 84 | Hanging Off It Looks Good and It Works |
| | CHAPTER TWELVE |
| 90 | Passing Who Was That I Just Passed? |
| | CHAPTER THIRTEEN |
| 96 | Supervise Yourself Yes, Homework Is Necessary |
| | CHAPTER FOURTEEN |
| 102 | Advice Ask Your Best Friend—You! |
| | CHAPTER FIFTEEN |
| 104 | How to Fall Relax—You’re Just Road-Testing Your Leathers |
| | CHAPTER SIXTEEN |
| 108 | Sponsorship There Is No Free Lunch |
| 115 | A Parting Word |
| 117 | Appendix |

▷ Margin Notes and Comments
by Eddie Lawson

Special Note:

Extra wide margins are provided for your notes.

Author's Note

The information contained in this book is intended to be used by a rider to investigate and master the basic riding skills covered in each chapter. None of this information is magic. It has been developed during more than six years of training more than 2,500 riders and getting results that either improved lap times or increased rider confidence. This information works if it is applied.

There is a certain magic, however, in using information that is understood, and the best way to do it is one step at a time. Go over the information and really understand it, then go out and apply it, bit by bit. Mastering each point will establish a certainty that you can do it.

The things that Keith goes over in his seminars and book are things I do all the time. You can learn the same things.

Introduction

I'm going to begin this book with a little confession. I've never really been all that interested in racing—I just wanted to ride. Throughout my racing career I regarded the other riders on the track as mostly just a nuisance. Many times they got in the way of the observations I was making about my riding, about how I could improve my riding and how that information could be presented to my students. I've always had just as much fun riding along by myself in a race as I have competing with other riders.

My reasoning for this is simple—no matter how many other riders are on the track, you must still rely on your own ability. The track is the ever-present challenge—not the other riders. This idea has been strengthened over the years through my observation that the most successful racers can go nearly as fast in practice as they do in the race. They use their understanding on the track when they please, without the pressure of competition forcing them to “go fast.”

Play the Game Well

Riding fast on a motorcycle is a tremendously exhilarating and challenging game. This game has rules and barriers. There's something to win, something to lose, and a purpose for each individual who plays the game. It demands your attention. The consequences of a major mistake can be severe—severe enough to make the game worth playing well. The purpose of this book is to describe the technology and the rules of riding fast so that every ride is a “win,” so that you'll approach the barriers with confidence and understanding, and so you can further your purpose in riding or racing, whatever it may be.

My overall approach to rider improvement is: **To simplify the actions of riding by defining the basics, and by investigating the decisions you must make to ride well.**

What'll It Cost?

Attention, and where you spend it while riding a motorcycle, is a key element in how well you will function: **Attention has its limits.** Each person has a certain amount of it, which varies from individual to individual. You have a fixed amount of attention just as you have a fixed amount of money. Let's say you have a ten-dollar bill's worth of attention. If you spend five dollars of it on one aspect of riding, you have only five dollars left for all the other aspects. Spend nine and you have only one dollar left, and so on.

When you first began to ride you probably spent nine dollars of your attention on how to let out the clutch without stalling. Now that you've ridden for years and thousands of miles, you probably spend only a nickle or dime on it. Riders tell me that some common movements, like shifting, have become “automatic.” It's not true. They are simply spending

If your face shield leaks air, tape it up. The air won't come through and get your attention.

less attention on it. Riding is like that. The more operations you reduce to the cost of a nickel or dime, the more of your ten-dollars worth of attention is left for the important operations of riding or racing.

You must make hundreds of decisions while riding just one lap of a racetrack or one stretch of road—especially when riding fast. Hundreds! If you understand enough about riding to have correctly decided how to handle 25 of those situations, you are probably a fair rider. **The things that you do not understand are the things that will take up most of your attention.** Whenever a situation arises that you do not understand, your attention will become fixed upon it. You often fear a situation when you cannot predict its outcome, and panic costs \$9.99—you may even become overdrawn. The course of action you have already decided upon to handle a potential panic situation costs much less than this and leaves you plenty of attention to sort out your options.

On the positive side, sorting out the actions of riding beforehand buys you the time and freedom to become creative with the activity of riding, just as having lots of change in your pocket allows you a certain freedom of movement. On the race track, that left-over attention allows you to experiment and to improve your riding ability.

High-performance riding and racing demand not only that you be able to perform the necessary actions, but also that you be able to observe them. Making accurate observations of your performance is the key to being able to improve them. **If you know what you have done—you know what can be changed.** If you did not observe what you were doing, the changes become haphazard and inaccurate. *Do you agree?*

In the next chapters we'll look at the game and where the attention is being focused or spent. We'll investigate the barriers to riding well and put into action the steps you'll take to bring home a "win" every time.

And finally, let's not lose sight of the basic reason we started riding—it's fun and makes us feel good. Here's readily available freedom, and all it takes is **A Twist of the Wrist.**

I might only use one-tenth of a cent on some things that cost another rider \$5.00, but you spend something on everything you do on a race track. The better you get the less most things cost.



What Is a Rider?

Before launching into anything heavy, let's agree that the rider is the person controlling the motorcycle, not a passenger. The rider works the brakes and clutch, the throttle and steering. He determines whether the bike goes around the turn fast or slow, smooth or rough, up or down,

and is the only individual who decides what action to take, carries it out, then decides how well it all worked.

It almost sounds too simple, but it's true: **What you do is what happens; what you don't do—doesn't happen.** Motorcycles don't do anything by themselves. They don't win races or lose them; they don't make mistakes or do anything right. Everything that happens during a ride depends solely on the rider.

Have you ever seen a new rider on the track or road struggling to operate his machine? The basic control operation, the track and who he is in relation to these are a mystery to him. He honestly feels he is being taken for a ride. If you've had those feelings, fine; even expert riders have felt this way at times.

There's an actual technology to riding. People are not born as good or bad riders—riding skill is learned. **A rider is a person who can lap a race track or ride down the road, fast or slow, and know what he did and how to change it.**