



BY DAVID LUSCAN

THE MISFITS GUIDE TO BASEMENT
BIKE FITTING

TRIATHLON EDITION

CONTENTS

WHO IS THIS BOOK FOR?	5
SECTION I	
INTRODUCTION	6
SECTION II	
ABOUT THE AUTHOR.....	8
SECTION III	
HOW TO USE THIS BOOK.....	10
SECTION IV	
THE HISTORY OF THE AEROBAR AND THE EFFECTS ON GEOMETRY	13
SECTION V	
GETTING STARTED/PROPER POSTURE.....	18
SECTION VI	
SADDLE SELECTION	21
SECTION VII	
SADDLE HEIGHT.....	27
SECTION VIII	
SADDLE FORE/AFT (SETBACK)	38
SECTION IX	
COCKPIT DISTANCE OR REACH	42
SECTION X	
CRANK LENGTH.....	49

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SECTION XI	
DROP.....	58
SECTION XII	
FRONT END DETAILS	69
SECTION XIII	
CLEATS.....	78
SECTION XIV	
HOW TO RIDE?	88
SECTION XV	
AERODYNAMICS.....	93
SECTION XVI	
EQUIPMENT CONSIDERATIONS	95
SECTION XVII	
IN CONCLUSION... ..	108
APPENDIX A	
RECORDING YOUR FIT	109
APPENDIX B	
RESEARCH STUDIES	114
APPENDIX C	
FREQUENTLY ASKED QUESTIONS.....	115
APPENDIX D	
SECOND METATARSAL CLEAT PLACEMENT	120

WHO IS THIS BOOK FOR?

ANYONE WHO USES aerobars (either for time trials or triathlon) and wants to squeeze all of the advantage out of those bars. A small amount of bicycle specific technical knowledge is helpful when adjusting your bike. If you know how to raise and lower your saddle, move it fore and aft, and do the same to your aerobars, you can avoid the time and expense of paying a professional to make the basic adjustments for you.

INTRODUCTION

THE STATE OF the bike fitting industry is disorganized, and that is generous. A more accurate assessment cautions that there really is no “bike fitting industry”. There are only fitters, schools of fitting, and inconsistent outcomes. Few bike fitters seek formal education, those who do often absorb very little practical knowledge during their brief classes, while the institutions themselves seem incapable of agreeing on universal principles. There are no standards, no industry wide testing, and no barriers to entry. Many bike fitters begin as the most venerable mechanic in shops where fits were often requested, yet thoroughly misunderstood. State of the art equipment continues to be a trainer and a plumb line. This lack of a cohesive industry leads to a lack of consistent outcomes. This is not how it should be.

As fundamentally a F.I.S.T. fitter, I am fully vested in the concept of orthodoxy in bike fit. F.I.S.T. (The Fit Institute of SlowTwitch) is the school of bike fitting founded by the inventor of the modern triathlon bike, Dan Empfield, who said “Orthodoxy simply means an adherence to historical consensus”.

His school proposes that just as we can identify effective golf swings, high jump technique, and methods to roll a bowling ball, there are fundamental characteristics of excellent bike fits. Consistent outcomes are possible, and good fitters know good fits when they see them. Poor fitters do not believe they can know anything without “more information”. They do not understand that “macro sameness and micro differences” drive nearly the entire spectrum of human improvement. Our macro

sameness makes orthodox bike fitting possible, even in remote settings, while micro differences allow us to squeeze the last few percent from a studio fit on a modern dynamic fit bike.

About a year ago I began doing online bike fits through video and email exchange. I was initially skeptical of the efficacy, but I had been offering so much free advice to remote athletes that I attempted to formalize the process. The outcomes of the first fifty online fits have shifted my thinking. Bike fit orthodoxy could be delivered remotely! Similar to my studio fits, many of the online clients were struggling with the same problems. Today’s responses resembled previous responses. There was enough redundancy that I developed a file of useful email templates with provocative titles like “female rider rotated posteriorly” and “massively over-cranked shorter rider”. In that sense, this book wrote itself.

The flow of ideas that led to the writing of this book:

1. **Humans are fundamentally the same.**
2. **Sameness breeds processes which deliver orthodox outcomes.**
3. **Many bike fitters operate as if sameness and orthodoxy do not exist.**
4. **Orthodoxy can be transmitted remotely.**
5. **The remote transmission of orthodoxy can be standardized.**

This book is an attempt to standardize the remote transmission of bike fit orthodoxy. In laymen’s terms, I think that, with guidance, you can do an excellent job fitting yourself to your bicycle from the comfort of your home.

ABOUT THE AUTHOR

I COMPLETED MY FIRST triathlon in 1988 at age sixteen and have been bike fitting professionally since 2005, becoming FIST certified in 2007 and Retul certified in 2016. The driving force behind this book is the experience gathered during 3000 successful studio bike fits and, more recently, over 100 online fits. Hundreds of first time aerobar riders, dozens of professional triathletes, and national caliber time trialists have all rolled through my studio.



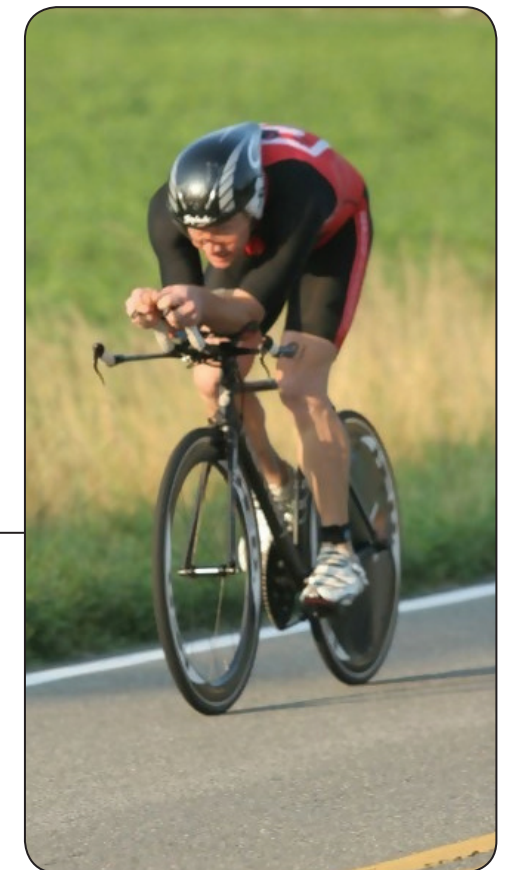
24 years of my evolving bike fit

First triathlon above. 1988 Bud Light USTS Baltimore. 16 years old and was swimming 60,000 yards/ week. Never rode 25 miles or ran 6 prior to this race. Thought I could break two hours. Actually went 2:56.xx Pursued sub 2 hours for 24 years. (Swam 18, rode 1:25, ran 56 or so)

I currently offers in person fits in Richmond VA through Outpost Richmond, the Washington DC metro area through M3 Bike, travelling fits throughout the region, online fits through my website, www.findingfreestyle.com and self-guided fits through this publication. For more information email me at CoachDave@DavidLuscan.com

24 years of my evolving bike fit

Last triathlon right. 2012 Age Group Nationals in Burlington. 40 years old. Swimming about 12,000 / week. Went 1:59.51 for 2nd master (RIP Doug Clark) Swam 21, rode 56, ran 36 high. Finally got my sub 2! Old age and experience FTW.



HOW TO USE THIS BOOK

WE ARE ALL far more alike than we are different, and proper bike fitting (and many other things of value) adhere to this reality. Our sameness underpins modern bike fitting. We know how bodies work and most of them work similarly. This is our bedrock. Orthodox outcomes are the consequence of processes that honor sameness. These principles are pervasive enough to work even in remote settings. Once we accept sameness and orthodoxy as guiding principles of bike fitting, we are ready to lead the rider to their personal expression of this principle.

The guiding principles in this book are to trust yourself, take your time, and complete the steps in the order presented. However, because everything on a bike affects everything else, understand that you will need to re-visit various

parameters as the overall fit progresses. Consider your first adjustments to be larger or gross adjustments. As the fit progresses you should fine tune with smaller adjustments. Repeats Sections 7, 8, 9, 11 and 12 as needed to achieve your ideal position.

This fine tuning is demonstrated by examining a typical evolution of correct posture as described in the following section. You should first read through the section, watch the video, and do your best at adopting the proper posture. Then move on, but with the understanding that as you select a more appropriate saddle your posture may change for the better. As we later adjust the front end of the bike, your posture may become even more “correct”. As your posture changes, your seat height might need a minor tweaking. As you

move the seat up and down, you might need to do the same to the handlebars. And so on. Start with inches, move to centimeters, finish with millimeters.

You will be making choices based on how things feel. Trust yourself. This can be an intimidating idea, but you are fully equipped to perceive and evaluate changes in your pedaling and comfort. Pedaling and comfort are our only topics, and your body is smarter than your brain. (Or mine). The awareness required can be thought of as a bubble. As you focus on it, your bubble will become larger and clearer. Truthfully, riding a bike in a proper aero position is not a highly technical undertaking, and you are more than capable of discerning the necessary things.

The following is taken directly from my Finding Freestyle introductory swim-

ming course materials and highlights the pervasive nature of awareness in activities across the spectrums of physical movement and technical complexity,

“If you can focus on what you ARE perceiving, instead of worrying about what you are NOT perceiving, you will gradually build your awareness from your starting point. You can think about awareness as a point that grows into a sphere—the “point” is located at the places in your body that you ARE aware of—by focusing on that particular point, you can then try to expand that point into a sphere—the outer edges of that sphere then form the basis of new points for you to create new spheres until finally, your awareness becomes quite broad.”

Often as I begin a fit, clients barely notice massive changes to the bike, but an