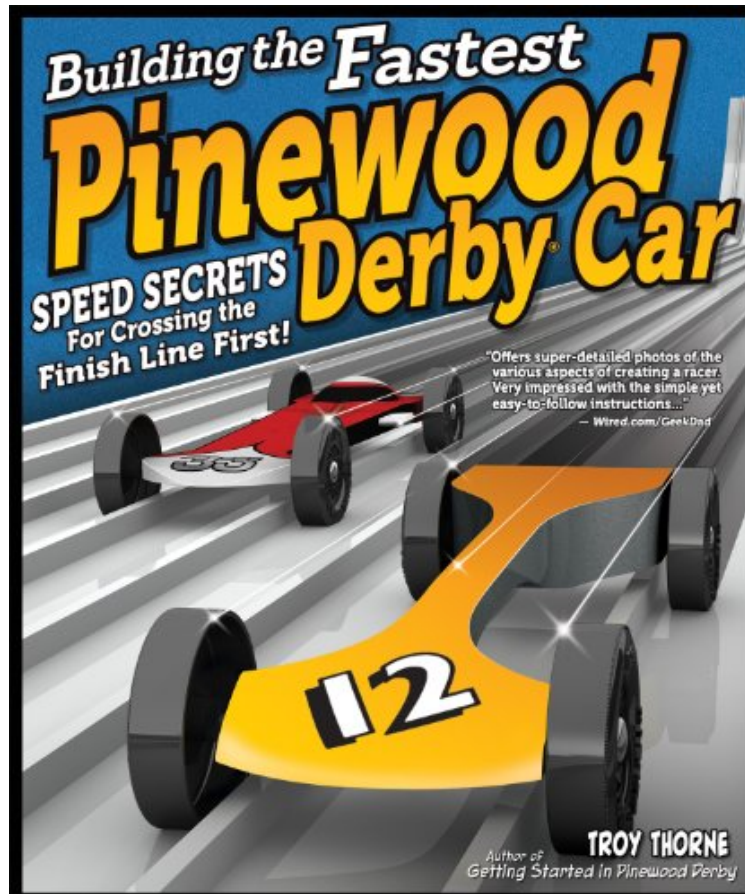


## Building the Fastest Pinewood Derby Car: Speed Secrets for Crossing the Finish Line First!

Troy Thorne

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### Troy Thorne : Building the Fastest Pinewood Derby Car: Speed Secrets for Crossing the Finish Line First!

before purchasing it in order to gage whether or not it would be worth my time, and all praised Building the Fastest Pinewood Derby Car: Speed Secrets for Crossing the Finish Line First!:

2 of 2 people found the following review helpful. If You Want a Competitive Car, get this Book!By Mr. HallmanAwesome book! There is a wealth of information on the pinewood derby inside this book! Has a ton of tips and techniques to make your sons car be competitive in the race. I and my son used this book as a guide to build his first pinewood derby car and he took 1st place in his den and had one of the fastest cars in the pack. He is headed to districts next month to race against the winners from the other packs in our area. I think that one of the best tips in the book which I didnt find in other sources is the use of a concentricity gauge (\$10 on ) to measure the roundness of the wheels. We purchased four pinewood derby kits from the local scout shop - mainly cause I was worried we would mess up cutting/carving the block of wood but it turns out that having all those extra wheels and axles was great

because we selected the best ones. Using the concentricity gauge set up the author describes, I was surprised to see just how un-round a lot of the wheels were. You then select the best ones and shave, sand, polish those placing your best of the four as your front wheel, the next two best as your rear and the worst wheel as the raised front. We did every step described in the book that was allowed by our pack/district rules. We selected the best axles out of the pile, used a drill press to file off the burrs crimp marks, sanded and polished the axles and beveled the axle head. We used the bent axle technique and raised a front wheel the book described and aligned it to be a rail rider. Not to mention an aerodynamic body design, smooth paint job, graphite on the wheels and axles, maximum weight pinpointed to the rear and in front of the rear axles. Tools we used were: table top dress press, vise, small triangular file, wet/dry sandpaper grit from 400-1000, wheel mandrel, derby works wheel shave kit pro hub tool, derby axle puller, graphite, real pipe cleaners, plastic polish, 5 minute 2-part epoxy, white glue, various size drill bits, superglue, wood putty, spray paint, tungsten lead fishing weights and some decals from the hobby store. There is so much info in this book that I would highly recommend it to anyone who is started out with pinewood derby for the first time and wants to build a competitive car. Get the book well before the race and read through it deciding what your son wants to do and what your rules will allow. There is also a great YouTube video made by a guy named Mark Roper on the pinewood derby, not only a great source of info on the pinewood derby, but one of the best YouTube videos I've ever seen. I buy from a lot but rarely have I ever written a review, but with this book, I had to share my thoughts. Also, about the book itself: well thought out, lay out was great, real color photos, nice thick glossy paper, explains everything in detail, has several design guide cut-outs that you can photo-copy and glue to your block of wood and cut out - they are to scale. I highly recommend this book!! 2 of 2 people found the following review helpful. This is the 200 Level PWD Course You're Looking For By Scout Parent Great book. This is sort of like the updated version of the David Meade book, but addresses topics Meade only glosses over that are now the standard thinking on what makes a fast and consistent derby car. As with Thorne's other book, it's well illustrated/photographed to make it accessible to adults and kids. It also spends a fair amount of time on design/decoration. The book includes several very good templates for fast cars. Unlike the Meade book, this book includes discussion on several techniques that are considered essential to having a competitive car ... rail riding, wheel bore prep, and what to look for in doing your alignment/testing. Additionally, this book addresses a broad set of weighting options (Tungsten, steel, and lead weights). You could spend a year researching techniques and tricks on the various PWD message boards (like derbytalk.com) to go from 101 (meade's book) to 201 or just buy this book and follow the steps. My favorite part of this book is a plan for a test track. I would've liked it more if the plan was for a 24' or 32' foot track with a traditional starting height (about 48"), but it's got enough information to get you started if that's how you want to go. 1 of 1 people found the following review helpful. Excellently Written Book By The Professor 101 Having built pinewood derby cars with my boys the last couple of years, I realized I needed some help on the technical aspects when it came to speed. We kept winning for design, but never for speed. I love the layout of the book, the writing style, flowers, big pictures and graphics, and everything is logical and well thought through. This book is geared for the beginner, but has enough tips and tricks in the book to be of value to an experienced racer as well. It was a pleasure to read the book. So while I haven't won a race for speed yet, that is no reflection on the book. It's simply a reflection on us as the builders and continuing to learn from our mistakes. Highly recommended.

Cross the finish line in the fastest car with the techniques revealed in this book by established Pinewood Derby(R) authority, artist, and Scoutmaster Troy Thorne. There's no secret to creating a winning entry: all you need is a great design and these tips for tricking your car out for maximum speed. Discover the "ultimate car" championship techniques that will allow you to shave those last tenths of a second off your time and go home with the trophy.

You can read my review of the other four Pinewood Derby books from Fox Chapel Publishing. What you're going to find are some of the coolest books EVER on cutting, drilling, painting, balancing, and racing a pinewood derby racer. So why another book? Glad you asked. While this new book certainly has some overlap with the other three books (mainly with advice on cutting and drilling), it's the new designs and techniques that make it a nice addition to the collection. The book uses the same cartoon character, Dash Derby, and he's got two new friends, Max Design and Professor Speed. These characters provide some fun and colorful antics to the discussions that include wheel balancing, building a test track, and using tungsten weights. There are a number of new car designs (my favorite has to be Quick Comet) - templates are provided for all of them so you can duplicate the shape and style of your favorite. Like the other Fox Chapel pinewood derby books, this one is in full color, offering super-detailed photos of the various aspects of creating a racer. I'm very impressed with the simple yet easy-to-follow instructions for using a variety of tools (some hand tools and a few machine tools). The book also demonstrates two commercially available products called Derby Worx Pro Body Tool and the Derby Worx Pro-Wheel Shaver XT - I wasn't aware of these tools but based on the photos, they appear to be providing some serious benefits with their machined bodies that are used as jigs. Pinewood Derby is going high-tech! The back cover talks about additional benefits of the book that include expert priming and painting instructions to give your car an automotive-quality finish and up-to-date materials and

techniques for weighting and alignment. Building the Fastest Pinewood Derby Car is written by Troy Thorne and is 135 pages of full-color instructions. Author Troy Thorne has followed up his Getting Started in Pinewood Derby publication with a new book, Building the Fastest Pinewood Derby Car. Starting with basic design, including cutting, attachment, lubrication and balance, the new book also includes a section offering championship secrets, offering options on how to shave seconds off a race time Building the Fastest Pinewood Derby Car (Fox Chapel Publishing, ISBN 978-1-56523-764.99.2-9) is priced at \$14.99. Good Read Fast Track to Success Get the authoritative lowdown for Pinewood Derby success from Troy Thorne's Building the Fastest Pinewood Derby Car (Fox Chapel Publishing). Filled with helpful graphics and super photos, the book transports you from beginning car construction to prize-winning modifications, including info on shaping, weighting, and axle prep. \$14.95 at national bookstores. Before we discovered Derby Talk, the 2006 release of David Meade's Pinewood Derby Speed Secrets was a boon to our family's racing experience. It made a lot of reputable information visible on the bookshelves of Scout shops at a time when speed-tips seemed to be closely guarded or otherwise sold via (sometimes dubious) mail-order pamphlets, etc. Since then, I've often recommended Pinewood Derby Speed Secrets as a starting point for those new to PWD. However, there was some advice that seemed questionable or outdated, and thus we recommended it with certain caveats. In December 2012, the same publisher released a revised title called Building the Fastest Pinewood Derby Car (BFPWDC). Authored by Meade's illustrator Troy Thorne, this new book admirably supersedes Meade's landmark work. [This new book is not to be confused with Thorne's other offering from 2011 -- Getting Started in Pinewood Derby -- an earlier work which is less focused on competition. Even though both books carry the same artistic elements and duplicate some information, BFPWDC represents a significant revision to both Getting Started in Pinewood Derby and Meade's Pinewood Derby Speed Secrets.] We now recommend Thorne's Building the Fastest Pinewood Derby Car as a more up-to-date starting point. For example, treatments like sprue-removal and hub-coning are absent, as these no longer apply to BSA wheels made after 2008. Also gone are some overemphasized tips like "quick-start" devices (aka cheater bars) and block-baking. More importantly, BFPWDC embraces and instructs on recent advances such as rail-riding, currently available tools, and new weights and accessories. It includes not just speed tips, but design templates and plentiful advice on detailed finishing. BFPWDC is not presently offered via BSA yet arguably less-useful titles are; for this reason it seems worthwhile to call attention to BFPWDC here. The value of a well-rounded reference is appreciated once one tries to scrounge up information through many varied sources. The author graciously acknowledges Derby Talk as a source for some information (and in the interest of full disclosure, Troy asked some people on DT, including me, to offer some early technical feedback). But there are still some circumstances where BFPWDC does not go quite as far as prevalent opinion on DT; this seems reasonable to limit the scope of the book, which is already pretty long at 136 pages. So (as was done with Meade's book), this thread is dedicated to pointing out some of the differences for the benefit of those less familiar with DT content. (It is not intended to disparage BFPWDC, but to simply complement this excellent resource with other content that might be gleaned from DT.) Of course the reader is always free to decide which information he feels is best: Weight Placement (p. 18) - Guidance on how to accurately determine the center of balance is absent. For a fixed wheelbase, the load under the front wheel can be "weighed" to calculate the center of mass (CoM) relative to the rear axle. The relevant equation is simple. Taper the Axle Head (p. 92) - There are differing opinions as to the need to taper the underside of the axle head with BSA's stepped outer hub. Polishing the Axles (p. 94) - Some find it beneficial to go much further with polishing, down to sub-micron-levels using lapping papers or liquids. Making Grooved Axles (p. 96) - It has been conjectured that excess graphite captured in axle grooves might actually impede rolling, rather than help it. Polishing the Wheel Bore (p. 104) - BFPWDC recommends polishing the wheel bore using a pipe cleaner and plastic polish, but most people on DT who have tried Sporty's bore-prep method prefer that approach. Building Your Own Test Track! (pp. 112-115) Although a fun-looking project, the top speed of a car on a 2'-tall test track will be 70% slower than the speed reached on a conventional 4'-tall track. For testing, the plans could be improved by replacing the first section with a 12' length (to raise the starting height), and then adding a timer. Bending Axles (p. 116) - Some prefer to install unbent axles into canted holes drilled with the aid of a drill press. Rear Wheel Alignment (p. 118) - An alternative alignment method allows the front of the car to skid down an incline on a piece of tape or thumbtack with the front wheels removed. The car should roll fairly straight if the rear-wheels are correctly aligned. Front Wheel Alignment (p. 122) - In BFPWDC, the camber of the rolling front wheel is not mentioned. Most DTers prefer positive camber on the dominant front wheel (DFW), and negative camber on the rears. I've included a few links as jump-off points to show where DT expands on BFPWDC content, but these links don't come close to covering the wealth of discussions and opinions expressed on DT. As usual, both newcomer and seasoned pro will greatly benefit from Derby Talk's search feature. From the Back Cover Your Speed is Guaranteed! Cross the finish line in the fastest car with the designs and techniques included in this book by established Pinewood Derby authority, artist, and Scoutmaster Troy Thorne. - Discover how to build the fastest Pinewood Derby car with the patterns and speed secrets inside this book - Choose from any of the 8 car patterns - all designed for speed - Follow the expert priming and painting instructions to give your car an automotive-quality finish - Learn about the most up-to-date materials and techniques for weighting and alignment - Enjoy step-by-step instructions and kid-friendly content that make this book great for parents and children

"Yet another great 'how-to' book from author Troy Thorne ...Fasten your seat belts and be prepared to go fast!" Jimmy "Shine" Falschlehner So-Cal Speed Shop Host, Speed Channel's Car Warriors  
About the Author  
Creative Director for Fox Chapel Publishing, and a Pinewood Derby-winning dad, Troy Thorne is a graduate of Savannah College of Art and Design, and spent over 10 years in the advertising field. He is an active scouting volunteer, builds furniture and canoes, and works with his son who was a national finalist in the All-Star Derby Design Contest.