CONTENTS —

	PAGE
INTRODUCTION	1
STARTING OUT	8
QUALIFIED	16
CONNECTIONS	22
CIRCUIT BREAKERS	32
GFCI - AFCI	43
OHMIC HEATING	60
CIRCUIT ANALYZER	72
ATTIC FIRES	87
RECEPTACLES	95
SWITCHES	122
THE EXAM TODAY	128
DID YOU KNOW	166
THE INSPECTOR	179

CONTENTS

	<u>PAGE</u>
EDUCATION	190
SELF EMPLOYED	194
10 EXAM QUESTIONS	200
10 EXAM ANSWERS	202
35 TRUE or FALSE QUESTIONS	204
35 TRUE or FALSE ANSWERS	209
50 CLOSED BOOK QUESTIONS	210
50 CLOSED BOOK ANSWERS	218
25 OPEN BOOK QUESTIONS EXAM	220
25 OPEN BOOK EXAM ANSWERS	224
SUMMARY	225

Introduction







Tom Henry in this book explains his feelings. Knowing the truth when it comes to electrical safety can help to save a life.

"Telling it like it is" is clear, fair, clean, straight forward, candid, impeccable, open and right.

This book describes a situation honestly without avoiding any unpleasant details: A book that tells it like it is, without any opinion or political bias.





Are receptacles connected in series or parallel?







Tom Henry's definition of Qualified.

Falling Behind on Electrical Safety

Wide Variations in State Variations in State Adoptions of NEC®

Reveal Neglect of Electrical Safety

Introduction

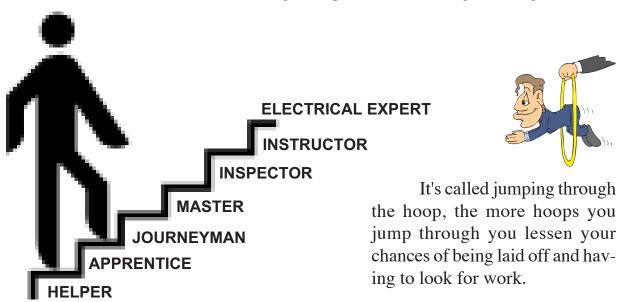
Everything in our lives was designed by someone. This book will show us how design thinking can help us create a life that is both meaningful and fulfilling regardless of who or where we are, what we do or have done for a living, or how young or old we are.



Our futures depend on a highly skilled and knowledgeable pool of skilled trades workers.

If you're saying "I don't know what to do with my life," consider these strategies I have shared to improve your life in the long term. Maybe you discover you want to start a business. You can build from these things and create a life you love living.

You can make a living, or you can desgn a life.



And guess what, when you go to apply for a job and they read your resume, do you know what they want to see? How many hoops have you jumped through!

What so many entering the trade today haven't been required to realize, it's a *skilled trade*, it's listed as a profession, you are required to be a professional. Do you know why? Because you can kill yourself or someone else working with electricity. It requires *education* and *continuing education* throughout your career. Obtaining the license is just a start in your journey through electrical education.

There is no excuse today for not passing an exam and getting your license. Good grief, back in the 1970s we didn't have access to all the books and videos you have to prepare with as you do today. So the company hired you and you didn't need a license, guess what now that you're laid off you wish you had obtained one.



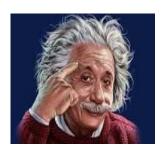
A 60 year old electrician came in my bookstore and wanted advice on what books to purchase to prepare for the journeyman electrician exam to get his license. He had been working in the trade for over 30 years and was recently laid off for lack of having a license. He never took the time to obtain his license until now at age 60.

This state of not knowing what to do next applies to a lot of people, at any age and maybe to you at different times in your life.

Life is about the journey, not the destination. Living a life of purpose gives both fulfillment and meaning to your journey.

Most people end up feeling more bitter over the regrets of not having done or tried something, rather than in the mistakes they made when they tried something. It's always the 'what ifs' that will go on to haunt you.

Reading other people's stories about how they lived their lives, their life philosophies, and how they overcame their challenges in life can be a good source of motivation and knowledge when you're saying "I don't know what to do with my life."



The history books are full of stories of gifted persons whose talents were overlooked by a procession of people until someone believed in them. Albert Einstein was four years old before he could speak and seven before he could read. Isaac Newton did poorly in grade school. A newspaper editor fired Walt Disney because he had "no good ideas."

There is a lesson in such stories: Different people develop at different rates, and the best motivators are always on the lookout for hidden capacities.

Successful people without a college degree, some were high school dropouts: Bill Gates, Ted Turner, John D. Rockefeller Sr., Paul Allen, Milton Hershey, Dave Thomas, Steve Jobs, Julie Andrews, Steve Martin, Tom Hanks, Simon Cowell, Woody Allen, Steven Speilberg, Walt Disney, Henry Ford, Thomas Edison, George Washington, Benjamin Franklin, Abraham Lincoln, Harry Truman, Winston Churchill, Grover Cleveland......

Their stories can inspire and motivate you, especially when you're not sure of your next steps. Even better, find someone in your life who has been in a similar situation you now find yourself in. Ask how they got through it, the steps they took, and how they shifted their attitude. You don't only have to learn from experience; you can also learn from others' experiences.

I've always like the line, "If nobody dropped out of the eighth grade, who would hire the college graduates?"

The average millionaire made Bs and Cs in school. Their average SAT score was 1190. Most millionaires were told they were not intellectually gifted, not smart enough to succeed.

Instead of relying on natural genius, millionaires choose careers that match their abilities. They may not have great analytic intelligence, but they are creative and practical. They focus on a goal, take calculated risks, and work harder than most people.

Whether we are graduating high school, choosing our career path, recovering from a heartbreak, being made redundant, or entering retirement, we all have a point in our lives where we may not know what to do next.

To live your extraordinary life, you'll need to live YOUR life, not somebody else's.

Often, we live our lives how others want us to live. We build our daily habits and schedules around what our families, friends, and society want for us. We are a product of our surroundings.

It takes guts to live your life according to your true priorities, especially when your priorities differ from the people around you. When you have the courage to build your life around what matters most to you, you live authentically and your days become filled with a stronger sense of purpose and fulfillment.

It's important to run YOUR race, live YOUR life, focus on what matters to YOU, and build your life around YOUR vision.

You might have been with the same company for the last 5 years, and the thought of doing the same thing for the next 5 or 10 years scares you. You want to do more, or perhaps even something completely different altogether.

Why is that so many of us find ourselves limiting our windows of opportunity and potential because we think it's too late to learn how to start over?

Introduction



I'll always remember when I worked in the industry the retirement party that was held for a machine operator who had operated the same machine from day one when he was 18 years old to his retirement 47 years later at age 65. When asked to step up to the microphone and express his feelings about his journey with the company, his reply was "I don't know if I had a good job with the company or not, I never worked any place else."

I started in 1956 as an apprentice electrician on the New York Central railroad in Ohio. Our roundhouse with over 300 employees was closed and everyone was without a job on the same day. In order to support my wife and two boys I accepted working as a laborer on a construction site wheeling concrete, running a jack hammer, etc. until I finally found a job as an electrician in the industry. Life isn't always easy.

While at Disney World, I obtained my Master Electrical Contractor's License, the company didn't require me to have it, **I wanted it for me!**

My gosh, look at our future, with maybe 30 years of oil left and billions of years of sun left, guess what, solar power and electric vehicles, these vehicles require a place to plug them in, this is our future.

Get involved now, get started on the ground floor, start your future today.



By being the **owner** of your company, you are the boss! **Build a reputation** selling yourself by explaining I was taught the **correct way by Tom Henry.**



Service call $$150 \times 4$ calls per day = \$600 a day x 5 days (one week) = \$3,000.

 $3,000 \times 50 \text{ weeks} = 150,000 \text{ a year.}$





There's never been a better time in the U.S. to be an electrician. Our Learn to be an Electrician Training Course is a home study program to actually train a person correctly.

I personally went through five electrical apprentice programs that offered either classroom or home study.

Final Thoughts

It's possible to make life changes and learn how to start over. Don't become a person who lets life pass them by **only to regret it when you're retired or far into old age**. Don't let your life plateau and waste away in the daily grind for the next twenty years while wasting the potential you still have.

Tired of being held back by your limitations? It's time to break free from them, and start living out your best days.

A person starting retirement will ask the question in the hope of doing something that has value in their life.



I'm currently writing book #140. At age 85, I'm still at my office Monday thru Sunday at 6 am trying to further my electrical education and passing on what knowledge I have attained since 1956.

I feel like you are the type of person who will read this book and will not need to be reminded by me the importance of education and proper training. So in writing this book, what is important to me is I might have had the effect of motivating people to work to the best of their ability so we can save a life. This feeling is priceless and well worth the time I've spent sharing my electrical knowledge with you in this book.

As an electrical expert, I've been on a team with other experts in their field. In one death case the metallurgist expert was also involved in the explosion of the space ship *Challenger*. Another case with the deaths of two firemen, the financial expert explained to me how to derive at the amount of money in a law suit involving a person's loss. **What is a human life worth**?

You can do anything you set your mind to when you have the vision, determination, and an endless supply of expendable labor. That's what I did.