

The DEAD Drill

By Chuck Quinton

Founder, RotarySwing.com

Copyright 2024 | Second Edition

Introduction

GOLF. How appropriate that it's a four letter word, no? It's a game that has challenged me like no other and I've had my share of "outbursts", as my wife calls them, on the course. But, over the last 10 years, those outbursts have completely gone away. Some might think of it as maturity, but it's far simpler and more tangible than that - **I finally have all the answers to the swing that allow me to hit the ball the way I knew I always could, and should.**

When we first pick up a golf club, the potential seems limitless. How far can we hit it? How low can we score? The game looks so simple on the surface; see ball, hit ball. But it quickly turns into a quagmire of confusion as we seek answers to problems we have, only to realize **there's as many conflicting solutions out there as there are grains of sand on a beach.**

I've been fortunate to be able to compete in many sports at a high level. I first picked up a golf club at age 14, made my high school golf team a few years later and then received a college golf scholarship. During this same time, I became a professional snowboard mountaineer as I aimed to be the first person to climb and snowboard down all 54 14,000 foot peaks in Colorado.

After nearly 4 years of risking my life, I decided I wasn't getting paid enough to die that young and focused all my attention back on golf. I played professionally for 8 years, struggling with injury, aches and pains and frustration as I worked with so called "top instructor" after "top instructor''. During that time, I also started winning races in downhill mountain biking and won 2 national championship racing cars.

But golf, oh golf....

It didn't come so easily. Not because I lacked the physical ability - I can assure you that YOU have more than enough physical skill to hit the ball as well as a pro - does Craig Stadler strike you as a world class athlete?? **The reason I didn't improve as fast as I did at other sports was one thing and one thing only - misinformation. No, actually it was awful information.**

If you want to spike my blood pressure, just ask me to bring up stories of the lessons I took from the so-called "top" instructors back in the day. "Just imagine you're pushing a basketball back with your belly button," was just one of the abstract, obscure and useless things I was told to fix my slice. I know many of you can relate to frustrating experiences about golf instruction because thousands of you have written me over the past 17 years since I started RotarySwing to tell me exactly that.

To me, it's infuriating. I just can't stand it when people tell me how messed up their swings are after spending thousands of dollars on the "teaching elite" of the world of instruction. It's unacceptable and wouldn't be tolerated in any other sport. Tennis instruction is standardized. Performance driving instruction is standardized. Skiing instruction is standardized. Every Olympic sport is standardized to the point that all the athletes look virtually identical when they perform their sport.

But golf? It's just some mystical black art that you are told to "dig it out of the dirt" on your own, that everyone has their own "swing DNA" and you "just have to find what works for you."

Let me ask you this...

Do you have the same muscles as I do, or Tiger Woods does? Do they attach at the same place and move the same bones at the same joints on the same plane as the person sitting next to you? It doesn't take a "rocket surgeon" to figure out we're all engineered the exact same way and thus, should all move the exact same way. Of course, there's differences in height, proportions, etc. **but those truly have a minimal impact on how your body moves in an efficient golf swing. Anyone who tells you different is selling you something.**



The simple reality is this. **The golf swing is SIMPLE.** The movements to swing as well or better than the average pro are very SIMPLE and **I can teach them to you in minutes.** The future of golf is going to look very "vanilla" with more and more younger players coming up who's swings look identical - just like the Olympians. I've been saying this for the past 17 years and you can see it happening already with the younger generation. They now have the tools to understand efficient movement and how to prevent injury now at their disposal through the massive catalog of videos I've published over the years.

To see just how simple the golf swing is when done the most scientifically efficient way possible, take a look at this video of my swing plane - it doesn't get any simpler than this.

As of the publishing of this book, RotarySwing has over 400,000 members and over 120,000 YouTube subscribers. My videos have been viewed over 100 million times. It's crazy to think about but awesome to see how many golfers' games my team and I have been able to impact. We've given over 100,000 in person and online golf lessons over the past 17 years.

And, with the creation of the DEAD Drill, I'm hoping to put a final "nail in the coffin" of bad golf instruction. No more "just strengthen your grip and aim left" to fix your slice. The DEAD Drill will fix ANY issue you have in your swing by teaching you proper fundamentals of how to move your body the way it was designed to move. And best of all, it's DEAD SIMPLE.

This book is intended to introduce you to the core concepts of the DEAD Drill and is not intended to be a comprehensive guide to everything on the golf swing - that's what the website is for. So, you will see links to videos that go in depth explaining in great detail the concepts that I briefly mention here. The reason is that it's simply not nearly as effective to try and explain something in the written word as it is to demonstrate the movement in a video. But, rest assured, everything you truly need to know and understand about the golf swing to hit the ball like a scratch golfer is covered in these pages.



Philosophy Behind the DEAD Drill

The simple truth is that almost no one practices golf in a way that effectively communicates with how the brain actually learns a new movement pattern. The human brain is an incredibly complex organism, but the process it employs for learning new movements is actually surprisingly simple. When it comes to learning, the brain is a pretty basic computer. You input data and then it decides what to do with that data based on one simple factor - repetition.

Your brain is always working, but not always learning. In fact, most information it receives throughout the day is discarded because the brain determines it to be irrelevant. Most of the stuff you're "trying" to do in your golf swing also gets treated this way because you simply didn't do enough repetitions to get your brain's attention.

Do you know the number of reps that is required to get your brain to actually go through the work of creating a new neural pathway (a neural pathway is what your brain creates to be able to repeat a movement pattern such as lifting a spoon to your mouth to eat - you struggled with something this simple at first when you were an infant!)? It takes between 100 and 300 identical reps for your brain to begin the process of "cementing" that movement pattern so you can repeat it the same way in the future. This is the same for you as it is for Jack Nicklaus and Ben Hogan. It doesn't matter how talented you may or may not be, you need 100-300 reps in a day to even begin the learning process.

Now, tell me, how many times have you gone to the range to work on your golf swing and done 100-300 perfect repetitions working on whatever tip you read that day? I bet the answer is nearly zero. To get 100 perfect reps in doing something new, such as learning how to rotate correctly to start the takeaway is impossible going full speed while hitting balls. NO ONE will do something new properly with all those extra distractions and challenges, especially at speed.

So, if you're like most, you go to the range to work on something, you "think" about it, make a few practice swings to try and "feel" the new movement, and then begin wailing away on balls, using ball flight as your measuring stick. This is not only a complete waste of time, but practicing like this guarantees you're not learning anything new at all and will continue to struggle with your swing.

But, let's say you're the exception, you've already read the books I recommend you read on learning such as Dan Coyle's "The Talent Code" and you know that just hammering balls on the range all day is futile. So, you practice intelligently at first and focus on the movement for a day or perhaps even a week. You're still FAR from mastering that movement. It takes between 3,000-5,000 reps to master a new movement pattern and overwrite an existing one.

Again, it's the same for you as it is for Tiger Woods. On average, the typical golfer can get 3,000 quality reps in a month by doing 100 perfect reps a day (which will take on average about 45 minutes depending on what you're working on). That means that "thing" or "tip" you're working on in your swing will take at least a month before you've really taught your brain much of anything - and that's assuming you're working on it correctly which most don't.

That doesn't mean you won't be good or even somewhat skilled at that new movement after just a few hundred reps. It just means you won't "own" that movement pattern for at least a month. In other words, you won't be able to do the movement while telling me what you had for breakfast that morning without making a mistake. Which really means you have no shot at doing this new movement correctly on the course, at full speed, with the ball in the way as well as all the other distractions that golf course provides, until you've gotten 3,000-5,000 reps.

That's why I typically refuse to see any of my students more often than once a month. You need the time to do the movements, for your brain to build a pathway and then myelinate that pathway. This is the process you learned every single movement in your life, from learning how to walk, to learning how to ride a bike, the process is the same. And with the complexity of the golf swing, you could work on individual movements for years before getting enough reps in to master each part of the swing.

If you're like most golfers, you simply don't have the patience to spend a month working on just your takeaway, then another month to get to the top of the swing, then another month for the transition, etc. That's exactly why I created the DEAD Drill. Imagine, if there was only one drill, one sequence of movements that you could learn and perform as one cohesive sequence that encompassed everything you needed to learn about the golf swing. And rather than just being a drill that you repeat on its own, your new drill is actually the entire golf swing, and the golf swing is the drill. That is what the DEAD Drill is.

You only have to learn how to do the DEAD Drill correctly, and it's only composed of 3 core movements. From there, you only need to do this ONE drill 3,000-5,000 times - not 50 drills. **If you can perform the DEAD Drill correctly right now, you could be swinging like a pro 30 days from now - that's the awesome power of the DEAD Drill.** No longer do you have to try and find a drill or tip to fix your slice or chicken wing, the DEAD Drill addresses EVERY issue you could possibly have in the swing and fixes them all. You just have to learn this one drill, do the pre-requisite number of reps to master the movement, and go out and start playing your best golf.

I can't change how the brain learns. It's hard coded into our DNA. But I can change how you learn the golf swing. I can make it far simpler and faster than anything else you've ever done. I can make it concise and focused - now it's up to you to learn it and put in the reps.

Chapter 0: Setup & Learning

Why start a chapter with 0? Simple. I like to define the movements of the golf swing as three core movements that you learn in 6 specific steps. That's how you will learn them on the website and during a RotarySwing BootCamp (learn about BootCamp at https://rotaryswing.com/bootcamp). But before you ever even think about working on the movements, you have to start at ground zero - setup and how the brain learns.

Because this book is focused on the DEAD Drill, I'm going to briefly touch on some key aspects of the setup and learning. If you go to the website, you'll see that I have dozens of videos on setup, learning, grip, posture, etc. so there's no point in spending too much time on those topics here. Instead, I want to call your attention to the most common setup and learning mistakes that nearly every golfer I see makes. If you're making these same mistakes today, you'll find it very difficult to do any of the movements correctly in your swing.

To this day, I almost never see a student for a first lesson who sets up to the ball correctly. The reason is that the proper setup doesn't feel natural and it's not intuitive. There are things that you have to do in your setup that you would only do once you understood their importance and impact to other areas of the swing. But since most golfers don't yet possess that knowledge when they take a lesson, they're all setup the same way - trail side dominant with little to no axis tilt.



It makes perfect sense because most golfers are very right side dominant who play right handed. This leads to a setup with no or even negative axis tilt where their spine is actually leaning toward the target. Of course, this not only typically leads to a reverse pivot, but a very weak and over the top swing as well.

Having axis tilt at setup is the first and perhaps most important fundamental of setup, so don't ignore it. On the website I walk you through a simple check to ensure you have the proper amount of axis tilt by simply holding a club against your sternum and belt buckle and then slide your hips toward the target until the club bumps you in the knee. (https://rotaryswing.com/axis-tilt).

It's important when you're learning to have axis tilt that you don't introduce "side bend". Side bend is simply the act of bending your spine to one side and taking the spine out of neutral joint alignment. You want to keep your spine in neutral as you slide your hips slightly

toward the target and let your spine “fall” away from the target slightly. If you see that your lead shoulder is significantly higher than your trail shoulder, it’s likely you’re introducing side bend and shoulder tilt and these will limit your ability to make a full turn and force you into a weak, arms dominated swing.

The second setup mistake that is very common is setting up with too wide a stance width. This mistake is very typical of golfers who dominate their swings with their arms and shoulders. When your force of movement from the top of the swing is with the arms and shoulders, your balance will suffer and you’ll compensate by taking a wider and wider stance until you no longer feel you’re falling off balance. Of course, this leads to a compounding error.

Now that you are standing too wide, you can’t shift your weight correctly, which in turn, forces you to use your arms even more to power the swing. Because you can’t shift your weight, you also start moving the ball farther back in your stance which causes you to shift even less weight or you’d top the ball if you shifted your weight properly back to the lead leg. One mistake begets another and now you can see where this is going... If you feel that you need to setup with your feet wider than 2 inches outside of neutral joint alignment, then you need to realize that you’re dominating the swing with your arms and shoulders and you need to fix your force of movement by focusing on the 3 core moves of the DEAD Drill.

A narrower stance at first may not feel very stable compared to what you’re used to. But, once you learn how to move your body correctly as you will be learning the DEAD Drill, you’ll find that you’ll actually be in better balance than before, even though your stance width may be much narrower than you’re used to. You’ll also quickly discover that shifting your weight is dramatically easier and your head will be able to more easily stay centered throughout the swing.

Learning

During my clinics, I spend over an hour talking just about the learning process. It may seem strange for a golf clinic to spend hours indoors NOT hitting balls listening to my team and I lecture, but rest assured, NOTHING is more fundamental to your improvement than understanding the way your brain learns new movement patterns.

You can have all the best information in the world, but if you don’t communicate with your brain how to “groove” that new movement, it’s all a complete waste of time. While I won’t dive into all the nuts and bolts here as I again cover this with hours of content on the site, I want to draw your attention to some simple facts.

First, it takes 3,000 to 5,000 perfect repetitions to master any new movement pattern and overwrite an existing one. You CAN'T change this, it's the same for everyone! Yep, even Tiger Woods has to learn the exact same way as you - through hard word drilling the movements over and over again. It doesn't matter how "fast" a learner you think you may be. In order for you to "own" this new movement so that your brain chooses the new one over the existing one at a subconscious level, you need at least 3,000 quality reps.

Now, that doesn't mean at 500 reps that you're not going to be quite skilled at it. It just means that you can't do that movement while telling me what you had for breakfast that morning without messing it up. With only a few hundred reps under your belt of ANY new movement, whether learning how to write your signature differently or learning how to play the guitar, you're still going to be controlling the movement at a conscious level of the brain. So, you'll be able to do the movement, but it will be a little slow, clunky and awkward. But with more reps comes more proficiency, more skill, more speed and smoothness.

So, understand that, at first, learning is a little slow and clumsy. If you've never played the piano before and I start you with a piece of Beethoven, it's not going to go well. We need to start with "Mary Had a Little Lamb" first. Actually, we need to start with the scales, hand position, etc. and work our way up to actually playing a song.

In the past, that's how I taught my golf students. We started with nothing but the takeaway, then we'd go to the top of the backswing, then the downswing, each phase requiring the prerequisite number of reps. While obviously successful, I hated how long it took but I didn't know how to get around the mechanical learning process of the brain. The myelination process alone takes between 2 to 14 days to even initialize. That means that what you're working on today doesn't really begin to get "cemented" into your neural pathways for up to a couple weeks! In some ways, this should encourage you that if you've failed to make big improvements in your swing over the years, it's likely you have worked AGAINST how your brain learns rather than with it.

But even still, I knew there had to be a better way, a faster way to get the results I wanted for my students. And that's why I toiled away for years trying to break the swing down into what I termed the DEAD Drill - the **D**rill to **E**nd **A**ll **D**rills.

You see, I didn't figure out a way to break the laws of physics or rewire the brain into learning faster. But what I did do was the next best thing. I figured out how to boil EVERYTHING you need to learn about the golf swing into ONE simple drill, that anyone of any ability could easily master, so that you only had to do those 3,000 to 5,000 reps ONCE. And that is the purpose of the DEAD Drill. You learn ONE Drill that is the last drill you'll ever need because it encompasses every area of the swing and will literally fix ANY issue, from over the top, to flipping, to chicken-winging and much more, and you can always return to it in the future, even right in the middle of a round, to get your swing instantly back on track.

No more trying to remember some random tip you read. No more trying to recall what you were told in your last lesson. Just one simple movement that fixes everything. You've still got to do the work, you still have to get in your reps, but it's a heck of a lot easier knowing you've only got to learn one thing and you can go on to play effortless, pain free golf for the rest of your life while hitting the ball better than you ever dreamed.

As I mentioned, there are just three core movements of the DEAD Drill. If you can get these three simple movements right, and you CAN, golf will never be the same for you. You'll finally understand and be able to replicate the shots you see on TV, and perhaps more importantly, know exactly how to fix the shots that didn't go as planned. So, let's get started!

Chapter 1: The Backswing

To have a perfect backswing, you really only have to do two things right: rotate correctly and transfer weight. That's it. If you do these two things and have your arms FOLLOW along instead of trying to be the star of the show, you'll be amazed at how quickly you can look just like your favorite pro at the top of the swing.

Over the past 25 years of teaching, I've seen the arms dominate the backswing in nearly every amateur golfer I've taught. Understand this: getting your arms to play nicely with your body turn is the most important and challenging aspect of the entire backswing.

I have a mantra that I use to reinforce this idea. Think to yourself;

"BIG body turn, tiny little arm swing."

You should feel like you're rotating a lot and that your arms are barely moving at all. This keeps your arms moving in sync with your rotating rib cage and helps prevent them from taking over your backswing.

With your new backswing mantra in mind, here are the only two things you have to do have a proper backswing.

Step 1: Rotation

This is your number one priority; turn, baby, turn! If there was one mistake that is more prevalent than any other, it's a lack of enough rotation in the backswing. When the arms begin to take over the backswing, the body will slow or even stop its rotation, leading to a very weak turn, if any at all.

This lack of rotation leads to a lack of muscle fiber recruitment from the core of the body and makes it virtually impossible to produce any real power in the swing. You will be completely dependent on the small muscles in your shoulders and arms to produce power which leads to a vicious cycle.

The harder you want to hit the ball, the harder you will swing your arms. The harder you swing your arms, the more you will cast the club, leading to a loss of lag (leverage) in the swing. You've no doubt experienced the following in your swing if you suffer from this mistake: the harder you try and hit the ball the more it just goes UP but not OUT. The cast leads to a loss of shaft lean at impact and will often cause you to scoop or flip the club at impact as the momentum of the club causes it to overtake the hands. The ball might go higher, but it won't go any farther.

It's incredibly frustrating to know that no matter how hard you swing, you simply can't hit it any farther. If this rings a bell, then you're likely not rotating properly in the backswing.

The great news is, proper rotation is so simple I can teach it to you in just minutes. In fact, you can learn it right now, right where you're sitting, reading this book. All you need to do is sit up nice and tall and pull your rear shoulder behind your head. It's critical that you learn to PULL and not PUSH (I have a video that explains why in depth at https://rotaryswing.com/flail).

If you've done this correctly, you've made a nice big shoulder turn of about 45 or more degrees and your hips haven't moved at all - because you're sitting on them! Most golfers believe they don't have the flexibility to make a full shoulder turn, but it's complete nonsense.

You've just proven to yourself that you can make at least half of your shoulder turn without turning your hips at all. You've also felt, perhaps for the first time, the correct muscles on the sides of your torso (your obliques) load up during the backswing. If you've never felt these muscles in your backswing before, get VERY excited because you're about to unleash a boat load of power that you've never tapped into!

As an added bonus for those of you who have a tendency to sway in the backswing and let the head move well off the ball, you've just cured it! If you pulled your trail shoulder behind your head, your head didn't move laterally at all. This again goes back to the concept of pushing vs. pulling. Think of it this way, what direction does a push move and what direction does a pull move?

If you were to get up from where you're sitting right now and pull the chair across the room, that chair will follow a nice straight line toward you because you are the force of movement. This is the same physics concept that allows us to pull a trailer down the highway at high speeds without having to make thousands of corrections to keep it following behind the vehicle.

But, what happens when you try to push that same trailer from behind? You can barely move at speed at all and you're constantly making corrections to keep it moving in a straight line. But what changed? Nothing but the force of movement which is now behind the trailer pushing instead of pulling.

A push always moves AWAY from the force of movement while a pull always moves TOWARD the force. If you're pushing from the lead side in the backswing and then pushing from the trail side in the downswing you have as much chance of becoming a great ball striker as you do pushing a trailer down the highway at 70 mph. Physics always wins and the golf swing does not somehow defy the laws of physics!

But wait, doing this drill sitting down you've only turned halfway and I'm telling you that anyone of any flexibility can make a full shoulder turn. But how?

Simple. Stand up, do the exact same movement but from your golf setup this time (having axis tilt and allowing your weight to shift to your trail leg will significantly increase your ability to make a full turn). Do it with your arms across your chest and make that same turning motion you felt while sitting down. Turn as far as you comfortably can without allowing your hips to turn. You should still turn the exact same amount as when you were sitting - at least half way.

Now, simply let your hips turn the remaining 45 degrees or so to get you to a full shoulder turn. That wasn't so hard now, was it? The hip turn of 45 degrees and the shoulder turn of 45 degrees means that anyone, no matter how inflexible you think you may be, have more than enough mobility to make a full turn. Even if you're extremely stiff and have multiple level thoracic spinal fusion as many of my students do, you can simply allow your hips to turn the extra 5 degrees you may by missing.

The reason you haven't been able to make a full shoulder turn in the past is because you weren't turning your shoulders! You were swinging your arms across your chest instead and that lead to your body feeling a lot of tension in the lead shoulder girdle.

Our bodies use tension and pain as a way to communicate to our brains that we're at risk for injury. So, our brain wisely decides that once we feel all this built up tension in our lead shoulder area that we need to get rid of it and this can happen as early as halfway back.

In other words, you may only turn 45 degrees during the backswing yet "feel" fully loaded up and powerful. But, the power you feel is only from the tiny muscles in the back of the lead shoulder - not nearly enough muscle fiber recruitment to lead to any reasonable clubhead speed.

If you're one of the millions out there who can't swing over 100 mph, then this is where you need to look first. I can almost guarantee you that you're not turning correctly and that your arms are dominating your backswing.

Make no mistake about it, getting this part right is the #1 struggle for most golfers and the one you must pay attention to the details. I have numerous videos on the site that deal with rotation and perhaps the most powerful is called "5 Minutes to Master Rotation" (https://rotaryswing.com/5-min-rotation). This drill is powerful because of the sequence that it follows.

At first, you start with your arms folded across your chest so that you can focus solely on rotating your torso. Next, you put your hands in a "prayer" or "namaste`" position in front of your chest. This is when the truth of how you're powering your golf swing quickly becomes evident.

As you're rotating back with your hands clasped together in front of your sternum, they should stay centered in front of your chest. Yet, almost everyone who does this drill the first time ends up with their hands back behind center, why? The answer goes back to force of movement and pushing vs. pulling.

Most golfers "push" from the lead side to move the club back behind them to the top of the backswing. This leads to the arms taking over the swing and the body not rotating correctly, if at all. Your arms and shoulders should be relatively relaxed during the backswing and be "moved" into position by the rotating rib cage, not the other way around.



In the image, you can see that my hands are still centered in front of my chest and my left shoulder is still relaxed, yet I've turned 45 degrees. This is essentially the entire takeaway. The hands during the takeaway should not move much behind the center of the chest.

You'll also note that my hips have not turned at all. This is critical so that you know you're loading the muscles in the core rather than just letting your hips turn and move your upper body.

I call allowing the hips to do all the rotating early in the swing the "lazy man's turn". It takes no effort to just let your hips turn back at this point and as a result, recruits virtually no muscle fiber. No muscle recruitment means no power, so make sure your hips are quiet and stationary as I discuss in the video, but don't try and "lock" them in place. That will create too much tension and restriction. Your hips will turn a slight amount, but you want them to get pulled into rotating by the upper body rather than just freely allowing them to rotate on their own.

The video walks you through a very specific sequence where we then stack on more challenges for your brain as we "walk" the hands out farther from your chest and then it becomes very evident when you have a tendency to push from the lead side. Really pay close attention to the details of this movement as most don't realize that they're pushing from the lead side and are shocked to see how much their hands have moved behind the center of their chest when doing this drill.

Step 2: Weight Transfer

Transferring weight from one leg to the other is a fundamental of all powerful hitting and throwing sports. Yet there have been many golf swing fads that try to minimize or even completely get rid of weight transfer. This is the typical "symptomatic" approach to "fixing" problems in a golfer's swing.

Many golfers who go to these band-aid fixes do so because they hit the ball fat, so, hanging on the lead leg makes sense - if you don't look at the underlying cause.

RotarySwing is a fundamentals based approach to the swing. In other words, we don't let symptoms misguide us in prescribing the correct fix for the ailment.

The reason golfers hit behind the ball is NOT because they shifted their weight to their trail leg in the backswing. Read that last sentence one more time....

Golfers hit behind the ball because their force of movement is coming from their arms and shoulders to start the downswing. This downward "hacking" motion, similar to chopping wood, forces the weight to stay on the trail foot in the downswing.

The fix is to cut out the underlying cancer, not put a band-aid on it. To cure this disease, you simply need to change your force of movement, which just happens to be the entire point of this book and the DEAD Drill in general!

Remember how I told you earlier that if you load up your lead shoulder early in the backswing that the tension will force the arms to fire first in the downswing? THAT'S the root CAUSE of hitting behind the ball. Your body simply won't be able to override your subconscious' protective instincts to prevent injury during the backswing, so you will fire your arms first and that will lead to a lifetime of frustrating golf.

Or, you can learn to simply pull your rear shoulder behind your head while pushing your trail foot into the ground. If you don't like the term "weight transfer", then think "increase pressure". You need about 70-85% of your weight on your trail foot before you begin shifting back to the lead side. If you don't allow your weight to transfer, you will find it more difficult to make a full shoulder turn and may feel increased tension in the low back which is a big "no no". I did a recent video on YouTube discussing Tiger Woods' continuing back issues that will help you understand this further: https://www.youtube.com/watch?v=iOfhpYNgjpU

By allowing your weight to transfer over to the trail leg (specifically, you should feel the weight being driven down through the center of the ankle), you ensure you are pivoting on your hip socket which is a joint perfectly engineered for this motion.

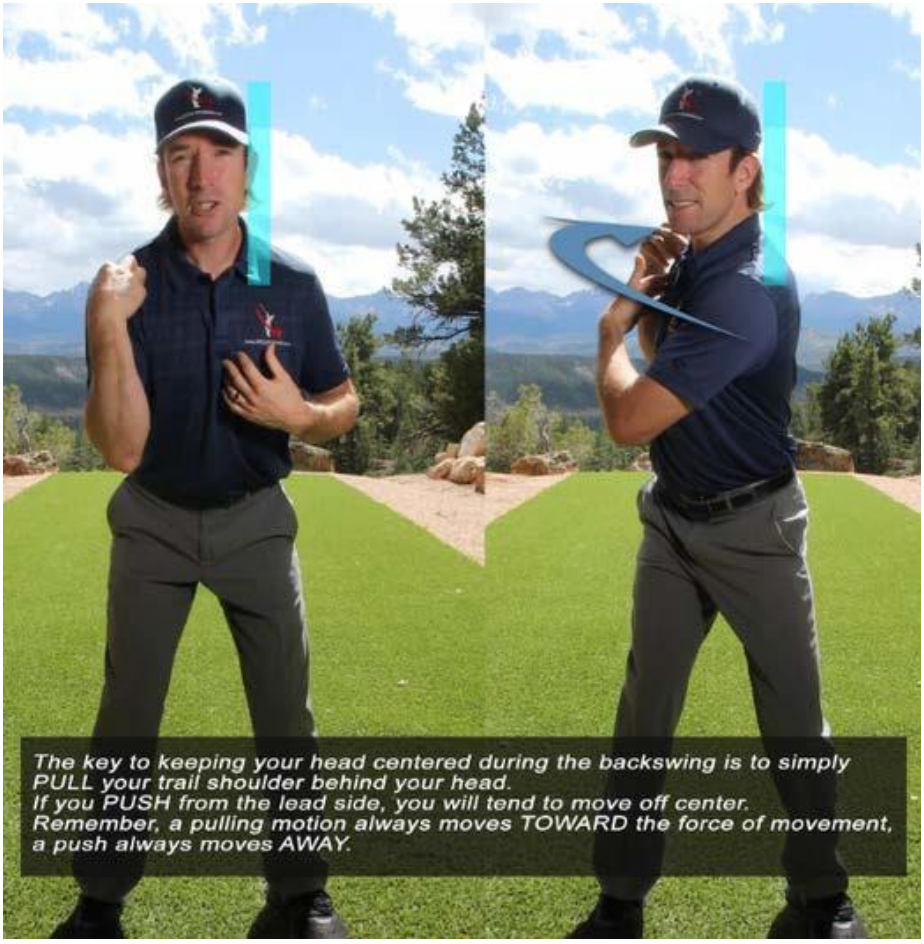
Checkpoints

Let's now go through the checkpoints that you'll want to be paying close attention to during this backswing motion.

Face On

From face on, there 4 critical checkpoints that you'll want to monitor in the mirror. Let's start from the top and work our way down.

The first one is the most important - your noggin. Your head must stay relatively centered throughout the backswing. Up to 1.5" of lateral movement is acceptable and normal, but any more than that and you're adding too many moving parts to your backswing which increases variability/inconsistency. By the same token, trying to force your head to stay perfectly still often leads to a reverse pivot where your head actually moves toward the target and is actually worse than allowing your head move too far off the ball.



If you find your head moving too far off the ball, know that you're pushing from the lead shoulder. It's a very common mistake and one you must avoid. The quickest and surest way to correct this is by doing my "Wall Drill" (https://rotaryswing.com/wall-drill). If your head is moving too much during the backswing, this drill will teach you what it feels like to make a compact and powerful wind up in the backswing.

The second checkpoint is your trail shoulder. It should be visible on the other side of your head. If you can't see the trail shoulder blade, you haven't turned far enough. Making a full shoulder turn is critical not just for power, but for swing plane and path as well. So don't quit on your turn!

The third checkpoint is axis tilt. Over the years my team of instructors must have uttered the phrase "you need more axis tilt" at least 60,000 times (as of the publishing of this book, we've done more than 80,000 online swing reviews), so yes, this probably means you too, statistically speaking!



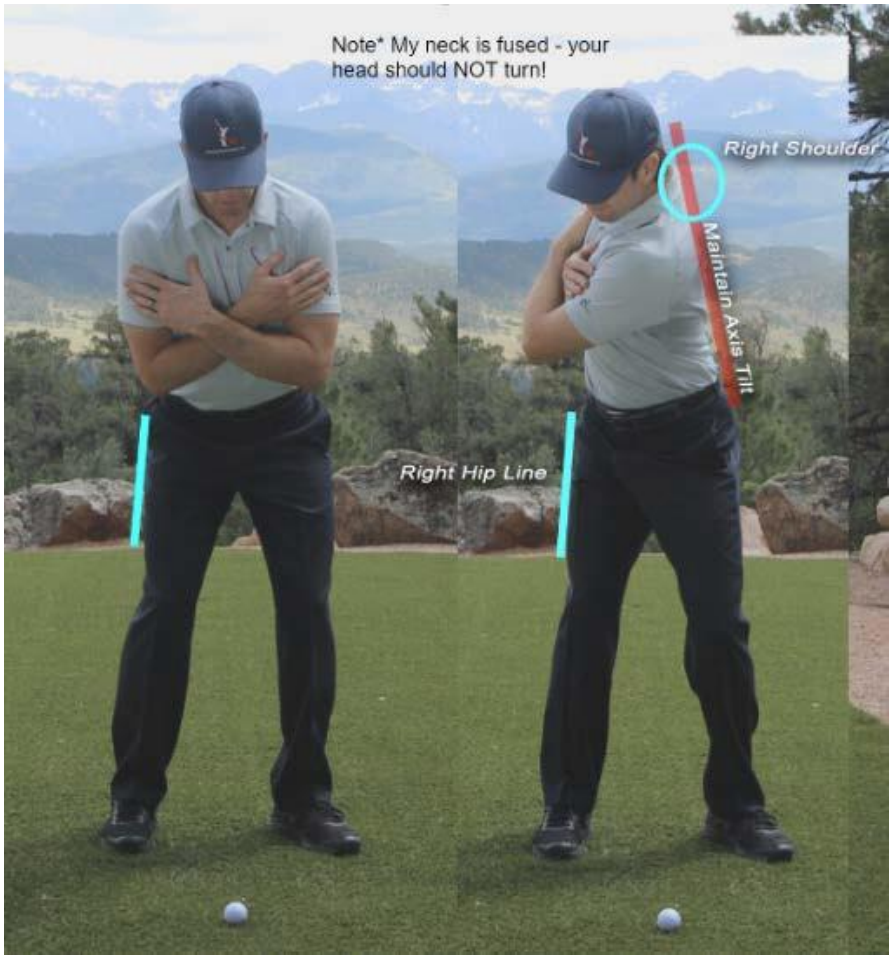
Most golfers don't setup with enough axis tilt to begin with and then their swing is a bucket of compensations from there. But, if you let your hips slide laterally during the backswing, you can lose all your axis tilt during the backswing and have a reverse pivot. My favorite way to check this is with my Neck Tie Drill (https://rotaryswing.com/neck-tie). If you've setup properly and rotated properly, a neck tie should hang freely off your chest at the top of your backswing rather than be draped across your belly.

Setting up with proper axis tilt is not intuitive, you're not likely to do it right just because it feels so strange at first for many. But you have to get over what you "feel" and rely solely on what you "see". If your "feel" was right, you'd already be playing your best golf because what you're doing now feels "normal" to you. But if I were to setup and swing exactly like you it would feel strange to me. Feel is irrelevant when you're learning something new. The only thing you can trust right now is a mirror and a video camera.

So, to ensure you have proper axis tilt at setup, simply take your proper (probably narrower) stance width and setup. Hold a club against your sternum and belt buckle and slide your hips slightly toward the target until the clubhead bumps you in the knee. That's it, you're done! You now know how to setup with perfect axis tilt every time! If you want to see this demonstrated, go to https://rotaryswing.com/axis-tilt.

The final checkpoint is the Right Hip Line. I mentioned earlier that if you let your hips slide laterally you'll reverse pivot. Checking the right hip line is how you prevent this. Ben Hogan described a similar check in his book and used to talk about leaning an umbrella up against that trail leg and that it shouldn't really move during the backswing. I like to have my students put their right hip up against something stationary like a countertop if they're at home or a bag stand or even their golf bag when on the range.

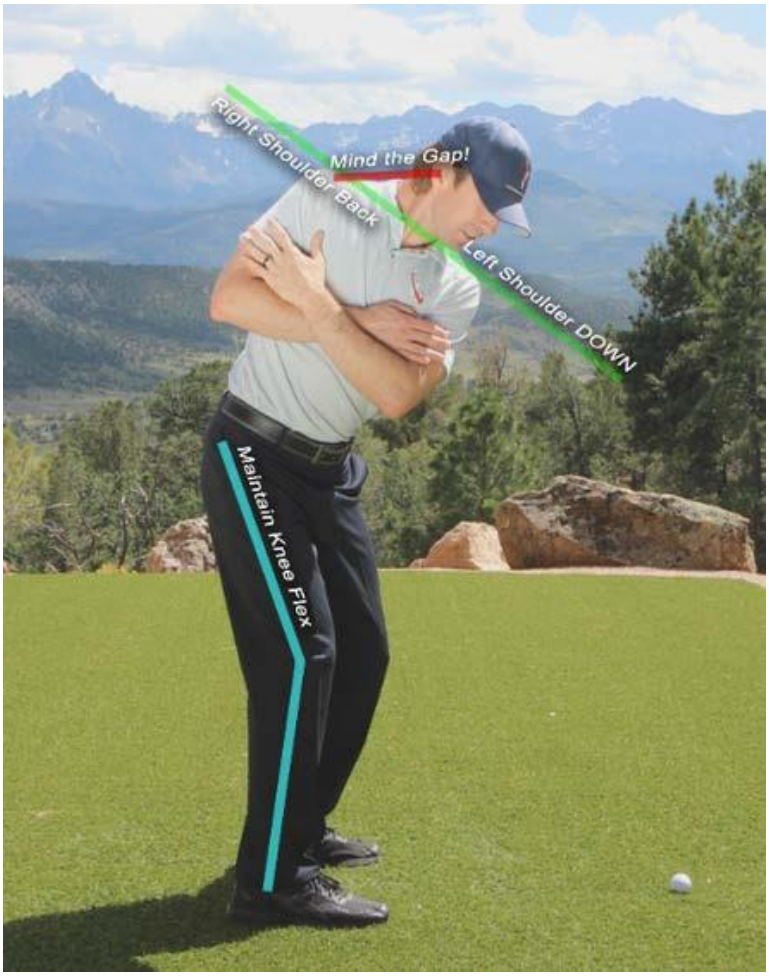
The effect is the same. Your trail hip and thigh should “appear” to have never moved laterally during the backswing (technically, the hip is both moving laterally away from the target and rotating back behind you away from the target line and these two movements together create the illusion that the right thigh and hip are stationary). If your hip moves away from the line toward the target, you didn’t shift enough weight and made your body rotate around the base of the spine. This leads to a lack of a full turn and lower back discomfort. Simply allow more weight to move over the trail leg as you rotate back and check in the mirror (or video) that the hip appears stationary from face on.



If you’ve covered these checkpoints correctly and look the same as I do (minus the head turn!) in the picture, then you’ve just made a world class, tour pro quality backswing! Now we just need to check a couple simple things from down the line and we’re off to the races!

Down the Line

When viewing your swing from down the line, there are three things to check once you finish your rotation to the top. The first thing to check is your shoulder plane. In its simplest terms, your shoulder plane should be perpendicular to your spine, or 90 degrees.



A common mistake when golfers first start learning to pull instead of push is that they start turning their shoulders too flat. To avoid this, make sure that your lead shoulder works down while the trail shoulder works “up”. They’re really just rotating on the same plane they started at address, so don’t over do this. Again, a mirror or video camera is your best friend. (https://rotaryswing.com/shoulder-plane)

Another mistake to avoid is having the rear shoulder elevate during the backswing, decreasing the gap between the shoulder and the ear. The shoulder should stay in the same depressed state it was in at address. However, most golfers are so used to powering their swings with their arms and shoulders they have no idea they’re hiking the rear shoulder up and creating so much tension. If you feel that your rear trapezius muscle is tense at the top of your swing, shrug your shoulders up as high as you can, then relax them back down to neutral and this is what they should feel like at the top of the swing.

The third major checkpoint is maintaining knee flex at the top of the swing in the rear leg. Letting this leg fully straighten during the backswing is a very common mistake that allows the hips to over rotate in the backswing and reduces the healthy muscular load you are trying to create in both the core and trail leg. It also means they have to rotate that much more during the downswing to get to an open position at impact. The RotarySwing is all about moving the absolute fewest parts possible to create the most efficient and consistent golf swing possible and when people make a mistake, it's usually because they're adding a movement that is unnecessary.

By maintaining a slight amount of knee flex at the top of the swing you should feel some healthy load in the trail leg glute and hamstring. As soon as you straighten the leg, this load immediately disappears. A simple way to develop this feeling is to go to the top of the swing and then squat down slightly. You'll instantly feel the creation of muscular tension in your butt and back of the leg and you want this at the top of the backswing. This drill is an exaggeration on your real swing, you don't want too much knee flex anymore than not having any at all.

Reference Videos

There are dozens of common mistakes that golfers make when trying to learn these basic fundamental movements that would take dozens of pages to cover in text. Luckily, they're all already covered in videos on the site in great detail. So, if something isn't looking quite right, check out the following videos. If you're still stumped, get a swing review (https://rotaryswing.com/swing-reviews/get-review) from one of our Certified RotarySwing Instructors so they can show you exactly how to fix the issue.

All of the following videos can be accessed at https://rotaryswing.com/users/performance-center/rst-5-step-system



Step 1: The Backswing

For each section of this book there is a corresponding video on the site that covers each point discussed here. It's often times much easier to demonstrate the correct movements and show you typical mistakes on video rather than trying to explain it via the written word. This video is the first video in the 6 part DEAD Drill series. It contains everything you need to know about building a perfect backswing. https://rotaryswing.com/step-1



Laser Beam Knee Drill

Many golfers move like they're trying to imitate Elvis Presley during the backswing with their lower body. The lower body should be relatively quiet (NOT frozen in stone!) because every degree of rotation and movement you put in the backswing has to be taken back out in less than a quarter second in the downswing. To minimize inconsistency and variability, you need to make sure that your knees are moving correctly - or more specifically, being MOVED correctly. The Laser Beam Knee Drill will help you with understanding how and how much your knees move in the backswing.

Visit https://rotaryswing.com/laser for this drill.

Chapter 2: The Transition

The transition move in the golf swing has been attempted to be taught so many different ways over the years and each with little success. The transition is actually a very simple move, there are really just two movements to it. The difficulty for you, the golfer, is actually ensuring the backswing is correct because if the backswing is off even slightly, performing the transition and downswing movements correctly will be much more difficult, if not impossible. In fact, there are far more checkpoints for the backswing than there are for the transition.

That's because the backswing is what sets the stage for a powerful yet simple transition move. But if the backswing isn't correct, if you didn't hit each of the checkpoints from the last chapter, the transition will continue to seem like a move that only elite golfers can do. The opposite is actually true. Once I explain to you just how simple the transition move really is, you'll realize that you too can move just like the best ball strikers in the world.

As I mentioned, there are really only two simple moves to the entire transition and the first one is so small and so subtle, it hardly deserves to be called a move at all. But, it is absolutely critical to the swing for proper sequencing, so don't ignore getting this little detail right.

The Lead Knee

During the backswing, the lead knee is pulled both slightly in toward the trail leg and slightly out over the foot as the hips rotate. This, of course, has to be "undone" during the downswing. You have to move your lead knee back into neutral joint alignment to initiate the transition and weight shift back to the lead leg.

The knee doesn't move much, at least it shouldn't have to if you didn't move it too far during the backswing (remember the Laser Beam Knee Drill video?). But most golfers push too hard, too soon off the trail leg and never learn to move from the lead side and instead end up losing their posture and sliding past neutral joint alignment. This is not only bad for your swing, it's bad for your body. You never want your lead knee or lead hip moving past the center of the ankle (viewed face on) during the downswing and this will only happen when you're pushing off the trail leg.

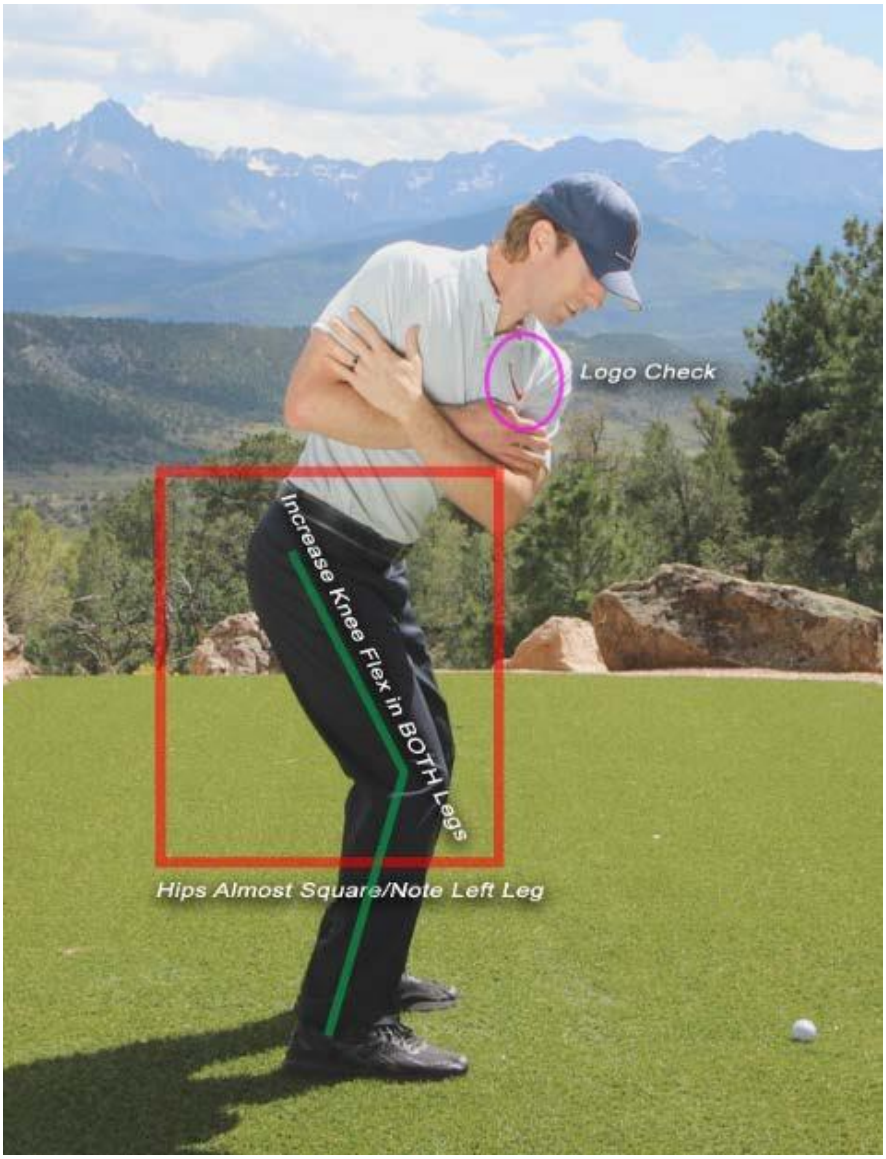
Understand that neutral may look a bit askew if you angle your lead foot out at setup as I have done in the following image. It appears that my knee is slightly forward of neutral but because my left foot is angled toward the target, it is actually not. You'd need to setup a camera that is in line with the angle of the foot to check this with true accuracy. But you needn't sweat the tiny details too much here. If you're putting yourself at risk for knee injury, you will be well past neutral and it will be very obvious, even if your foot is flared.



Once the knee has initiated the transition back to the lead leg, the transition move is completed by “squatting” back to square (https://rotaryswing.com/squat). In other words, your hips need to rotate back to “square” to the target while your shoulders remain closed. This is critical! You do NOT turn your shoulders in the downswing - your shoulders GET turned by your hips. By turning your hips back to square, your shoulders will be turned about 45 degrees or so, depending on how much you let your hips turn in the backswing.

As you’re turning your hips back to square, you are also continuing to shift weight back over to the lead leg. Where you may have had as much as 85% of your weight on your trail leg at the top of the backswing, you should now have about 60% of your weight back over the lead leg. This is also where you should be feeling a very slight “squat” move. In other words, increase the knee flex and hinge from the hip slightly to load up for the post up move. You want to feel your powerful trunk loading up and you want to feel that you’re driving your feet into the ground.

This is an incredibly powerful feeling the first time you do it and it's common for golfers to get "addicted" to it and start to overdo the squat. Your head should drop no more than a couple inches; any more than that and you'll have a hard time getting posted up in time without hitting the ball fat.



In the image you can see that I haven't turned my shoulders as the logo is still visible on my shirt, yet my hips are almost back square to the target. I have very slightly increased the knee flex so that I can use the ground for leverage and I would be in a very powerful position in which to deliver the club from.

For those of you who tend to swing over the top and use all arms and shoulders to power your swing, this feeling will be very foreign. You won't feel that you're going to be able to get the club back to the ball and if you did, you'd hit it way right (for righties). That's a GOOD thing! Don't worry about what you feel at this time, you've never felt a proper swing before! Only focus on what you see in the mirror and on camera and your feel will adapt to the correct movements with repetition.

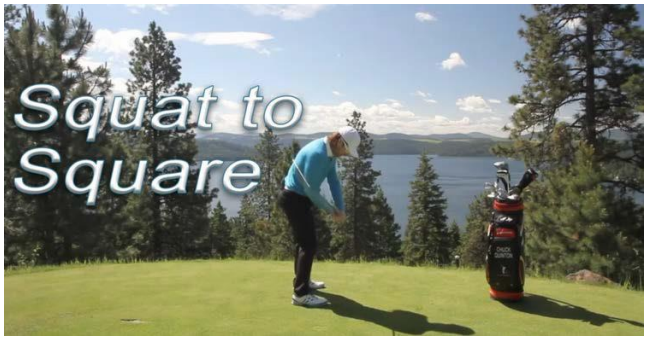
For those of you who push very hard off the trail leg and lose your posture, this feeling will also be the exact opposite of what you're used to. You'll finally feel your hips moving slightly back instead of toward the ball.

So, to recap, the transition move is nothing more than simply squatting your hips back to square while shifting your weight back over the lead foot. As we add the arms and club later on, you'll soon discover the secret to a proper swing plane - it's all in how the body moves. You'll never again try to create a swing plane by manipulating your arms and club, you'll see that swing plane is a by product of the angles of the spine and the sequenced movement of the body. Your club will shallow out perfectly, and you will have done nothing more than "squat to square".

Reference Videos



DEAD Drill Step 2 - The Transition
The second step in the 6 part video series on the DEAD Drill is the transition move. I go in depth on how to make your transition incredibly simple, yet powerful while showing you each checkpoint.
https://rotaryswing.com/step-2



Squat to Square
There are numerous videos discussing the transition on the site with some fun drills to really wake up the lower body. My "Frisbee Drill" is one of my favorites for feeling this, but the main one you need to be familiar with is the "Squat to Square" video. Once you feel this movement for the first time, you'll finally know what it feels like to be able to "hit the ball with your legs."
https://rotaryswing.com/squat

Chapter 3: The Post Up

The post up move is perhaps the most critical of all - and the simplest. That may sound crazy to you if you've been flipping the club, sliding past impact, hanging on the back foot or any other number of common mistakes. But all those mistakes were caused by you trying to dominate the swing with your arms and hands - your force of movement was wrong.

But now that you are learning how to move your body correctly, you'll realize that the post up is little more than pushing your lead leg into the ground. By straightening your lead leg, you're effectively moving your lead hip up and away from the ball - the exact opposite direction the club is travelling. The club is moving both down since the ball is on the ground, and out as the club has to travel on an arc to get back out to the ball. You always want your body moving in the exact opposite direction the club is going. This is how you take advantage of centripetal and centrifugal force in the swing.

During the backswing, what did I tell you to do? I told you to pull your rear shoulder behind your head. What direction is the club moving during the backswing? You're moving your rear shoulder toward the target while the club moves away from the target. That's why with RotarySwing we don't have to worry much about the path and plane of the club. We're putting Sir Isaac Newton in the driver's seat for us and putting the laws of physics to work. I have a great video using a flail as an illustration of this point here (https://rotaryswing.com/flail).



Face On Checkpoints

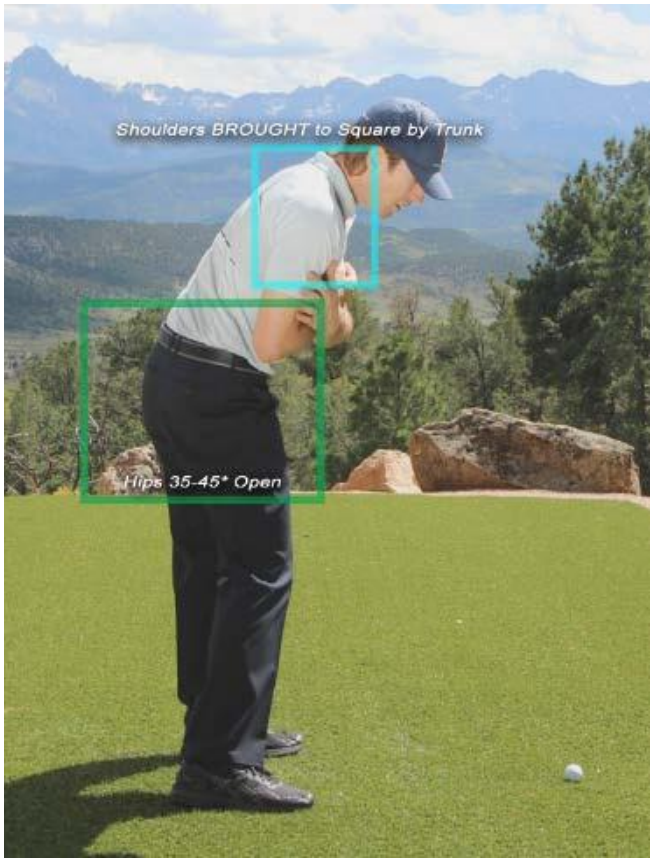
In the image on the left, you can see all the critical face on checkpoints - and there aren't many. The first and most critical is the hip in neutral joint alignment (NJA). It is absolutely critical the left hip socket not move past the center of the ankle at this point in the swing when the stresses on the body are at their peak. And, if you're moving correctly using the pulling muscles in the lead leg rather than pushing off the trailing leg, that's exactly where you'll end up. It's only if you push off the trail leg will your hip be moved past NJA and put you at risk of injury. A labrum tear is often the result, or if you continue to do it for years on end, expect a hip replacement as your reward (think of just about every golfer from the 70s era - Nicklaus, Watson, Weiskopf, etc.). It wasn't just bad fashion that plagued this era of golfer, it was also bad mechanics that lead to countless hip replacements.

The second checkpoint is the left side of my head, it should end up right where it started, on the back of the ball. If your head moves in front of the ball, you either have the ball too far back in your stance or you're pushing off the trail leg.

The final face on checkpoint is my spine angle, or secondary axis tilt. This is, again, a by product of doing other things right. If I was setup correctly with the proper ball position, then as I move my hips further forward than where they were at setup while my head remains in the same spot as where it started, my spine will be tilted further away from the target than where it started.

Down the Line Checkpoints

The lower body is doing all the heavy lifting in the downswing and just as during the transition, my shoulders are getting a free ride. During the post up move, you're both straightening your lead leg (straight, but NOT hyperextended) and opening your hips by pushing the lead hip open with the leg wile using your obliques to assist in rotating the hips. If I had roughly 45 degrees of separation between my upper and lower halves at the top of my backswing, then guess where they should be at impact? That's right! If your hips are 35-45 degrees open, your shoulders should end up dead square. If they're open, you turned them - DON'T!



One final checkpoint from down the line is the trail heel. You want to ensure that your trail leg foot is still on the ground, though rolled slightly to the inside. If you allow your heel to come up in the air, it will free up your hips to rotate open too far, which in turn, allows your shoulders to open too far and will often cause you to hit the ball off the toe of the club. However, by keeping the heel on the ground, this forces the hips to stop rotating and won't allow them to open any further than they should. This little trick forces the club to release past the body as you'll see later.

Keeping the heel on the ground provides a greater sense of control and stability and leads to greater consistency in the strike. If you see your heel lifting into the air before impact, it means you're pushing off the trail leg and that will lead to numerous issues and inconsistency. Note that this is an EXTREMELY common mistake that takes a while to break the habit.

Reference Videos



DEAD Drill Step 3 - Post Up
The post up move is the key to effortless power in the golf swing and if you're like most golfers, you've never felt what it feels like to have a proper post up. But don't worry, it's not difficult and this video walks you through it.
https://rotaryswing.com/step-3



Role of the Right Foot
This one is extremely important and one of the fastest ways to increase your consistency. If you did nothing else today but worked on this simple fundamental, you'd instantly find you have much more control over your strike and feel much more under control at impact.
https://rotaryswing.com/right-foot

Chapter 4: Add the Lead Arm & Club

NOTHING CHANGES!!! That's the most important thing for you to understand as you begin the process of stacking each component back into the swing. Your focus is still on the exact same body movements that got you to this point. The fact that your lead arm is out in front of you now instead of across your chest is irrelevant. The arm gets moved by the body, NOT the other way around. So, your body positions should look identical to before. The same is true once we add the club into the mix. The only thing that changes is that we now have a few more checkpoints to look at.

You've now learned the 3 core movements of the DEAD Drill and we're doing nothing more than stacking the remaining pieces on top of the core drill itself. You should be focusing on the exact same things as before. Ignore the fact that your arm is there. If you move your body as you've already learned, the arm will go exactly where it's supposed to and that's part of the "magic" of the drill.

Face On



While it's tempting to begin focusing on your arm now, don't do it! If you move your body correctly just as I have taught you so far, sit back and be amazed as your arm starts going exactly where it's supposed to without you doing a thing.

To start, go to the top of your backswing and then simply extend your arm straight out in front of you to mimic a top of the swing position. Don't worry too much about the exact position of the arm, we will focus more on that later on.

Next, simply do your squat to square and feel as if you're leaving your arm at the top of the backswing. It will be brought down to the position you see in the middle image because the hips rotating back to square will turn your shoulders, which will move the arm. Finally, post up. If you've done nothing with your arm, it will end up perfectly in front of your trail thigh.

Down the Line



From down the line, you can see how the lead arm being moved by the body begins to create the look of a tour caliber golf swing. For those of you who have struggled with swinging over the top, this little sequence will be pure magic once we add the club.

Add the Club - Face On

Once we add the club, it becomes very easy to see just how powerful the DEAD Drill really is. By learning how to move your body correctly with just these three simple movements, the positions that you see the pros on TV achieve are finally within your grasp. Having lag, a proper swing plane and path and a rock solid impact position are now all a piece of cake.

The middle image is the one that will probably catch most golfers' eyes. Given that the vast majority of golfers on the planet swing over the top and cast the club, having lag like this is a pipe dream. But, the simple reality is that creating lag is not only super simple, it's a by product of doing OTHER things correctly. The first and foremost reason golfers cast the club is because they are trying to accelerate the club with their dominant hand (right

hand in most cases). The trail arm is in a position where it can do little more in the downswing other than widen the arc, and thus cast the club. That's why you don't want to "push" with the trail arm in the downswing.

However, when you focus on "pulling" with the last three fingers on the lead hand, you automatically create lag just by doing your transition correctly. This great position is carried forward into the post up move. Most golfers can only dream of having this much lag this late in the golf swing, but using the DEAD Drill, you will achieve a perfect delivery position just like this without doing a thing with your arms or hands. The body did all the work.



In this sequence of images, it's the last one that matters most. If you arrive at this position, you're going to have more leverage in your swing than you've ever felt before. For most golfers, the club is already near the ground when the lead hand reaches the trail thigh because they started pushing the club with the trail arm at the top of the backswing.

So, make sure that club shaft is near parallel to the ground at this point as this will be the most critical and final checkpoint you have just before impact. Once you have leverage like this in your swing, speed and distance are the direct result as long as you release the club properly which we will talk about later.

Adding the Club - Down the Line



This sequence of images demonstrates how the DEAD Drill will create a proper swing plane without you having to focus on swing plane at all. You move your body correctly and a perfect swing plane will be the result. Most people are shocked to hear me say that swing plane is NOT a fundamental of the golf swing. But by it's very definition, it simply can't be. Let me explain.

In order to be a fundamental, according to Webster's Dictionary, it must meet these four criteria: It must be primary, central, origin and absolute. The antonyms of the word fundamental are: secondary, consequential, periphery, and dependent. Now, I want you to think for yourself how which one more accurately describes swing plane. The answer is pretty obvious, right? Swing plane is completely consequential and dependent on how you move your body, and happens in the periphery. Whereas the body movements of the DEAD Drill are the "origin" of movement happening at the "center" of the swing.

That's not to say swing plane is not important, it's VERY important, it's just NOT a fundamental. What this really means is that you don't fix swing plane by directly working on swing plane - that's a manipulation. No, you fix swing plane by fixing the underlying fundamental that is causing the faulty plane. You fix the underlying cause, not the symptoms you see. I can guarantee you that if your swing plane is off, there is an underlying fundamental (ie. body movement or setup mistake) of the DEAD Drill that is the real culprit. To fix your swing plane, fix your body and swing plane will fix itself.

Reference Videos



DEAD Drill Step 4 - Add the Arm

On the website, I break adding the arm and adding the club into two separate videos. That is because so many golfers start swinging their arm all over the place without realizing it once we add it back to the "stack". By just focusing on the movements of the arm without the club, it makes it much easier to master each checkpoint.

https://rotaryswing.com/step-4



DEAD Drill Step 5 - Add the Club

Once your arm is being moved correctly throughout the swing by your 3 core body movements, it's time to add the club back into the mix. This video walks you through checking your swing plane and lag so that you now have the club moving through the entire swing just like a pro.

https://rotaryswing.com/step-5

Chapter 5: Adding the Trail Arm

If you want to screw up all the progress you've made so far, then add the trail arm too soon and let it start taking over your swing again. Because most golfers are right handed playing with right handed clubs, they dominate the swing with the right side of the body. This is the exact culprit for swinging over the top and casting - the two most common swing flaws in all of amateur golf. So, to avoid struggling with your swing for the rest of your life, ensure that the right arm is just a "passenger" right now as you add it back into the mix.



If you look at the sequence of images above, one thing should be evident - my body movements are exactly the same as when we started. The fact that I now have reintroduced my lead arm, club and and now trail arm is irrelevant - I'm still just focused on the same three core body movements. If you find that adding the trail arm to the mix begins to change your core body movements, then simply remove it from the "stack" and work to slowly reintroduce it as you get more reps under your belt. The absolute worst thing you could do is continue to do the movements incorrectly after adding the trail arm, so don't be in a hurry to add this piece to your drill. Be patient - those who go the slowest at the beginning ALWAYS arrive the fastest at the end.

As you study the images with the right hand back on the club, it should be clear that everything is exactly the same as when it wasn't there. The lag, the delivery position, the body movements - all identical. That is only possible if your body movements are controlling the swing. If you add the trail arm and now your positions look different, it simply means you're doing something you shouldn't be with the trail arm.



At first, you may find that your swing looks very different when you add the trail arm back in. You may see that you don't have nearly as much lag and your shoulders are more open during the post up. These are common faults that you need to pay close attention to as it means you're starting to overuse the trail side for power.

The vast majority of your swing speed actually comes from the release of the wrist angle (lag), so preserving that should be of utmost concern. In order to do that, you simply need to move your body correctly and relax the arms. They need to get moved by the body and if they do, you'll look exactly like I do in the sequence above.

Reference Video

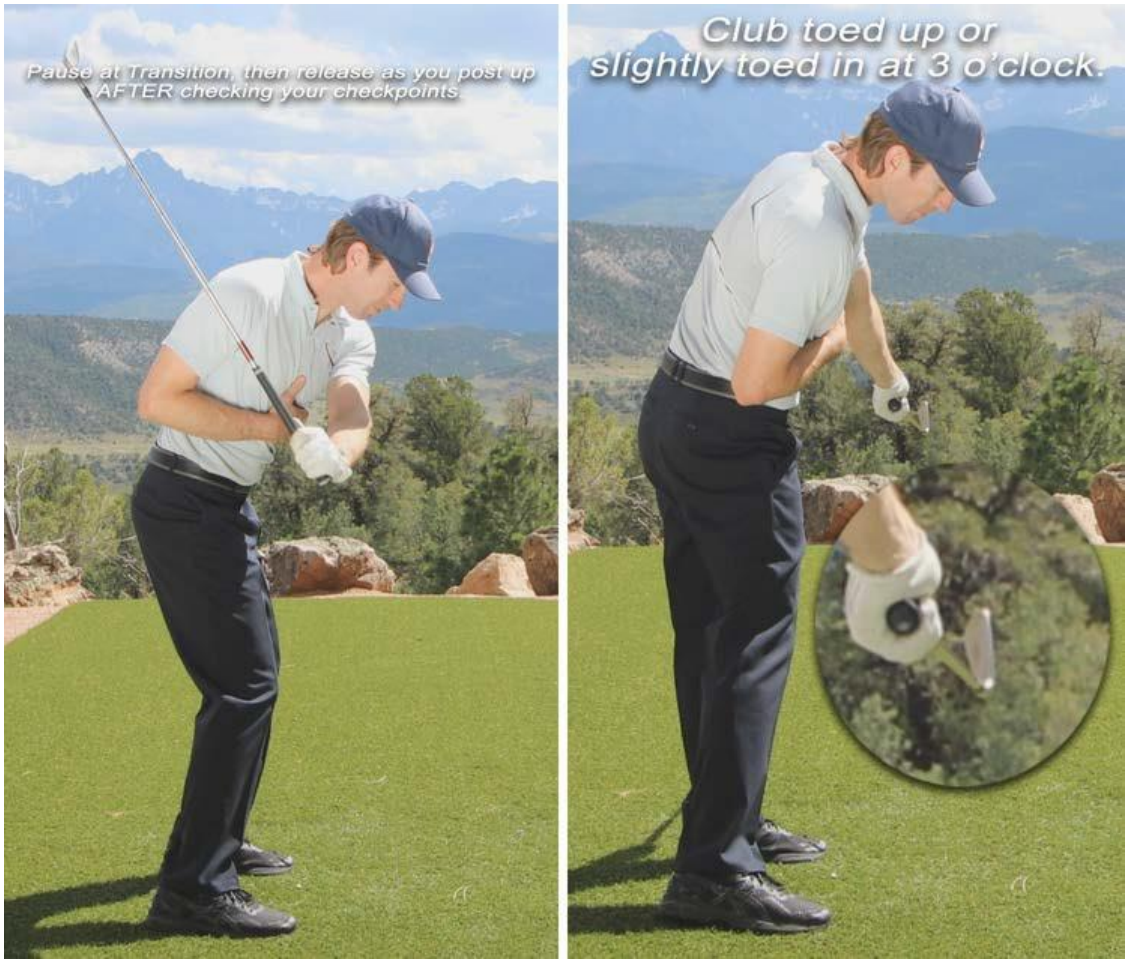


DEAD Drill Step 6 - Add the Trail Arm
Adding the trail arm is typically where the train jumps the tracks for most golfers who are very trail side dominant. It's critical you not be in a hurry to add this back into your drill if you find that your positions change by doing so. Keep drilling with just your body, lead arm and club until you've got the movements down.
https://rotaryswing.com/step-6

Chapter 6: Adding the Release & the Ball

Graduation day! If you've been working through your body movements and got those dialed in, you'll be eager to start pounding balls. But, you need to be patient as you likely haven't done enough reps yet for your new body movements to take hold. So, as you take the next step to hitting balls, start out very slowly and video your swing so you can see what tendencies you have (ie. trail arm taking over, trail foot coming up too soon, etc.) so that you know what to practice back in front of the mirror when you're back indoors.

At first, when you're learning a proper, effortless release, it's often easier and faster to learn by removing the trail arm from the club at first. This will make it much easier to feel how the toe of the club naturally wants to rotate around the hosel during the release for effortless speed and control.



You'll want to video your swing without hitting a ball at first to ensure the toe of the club is rotating properly as you see in the images. The clubface at the 3 o'clock position should be toed up to slightly toed in. There are some instructors today that advocate having the clubface match the spine angle at this point, but I can assure you that no tour pros release, or more accurately "don't" release the club in this way. That's because there's too much free speed to be gained by allowing the club face to rotate around the hosel - not to mention that's exactly how your clubs were designed to be used in the first place!

If the club designers wanted you to hold the club face constant through the hitting area, they would've put the shaft in the center of the face like a center shafted putter. But, of course, that would be foolish and cost you between 6 and 8 mph of free speed. Yep, that's how much is to be gained by a rotating club face - that's about 21 yards total distance with a driver!

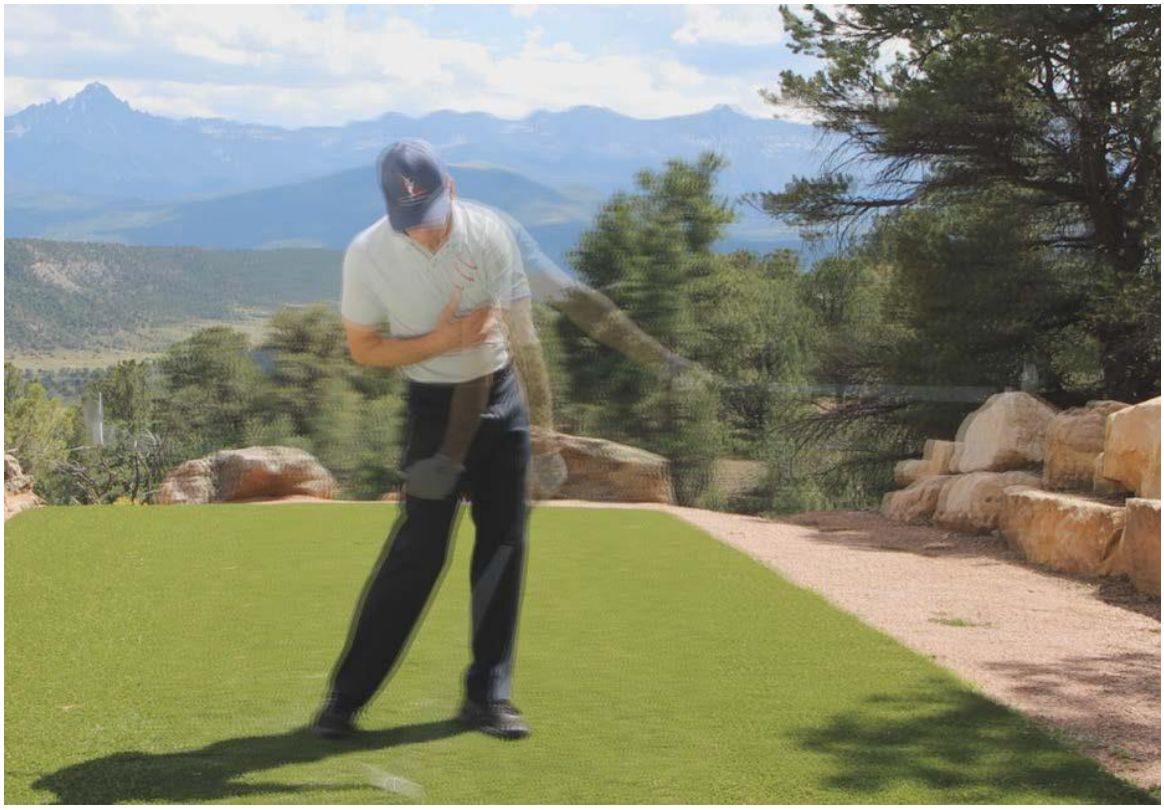
Do you want to throw away 21 yards of free distance off the tee? I didn't think so. So, stop fighting physics and look at what the longest hitters on the planet do, from Jack Nicklaus to Tiger Woods to Dustin Johnson. To make this easier for you to visualize, I have a video on my YouTube channel that proves that holding off the release is not how the pros release the club: https://www.youtube.com/watch?v=1GYx7Y6FtTY

As you'll hear me say over and over again, the camera never lies. So, if your instructor is telling you to "release" the club by "not releasing it" and holding the face open, ask for your money back and run because this type of release creates tremendous stress on the spine as I've talked about in this video (https://rotaryswing.com/body-release). If you really want to take a deeper dive into this discussion and see the types of injuries it can create, unfortunately you don't need to look any further than the demise of Tiger Woods which I predicted back in 2010 here: https://www.youtube.com/watch?v=nOhjIRQquhM

Unfortunately, I knew back then the changes I saw Tiger making with his then coach were putting his back at risk for injury and I've published several more videos on the topic on my YouTube channel. It's a shame, with the most basic understanding of biomechanics and anatomy, Tiger could've gone on to win many, many more majors.

But let's get back to your swing and how to prevent your own back problems by allowing the club to release properly. The next image I want to share with you illustrates this point perfectly. These three frames of video overlaid with each other show just how little the body moves from the delivery position all the way into the full release. You can see that the club has moved 9 feet of more, and my head, shoulders and hips have barely moved at all - by its very definition: efficiency.

The club is now free to accelerate independent of my body by simply allowing my forearms to naturally rotate over. Note that when working on this step of the DEAD Drill, it's natural for your lead hand to end up too far in front of the ball at impact as you can see below. For those of you who have never had shaft lean at impact, look out! You now finally understand how to his those low, boring shots that scream through the wind like a missile! But, rest assured, once you put the trail hand back on the club, the hands will be brought back into the proper impact position as you'll see later.



As you work through this movement and stop at the 3 o'clock position each time to check the club face, I want you to pay attention to what you feel in the club. If your wrists and grip pressure are relatively soft, you should feel how the toe of the club naturally wants to rotate around the hosel. You should never try and rotate the club face over! That's a "pro flip" and impossible to time consistently. Your job is to feel the club swinging, your wrists naturally uncocking and the club face and forearm naturally rotating over.

Once you can do this consistently, you want to slowly start introducing the trailing arm back into the mix. Don't rush this step as the trail arm will gladly take over the entire swing as it's likely your most coordinated hand. The best way to avoid this mistake is by letting the trail hand come completely off the club before impact as you can see in the next sequence of images.

This may be a challenge for you at first as you're likely trying to control and steer the club through impact with your dominant hand, so it's very important to hold on to the club very lightly. As you can see in the middle image, my trailing hand is just following along and then is completely off the club in the next frame. It's critical that you check the clubface again as it's very common for you to start pushing the club with the trail arm and holding the face open again once you add the trail arm back into the mix.



Once you're certain the club is still releasing correctly, challenge yourself to begin hitting balls while letting the trail arm come completely off the club. For the first time, perhaps in your life, you'll feel what a proper release feels like and how little your body actually has to do through the hitting area; yet the club will accelerate with great speed - and zero effort. You'll also see how easy it is to draw the ball when you allow the trail hand to come off the club as the club will naturally rotate over without the trail arm on there. Free speed, soft baby draw and less effort, sound good?

From the face on view, you can see all the things you've been struggling with - no shaft lean, flip at impact, chicken wing, etc. - start to fade into the distance. When controlling the club with the lead arm by using a pulling motion, you can see that my left wrist is perfectly flat with my hands leading the club head into the ball. This is an important component for compressing the ball, getting ball first contact and controlling spin and trajectory.

At impact, you can see just how lightly my trail hand is on the club, I'm barely holding on and simply allowing centrifugal force to do the work for me. Just after impact, it's clear the toe of the club has rotated over from where it was just two frames before. Again, I'm not trying to rotate the club face, quite the opposite. I'm trying to get out of the way so the club face can rotate on its own - that's the key to consistency. The less I try and control the club with my arms and hands, the more it will consistently release the same way in the same place.

Remember, it's called a golf "swing" and not a golf "hit" for a reason! LET the club swing!



Note in the image sequence how little my chest has moved at the point in the swing when the stresses and forces are at their peak. If you want to play pain free golf for a lifetime, this is the most critical thing you must get right. My left hip socket is directly over my left ankle (NJA) and is rock solid - hence the term “post up”.

The logo on my chest has moved only millimeters - proof that I’ve protected my spine from potentially dangerous shear forces by avoiding rotating my chest toward the target - the LAST thing you’d ever want to do in the swing! That is unless you like putting excess wear and tear on your spine, slipping or compressing a disc AND slowing the club down in the process. That’s because the club can then only move as fast as you can rotate your chest and I can assure you, your forearms can rotate over much faster than you will ever be able to rotate your chest and all your internal organs!

Faults and Fixes

RotarySwing is a systematic, fundamentals based approach to fixing the golf swing. We don't do "quick fixes" and I hate the word "tips"! But, if you're like most golfers, you really just want to fix whatever issue is causing your grief and move on. The only lasting, permanent way to do that is by fixing the underlying cause rather than fixing the symptom and that's exactly what the DEAD Drill is designed to do.

As you continue to understand the simplicity of the DEAD Drill and increase your "golf swing IQ", you'll discover that the golf swing really is simple and the RotarySwing is far simpler than what you're doing now. But I can still "shortcut" your learning process by helping you quickly understand how the DEAD Drill will fix literally any and every issue you have in your swing with some simple "faults and fixes".

On the following pages, you'll learn just that. So, let's start with the one that most every golfer on the planet struggles with, the dreaded over the top slice.



Over the Top Slice

It's insane to me that more than 90% of amateur golfers on the planet struggle with a slice when it's literally something that the RotarySwing can fix in just minutes. The simple truth is this: if you're swinging over the top you are dominating the swing with the trail side of your body. As soon as I remove your trail arm off the club, your club will shallow out immediately and you'll find it nearly impossible to swing over the top.

The reason is the way the muscles are loaded at the top of the swing of the trail and the fact that most golfers are right handed so their trail side is their dominant hand. This makes it a challenging habit to break at first and is exactly the reason the DEAD Drill is sequenced the way that it is. We add the trail arm to the drill once you've had enough reps under your belt to begin transferring control of your swing to your body from your arms. Be sure not to rush this step!

If you've taken your trail arm off the club and video'd your swing and still see your swing plane being too steep, the next place to check is your setup. Yep, good old setup is the #2 cause of swinging over the top and it simply means you don't have enough axis tilt as I discussed earlier. Your spine (axis) is the primary determinant of swing plane. If your spine is leaned toward the target, your plane will be steep and your path out to in. Now, flip it around where you exaggerate your tilt away from the target and make a swing with your lead arm only and watch what happens.

You'll see on video that it's now impossible for you to swing over the top and out to in. That's how simple it is to fix the most common swing problem in the world with the DEAD Drill. You can literally cure this problem with proper fundamentals in just minutes and never swing over the top again.

Reference Video



Stop Slicing and Swinging Over the Top
Want to instantly correct your over the top swing, right now? Simple. Do the simple trick I show you in this video and you'll find it virtually impossible to swing over the top ever again. It's a secret all the pros already know and once you see the video, you'll catch on to how they practice it, even while sitting on the tee box waiting to hit their next shot.
https://rotaryswing.com/over-the-top

Scooping at Impact/Chicken Wing

You may not realize it yet, but the flip at impact and the chicken wing thereafter are directly related and caused by the exact same thing - pushing with the trail hand and arm. Yep, the exact same cause as the over the top slice. You'll soon realize and the camera will prove that nearly every issue you've struggled with in your golf swing is caused by the trail side of the body.

If you're flipping the club at impact, you're simply pushing with the trail hand. This will cause the lead wrist to break down at impact which adds loft to the club face and kills any chance of properly compressing the ball. As you add loft, you lose distance and increase the spin rate. If you want to hit it short and high and struggle in the wind, by all means, keep pushing with the trail hand! But, if you want to be able to flight the ball on a penetrating trajectory the bores and hisses through the wind, then you must learn to make the lead hand the control hand in the swing.

The chicken wing is nothing more than an extension and continuation of the flip. As the trail arm continues to push across the body, the lead arm has to bend or magically become shorter. If you're plagued by the ugly chicken wing after impact, take the trail arm off the club completely and make a few practice swings on video and watch what happens.

Instantly, your lead arm will be pulled straight by the momentum of the club and you'll finally understand how the pros look so "wide" and have so much "extension" in the release. They're not actually trying to keep their arms wide at all, it's simply a by-product of proper fundamentals and that's exactly what the DEAD Drill teaches you.

Reference Video



The Chicken Wing
The chicken wing is literally one of the easiest things to fix in the golf swing, you can get rid of it in just seconds. If you're chicken winging it, you're pushing from the trail arm, plain and simple.
https://rotaryswing.com/chicken-wing

Not Able to Properly Release the Club

So, you know you're not pushing with the trail arm because you're not chicken winging or scooping at impact, yet the clubface is remaining open during impact and the release, what gives? There are two common causes for this, both of which the DEAD Drill will solve.

First, you're likely pushing from the trail shoulder. How do you know? Are your shoulders open at impact? If so, it's likely that you're trying to power the golf swing by "spinning" your shoulders through impact. This movement feels powerful because you're using a lot of muscular effort to move the club, but it's not power that you need in the golf swing, it's speed and the shoulders simply can't rotate fast enough to produce much speed in the swing. Not to mention that this puts tremendous shear force on your spine.

Your shoulders need to be moved to square at impact by the hips and then slow down in the hitting area so the club has a chance to release. This can ONLY happen if you're not trying to turn your shoulders from the top of the swing and, instead, are only rotating your lower trunk. If you start turning your shoulders from the top, you'll not be able to stop them at impact due to all the momentum you've created and they'll keep turning through the hitting area. This leads to the club being essentially "dragged" through the hitting area and delays or completely inhibits the release altogether.

However, using the DEAD Drill, you'll learn to rotate only your hips in the downswing and that will, in turn, rotate your shoulders for you. Once you post up your hips (Step 3 in the DEAD Drill Learning System), the shoulders will slow down their rotation but the arms and club will be able to continue accelerating and release independent of your body. This is done by allowing the momentum of the club to rotate the forearms through the hitting area. Note that you are NOT trying to actively rotate the forearms or clubface! Instead, you're putting Sir Isaac Newton in the driver's seat and letting the centrifugal force release the club for you. This is what it feels like to have an effortless release that you are not trying to time nor control - it's called a "release" for a reason!

What does it mean to "release" something? It means to "let go" and that's exactly the feeling you should have through the hitting area. If you're the type of golfer "death gripping" the club through impact in a desperate attempt to control the club face, you've likely never experienced what a proper release feels like so get very excited because a proper, powerful and effortless release is the greatest feeling in all of golf!

You'll feel the club radically accelerate while you simply "get out of the way". You'll feel a boost of speed that seems to almost happen "magically". The club face will square on it's own without you having to do a thing with your hands, but there is one other key thing you must do.

Remember earlier I said there are two common causes for the club not releasing properly? Even if you're not spinning your shoulders in the downswing, you still must

properly “post up” with the lower body. If you don’t, the hips will continue to rotate and potentially slide during the hitting area and this will have a similar effect to you rotating your shoulders during impact.

The club will be “dragged” through impact and the toe will not turn over. It is critical that your hips essentially stop rotating before impact or dramatically slow. You do this by straightening the lead leg (not hyperextending the knee but making it straight) and contracting the glutes. There’s a video on the site called “Squeeze the Cheeks” (https://rotaryswing.com/squeeze-the-cheeks) that discusses this in detail. The basics that you need to understand is that when you contract both glutes, the pelvis will decelerate. In fact, the glutes actually have to be allowed to “lengthen” (think relax) in order for the hips to turn. Contracting the glutes does the exact opposite and is a critical component for an effective post up.

For older golfers, it’s very common to lose the ability to activate the glutes. If you’ve spent the last 30 years “sitting on them” in an office chair and not actively engaging them in some activity, the neural pathway to activate the glutes weakens over time. It’s the whole “use it or lose it” syndrome that our brain employs to remain an efficient machine.

But, take heart, this neural pathway can be fired back up again and we have a couple simple drills and exercises on the site that will help you wake those glutes back up so you can have a powerful post up move (https://rotaryswing.com/bridge).

Losing Lag

Is your driver speed below 100 mph? Then you're casting the club and losing lag. Lag, or the angle formed by the shaft and the forearm in the downswing, makes up the majority of your club head speed. And if you're casting the club like 99% of the golfers on the planet, you'll never swing over 100 mph.

The great thing is, the DEAD Drill will teach you exactly how to create insane amounts of lag in just minutes. That's because lag is actually not something you try and create in your swing. Lag is a by-product of doing the fundamentals correctly and the DEAD Drill is nothing more than a simple and quick way for you to learn all the proper fundamentals of the swing in a single drill.

If you're casting the club, there are two common causes and they're the same as what you just learned about not being able to release the club properly. If you're pushing with the trail arm, you're going to cast it. You must learn to PULL from the lead side.

At the top of the swing, the trail arm is loaded with three levers. First, the arm is in an elevated position as it raises from the shoulder socket. Second, the arm is bent at the elbow, stretching and loading the tricep muscle. Third, the wrist is bent back engaging the extensor muscles in the forearm.

The ONLY thing the trail arm can do at this point with these muscles loaded is widen the swing by pushing against the shaft - ie. casting. There is literally nothing else the trail arm can do if you begin to use the muscles of the trail arm early in the downswing.

That's why you MUST learn how to transition to the downswing (Step 2 in the DEAD Drill Learning System) using the lower body and NOT the arms. This is challenging for most golfers because their dominant hand is typically the one that is loaded up at the top of the swing and since that's the most coordinated side of the body, it's the one we're most tempted to use to try and accelerate the club.

While it feels right to try and use the trail arm to control the club in the downswing, it couldn't be more wrong. Golf is quite the game of opposites and never is it more true here. Just do the exact opposite of what feels right in the downswing and you're probably on the right track!

But seriously, this again goes back to the pushing vs. pulling discussion we had at the beginning. If you take the trail arm off the club completely and just pull with the lead arm, you'll instantly see that you have more lag than you know what to do with. It's incredibly simple to create Sergio Garcia-esque lag when you understand how to move your body and your lead arm correctly, and simply let the trail arm be "told" what to do by the body and lead arm.

The second common way to lose lag and cast the club is to spin your shoulders in a futile effort to create speed from the top of the swing. The reason is that you create too much centripetal force too early in the swing, the resultant force of which is centrifugal force. This centrifugal force acts most aggressively upon the part that is farthest away from the rotating center.

In other words, your shoulders turning around your spine is the “center”. The clubhead is, of course, the farthest away from the rotating center and is forced by the centrifugal force out away from the rotating center. And unless you’ve figured out a way to prove Newton wrong, the result of this will always be casting the club because the centrifugal force is just too powerful for the tiny forearm muscles to overcome.

A simpler way to think about this is the good old child’s playground toy, the merry go round. If you’re in the center of the merry go round, you don’t feel as if you’re going very fast even if the merry go round is rotating quite quickly. However, the kid on the outer edge of the merry-go round is holding on for dear life to avoid a trip to the emergency room!

Both are moving at a constant rate of speed in relation to each other, but both are having very different experiences on the playground. You may not feel that you’re rotating your shoulders very much in the downswing, but the club is experiencing something very different! Again, if your shoulders are open at impact, you’re likely turning them or not getting posted up properly.

The Proof is in the Pudding

So, there you go. Every single most common swing flaw that affects 99% of amateur golfers on the planet, all addressed and easily fixed by simply learning the DEAD Drill. That's what's so cool about it. I designed it to be incredibly simple to learn, easy to understand and to fix literally every issue in your swing.

There is no other single drill that both fixes every issue in your swing AND works in a way to effectively communicate with your brain to make incredibly fast changes. That's why the RotarySwing BootCamps have been so incredibly popular because they fast track you through the entire learning process in just 21 days.

Let me share with you just one example of a member so you can see what types of changes you can make to your swing in just 21 days in the comfort of your living room, without ever taking a single in person lesson or even stepping outside.

Let's start at the top of the backswing. As you recall, I told you that ANYONE can make a full shoulder turn, no matter their age or flexibility. To accomplish this, we focus on rotating the rib cage rather than swinging the arms and club.

As you can see in Nolan's swing here, his position at the top looks much more powerful and coiled up, yet it's actually more efficient than what he was doing before.



You can see in his before swing that his head had moved off the ball and his lower body looks quite relaxed, with the right leg almost vertical. This is because he allowed his hips to slide laterally during the backswing rather than simply focusing on pulling his right shoulder behind his head as did in the after swing.

You can also see how flat his shoulders turned in the before swing which is another common fault when you push from the lead side of the body during the backswing. Lastly, note the width he has at the top. His hands are farther from his head with the left arm remaining perfectly straight. If your lead arm bends during the backswing, you are pushing that lead arm across the chest and/or allowing the trail arm to fold too soon. You want to imagine that your trail arm stays straight all the way to the top of the backswing. This width in the swing makes it much easier to get the arms back in front of the body during the downswing and helps you benefit once again from our old friend physics. The wider arc you create, the faster the hands and club will move to keep up with the rotating body and the more time they have to accelerate. Width in the swing is “free speed” so you want to take advantage of it as it takes no physical effort.

Think of it this way. Can you swing your pitching wedge as fast as your driver? No, of course not. But why? Width. The radius of the arc created by the length of the driver shaft is far greater than that created by the much shorter pitching wedge. On average, for every half inch of shaft length increase, you’ll pick up 2 mph of clubhead speed. That, combined with the decrease in loft is what allows your 5 iron to fly farther than your 6 iron.

For golfers who make a very narrow backswing by collapsing the trail arm, they’re throwing away tons of free speed! So, keep your arms wide by simply not doing much with them. They should feel as if they barely move relative to how much your body is turning during the backswing.

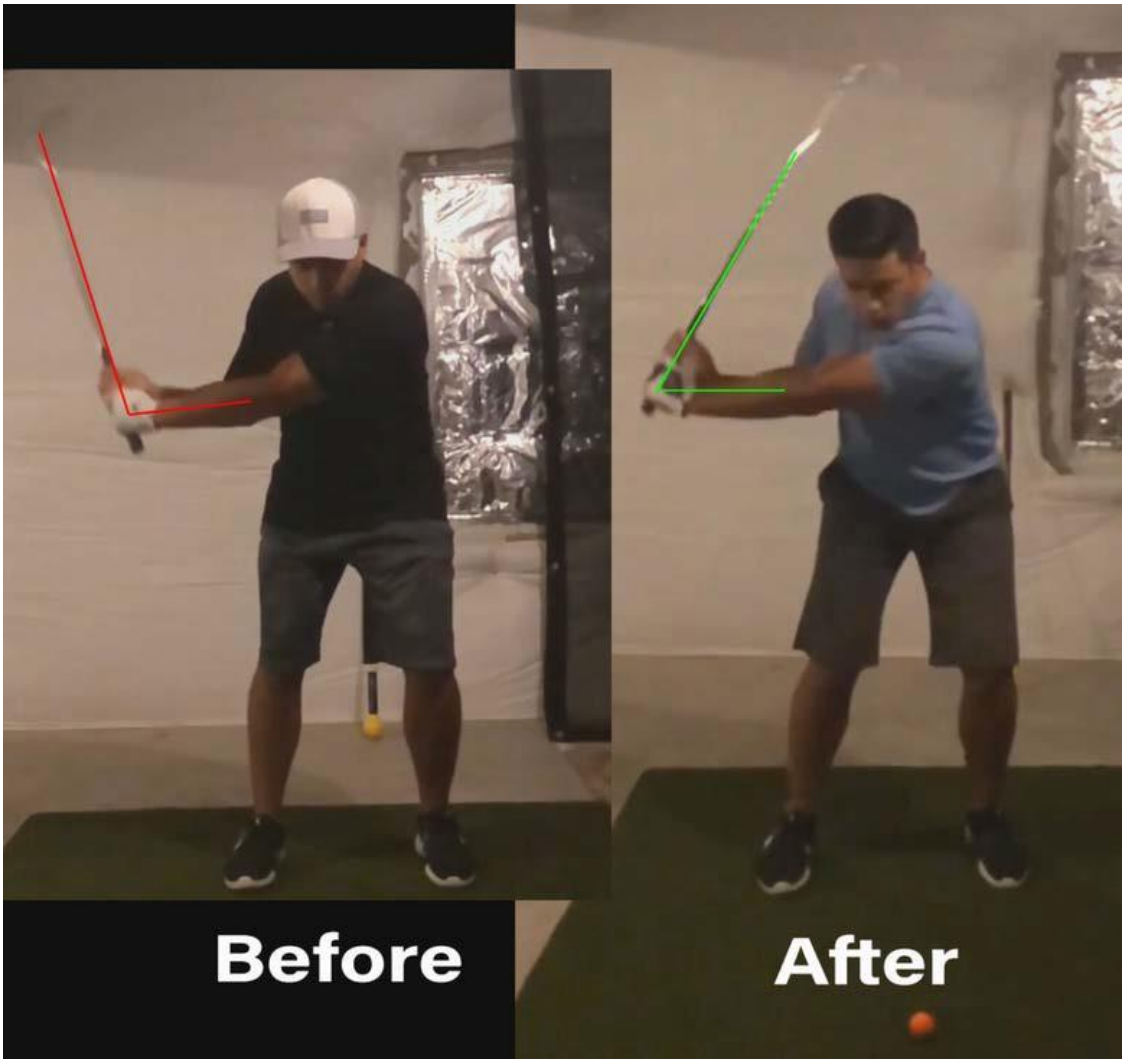
Now let’s take a look at the difference in Nolan’s lag, or potential energy in the swing. As you recall, the leverage you create and release in your wrists produces the majority (about 2⁄3's) of your club head speed in the swing. And just like most golfers, Nolan was losing a ton of lag during the downswing that was costing him a ton of speed.

As you can see now in the next image, Nolan’s swing halfway down looks as good as any tour pro on the planet, and he did this all by following the DEAD Drill Learning System online without a single in person lesson.

In his before swing, you can see much more of his right shoulder, whereas in the after swing his shoulders have remained closed much longer. That’s because he’s not turning his shoulders at all, they’re being turned by his lower body. In Step 2 of the DEAD Drill, you focus on the transition which is widely considered the most difficult move in all of golf. It’s actually quite simple and there are only two pieces to it. You first move the lead knee back over the lead foot. This move initiates both the weight transfer back to the lead

Once the lead knee is moved over the lead foot, you “Squat to Square”. This move is covered in detail here: https://rotaryswing.com/squat-to-square. Essentially, imagine you are turning your hips back parallel to the target while “sitting” more into the lead leg while increasing the knee flex slightly in both knees. This move activates the glutes, hamstrings and quadriceps so that you can make a powerful post up move to release the club.

And that is how you release the club - by posting up on that lead leg. Your body should always be moving in the opposite direction you want the club to go. During impact, the club should be moving both down (since the ball’s on the ground!) and out away from you. So, what direction should your body be moving then? Both up and back.



The final checkpoint in the DEAD Drill before impact is in the following image. It is when the lead hand gets back in front of the trail thigh. There's no comparison here. The after swing is as good as any world class ball striker and the before swing looks like nearly every average amateur golfer.

As the lead hand gets back in front of the trail thigh, the club shaft should be roughly parallel to the ground. This is really the only point in the swing that really matters. You can do a lot of things pretty wonky in the backswing, but if you arrive at this position just before impact, you can hit the ball like a pro.

In his before swing, it's obvious he's lost nearly all his lag and has literally nothing left to hit with. Every golfer on the planet will either try and push against the shaft with the trail hand at this point or try and spin the shoulders in a futile effort to create any speed. But it's all for not, the damage has already been done and the ball is going nowhere.



Now, let's take a look at the moment of truth, impact. Once again, Nolan's impact position is world class - not bad for 3 week's work, no? His left wrist is rock solid and dead flat, he has the perfect amount of shaft lean for an iron, his left hip and knee are in neutral joint alignment, right heel on the ground and rolled to the inside, shoulders square - I LOVE it!

His before swing, not so much... His left knee is still bent showing that he's not posted up which will slow the release down and puts the knee in a compromised position. His left wrist is already breaking down and the shaft is already leaning back away from the target. This adds loft, which adds spin, both of which reduce distance.

But here's what's really cool. Nolan arrived at this perfect, tour caliber impact position by focusing on just the 3 core body moves of the DEAD Drill exclusively. His world class impact position is a RESULT of doing the fundamentals correctly.

Focus on your body movements and watch your impact, lag and swing plane improve "automagically" without once worrying about the club! THAT'S the power of the DEAD Drill.



How to Radically Improve Your Swing FAST

If you're serious about improving your golf swing and want to do it the fastest way humanly possible, then the DEAD Drill is exactly what you're looking for. Here is the pathway to rapid improvement:

Step 1: Join RotarySwing.com

There's only so much I can do to explain these dynamic movements in text. It's a million times easier for me to show you how to do it in video. The videos on the site break down each of the core moves of the DEAD Drill in an incredibly simple to understand format. The 6 core videos of the DEAD Drill are all under 8 minutes long each and they're truly all you need to know to swing like a pro!
Learn more at https://rotaryswing.com

Step 2: Get a Review

Feel and real are not the same, and if you're not watching yourself in the mirror, then you're not improving - you're simply fooling yourself. You CANNOT rely on feel, you MUST SEE what you're doing - I can't emphasize that enough. But even still, you may not catch the little details that are so critical to your success. That's why we have a team of Certified RotarySwing teaching pros who have done more than 80,000 swing reviews to help our members not waste a single rep by doing the movement wrong.
https://rotaryswing.com/swing-reviews/get-review

Step 3: Join a BootCamp

The BootCamp is a 21 day guided program that walks you through exactly how to do each of the 6 Steps to master the DEAD Drill in an online, live interactive format. There are 6 live teaching sessions that you watch on your computer where you are guided by a Certified RotarySwing instructor on exactly how to do each movement. You do the movements with your coach and can ask questions and even "go live" yourself so the instructor can show you exactly what you're doing incorrectly and make instant corrections. It is the fastest way to improve, hands down and is what Nolan did to make the huge changes you saw in his swing. To learn about enrolling in BootCamp, go to https://rotaryswing.com/bootcamp

Step 4: Cancel Your Membership!

Say what? Yep, my goal is to get you to QUIT your membership at RotarySwing! Sounds strange, but that should be the goal, no? If my team and I do our jobs and you do yours, you're going to learn this simple drill quickly and be on your way to hitting the ball better than you ever dreamed! We're here to make you a great ball striker, not keep taking your money forever. We WANT you to improve, kick you out of the nest and send you on your way as quickly as possible so that you're enjoying the game the way we do - by CRUSHING the ball consistently long and straight. That's what the game is all about! Well, ok, putting and short is important and we have full courses on that as well, but let's be honest, hitting the ball great is more fun!

The DEAD Drill



ROTARY SWING

www.RotarySwing.com