

UNLOCK YOUR GOLF SWING:

**Learn movements that are limiting
your swing and how to fix them**

BY GREG LAW PT, DPT, CFMT

Version 1.04

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This book is written with the golfer in mind and how you can learn to identify movement dysfunctions in yourself and begin taking steps to fix those dysfunctions.

This is all exciting information to apply directly to your swing with the screening process and the body/swing connection learned through the Titleist Performance Institute (TPI). They spent countless hours identifying the key movement screens and learning how performing or not performing the screens correctly correlates to your golf swing. I have to make sure I give full credit where credit is due.

It needs to be said that, if you have pain with any of these movements, please see a movement specialist in your area. From there, they should be able to evaluate, treat, and provide modifications so you may continue training. If you don't know of one, email me (greg@lawsofmotionpt.com) and I will help you find a trusted professional in your area.

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LAWS OF MOTION
PHYSICAL THERAPY

PROLOGUE

Please use this book as a resource to improve your drive distance, iron accuracy, or simply help reduce pain to help you play longer into retirement. I have carefully devised exercises to pair specifically with the Titleist Performance Institute screens to allow those consistently working with the exercises to test and retest themselves as they progress through the book to see and feel the changes that you are making for yourself.

If you reach a point where you are having difficulty performing the screens and/or exercises, have pain with the screens and/or exercises, or you just aren't getting the results you are hoping for, please see a qualified rehab specialist who can help you along the way.

If you are in the Scottsdale area, feel free to email me to set up a time to come by and chat with me!

Laws of Motion

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If you aren't, let me know what I can do to help you find the person you are looking for.

- ▶ For a complete list of those that are TPI certified including medical professionals, fitness professionals, and golf instructors, click [here](#).
- ▶ For a list of highly qualified manual therapists, click [here](#).

1.

HOW TO USE THE EBOOK

This book is a guide to help you assess your movement and see where you may have any physical deficits that can limit your golf swing. These deficits may be leading to stiffness and/or pain while you are playing or after the round has finished. It may give you an indication of deficits that are robbing you of your golf power and accuracy. The screens may also be able to indicate physical limitations that are causing your shots to be relatively inconsistent or why the group in front of you keeps ducking for cover on the next fairway.

We will look at many of the movement screens designed by TPI paired with basic exercises that may help improve your performance during these screens and ultimately your golf swing. A few WARNINGS:

1. Performing these exercises a few times here and there will likely not result in the outcomes you want. In order to get the full benefit you must do these at least 4-5x/week for 6-8 weeks to get optimal performance.
2. If you are still having difficulty performing the screens, go see a manual therapist to help with movement dysfunctions limiting your progress and your golf swing.
3. Performing these movement screens does not substitute a medical assessment.
4. If you are in pain with these screens and/or exercises, stop and see a physical therapist.

Each page number in the table of contents is linked to the corresponding section. Simply click on the page number and it will take you directly to the chapter of interest.

Of note, everything underlined in the ebook is an active hyperlink that will direct you where you need to go. The links will look like [this](#) and will be active hyperlinks. Each section for the movement screens and exercises will be equipped with pictures along with video links for exercises in which you will be whisked away to the far away YouTube land for a full video and explanation of the exercise if you require further clarification.

Each chapter will contain three sections including a movement screen, golf/swing connection explanation, and sample exercises that can help improve your ability to perform the screen which translates into a more efficient golf swing.

Have fun with the screens and exercises and, as always, if you have questions or would like further clarification, I'm just an email away (greg@lawsofmotionpt.com)



2.

SWING CHARACTERISTIC OVERVIEW

This section is to provide a quick swing characteristic overview. These terms will be used throughout the ebook as potential swing characteristics that each screen can predict as a swing fault.

- **S-Posture** - A setup posture that has too much arch in the low back.
- **C-Posture** - A setup posture that is too rounded through the back.
- **Loss of Posture** - Significant change in body angle from the setup position to the backswing and can either cause a block right or a hook left for right handed golfers.
- **Flat Shoulder Plane** - A flattening of the shoulder plane from the original setup position in the backswing which leads to poor power and inconsistent shots.
- **Early Extension** - Hips or spine moves forward or go into extension from the initial setup position which can lead to a block, hook, or completely shanking the shot.
- **Over-the-Top** - The path of the club comes through the downswing at a steeper angle that it did when it went through the backswing and can be a cause of slicing.
- **Sway** - Excessive movement of the body away from the target during the backswing causing a loss of power.
- **Slide** - Excessive movement of the body toward the target during the downswing causing a loss of power.
- **Reverse Spine Angle** - Excessive back bending or lateral upper body bending during the backswing leading to poor

sequencing of the swing pattern and is the number one cause of low back pain during the golf swing.

- ▶ **Hanging Back** - Lack of weight shift forward during the swing leading to lack of power and inconsistent shots.
- ▶ **Early Release** - Early release of the wrist angle through impact leading to loss of power and consistency as well as excessive loft.
- ▶ **Chicken Winging** - Bending of the lead arm through impact which causes a loss of power and can lead to tennis elbow (yes, tennis) of the lead arm.

3.

SETUP POSTURE - C-POSTURE

The setup position is the start of it all. You take a step on to the tee box, line your shot up and address the ball, line your feet up with your target, place the club head in position and get ready to hit the best drive of your life. What does your ability to get into a good setup position tell you about your body? More importantly, what's it going to do to your swing?

There are three types of postures at setup: neutral (efficient), C-posture, and S-posture. In this chapter, we'll discuss the screening process for setup posture and dive into the C-posture. For more on S-posture, see chapter 4.

THE SCREEN

The screen in this case is very basic. What do you look like when you step up to your ball and get ready to swing away? During the screens that involve getting set in your address position, we're going to assume a 5-iron posture. This means you are going to get into position as if you were about to hit a beautiful, slow-rising 5-iron high in the air landing right next to the pin.

It can be very tricky to judge yourself on your setup position. Odds are, if you knew what you were doing wrong from the start, you would have already fixed it. It's usually best to get a friend to help or use a phone with a view down the line of the

shot meaning a video as if you were looking down the fairway from behind the golfer

Below you will see an example of a neutral setup position



Below you will see an example of a C-Posture position



THE SWING

So now the big question comes in to play. What does a C-posture potentially do to my swing?

C-posture at setup is typically due to muscle imbalance that is going to limit golfers from efficient energy transfer and will limit the motion available during the backswing and follow through. If he or she attempts to swing in full, it will result in loss of posture as well as early extension which greatly effects the accuracy of the shot and leads to a great deal of variability of the club contact point.

THE FIX

I setup in C-posture, now what?! The fix for this position is usually not difficult in terms of exercise difficulty but, depending on the duration of this issue, it may take the longest to correct and require the most dedication in terms of exercise frequency.

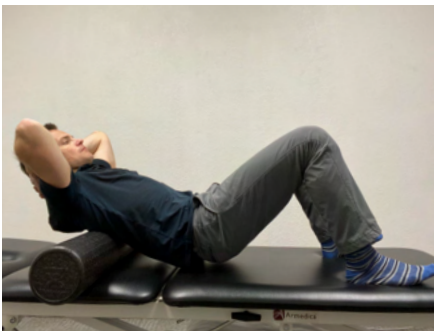
The C-posture is caused in large part by the inability of the thoracic spine (the part of the spine where the ribs are) to be able to extend, AKA bend backward. This can be due to years of bad posture, slumped over a desk, sitting in a recliner, the list goes on and on. Along with a thoracic spine that won't extend, there are often other compensations including rounded shoulders and a forward head posture that can also develop.

In other instances, the pelvis can be the main contributor. Try extending in your thoracic spine while keeping your tail tucked. Go ahead, I'll wait. If the pelvis is stuck as if your tail were tucked, this will lead to your C-posture as well. So let's get this thing fixed.

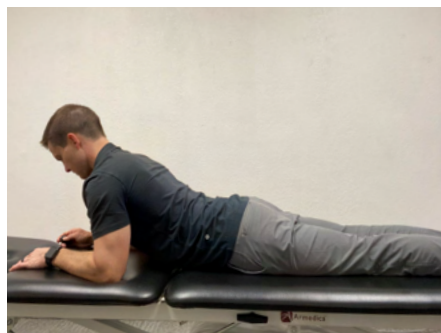
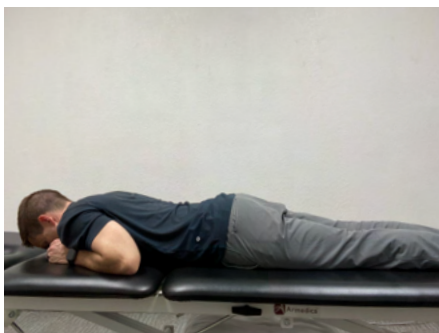
Snow angels on FR - Lie on a foam roller with the roll lengthwise along the spine. Bring your forearms together in front of you and slowly bring them away from each other until you begin feeling a stretch through your pecs. Keep your forearms parallel to the ground. Next, raise your arms up and down as if you were making snow angels. Make sure to keep your low back down on the foam roller so you do not compensate by arching your back.



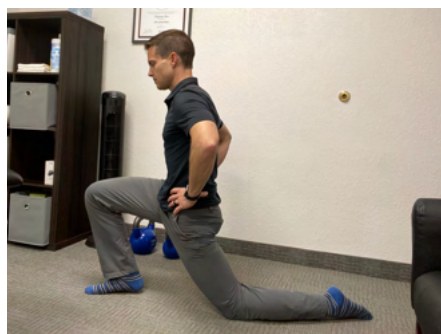
General to Specific Thoracic Extension - Lie on a foam roller with the roll perpendicular to you. Start by rolling up and down on the roll from the top of your shoulder blades to the bottom. Once you find a place where it feels the tightest, pause there and do a reverse sit-up allowing your thoracic spine to extend over top of the roller.



Prone Press Up - Begin on your stomach with your hands flat under your shoulders. Press your shoulder away from the floor with your hands with the intention to extend your back starting at the base of the neck and moving down the spine.



Hip flexor stretch - Begin in a lunge position with one leg forward and the other leg behind you and the knee on the floor. Keep your tailbone tucked (don't let your back arch) and shift your weight forward towards the lead leg. You should feel a stretch on the front of the hip of the trailing leg.



4.

SETUP POSTURE - S-POSTURE

As we discussed in Chapter 3 during our talk about C-Posture, the setup is where it all begins. Starting off in a poor posture can really hinder a golfer before the club even starts into the backswing. In this chapter, we will dive into the S-Posture, what it looks like, how it can effect you, and how to get out of it.

THE SCREEN

Once again, this screen is very easy to do but can be hard to judge how you perform without some type of visual or your golfing buddy helping you out. If you're by yourself, take the time to set up a camera down the line (behind the golfer looking toward the fairway) to truly assess your position.

Below you will see an example of a neutral setup position



Below you will see an example of a S-Posture position. Notice the change in low back positioning with an increase which shifts your weight forward on to your toes.



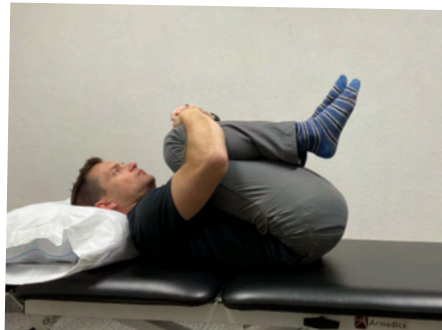
THE SWING

How is S-Posture taking away from my game? The player will lose the ability to efficiently transfer energy from the rotation of their body to the club leading to reduced swing speed and lose the ability to out-drive the group. It can also indicate a greater problem of poor hip and core stability and can lead to loss of posture or reverse spine angle leading to poor sequence of motion during the downswing.... Your ball doesn't fly as far.

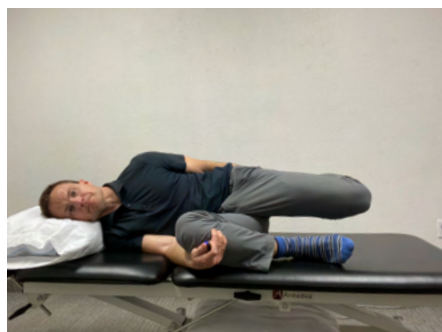
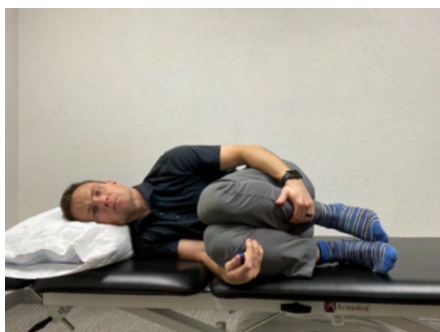
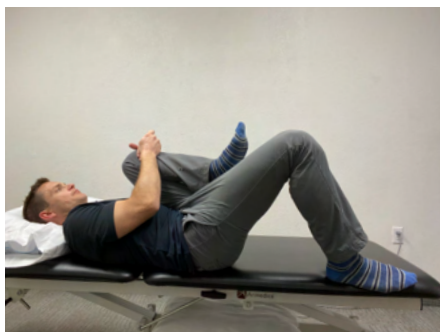
THE FIX

I need to get out of my S-Posture and into a neutral setup position. How can I do that? A lot of the correction can be made by improving muscle balance and hip strength/stability.

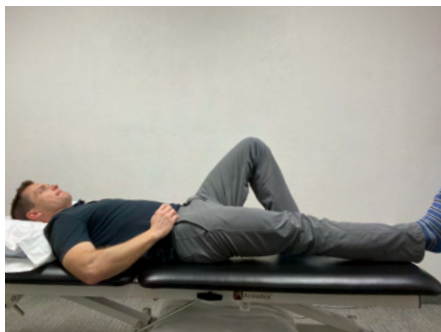
Double knee to chest - While on your back, bring both knees towards your chest and hold the stretch. Breathe



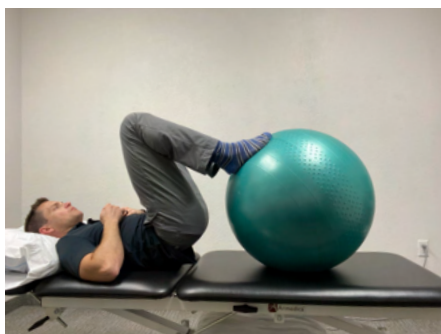
Rectus femoris stretch - The rectus femoris is one of quadriceps muscles and it spans both our hip and knee joints. To stretch this, lay on your back on an elevated surface. Bring the opposite leg towards your chest and then allow the leg you are stretching to fall off the edge of the table. Be sure to let the hip extend and the knee bend. Alternate method shown as well in a side lying position.



Hip flexor/core strengthening - While lying on your back, keep the low back pressed into the floor and slowly extend one leg as far as you can bringing it as close to the floor as you can without touching the floor. During this, the low back should remain flattened and not arched. Too difficult or easy? Click [here](#) for a simple core progression.



Hamstring curl on ball - Lie on your back with your heels on an exercise ball. Slightly lift your hips away from the floor (your hands can be on the ground to help for balance if needed) and bend your knees pulling the ball towards your bottom. Pause and then roll the ball back out to the starting position. Repeat.



5.

PELVIC TILT

During our golf swing it is normal for our pelvis to tilt both anteriorly and posteriorly. In fact, it should do that as part of efficient movement patterns to hit the ball with power and accuracy.

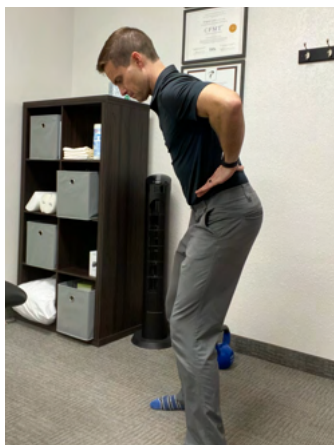
THE SCREEN

This screen goes well with addressing posture at the setup and can be a great test to see if you are more prone to setup in a neutral, S-posture, or C-posture position at address. Stand in your 5-iron posture and assess your motion going into an anterior pelvic tilt and then into a posterior tilt.

For terminology, think of the pelvis as a bowl of water. An anterior tilt is going to pour water out of the front side of your pelvis and a posterior tilt will pour water out of the back side of the pelvis.

If you cannot go into both directions with ease then you've failed the test. If you move from an anterior tilt to a posterior tilt or vice versa and you feel a shaking or stuttering through the movement, you've failed the test as well. The stuttering is caused by a strength or motor control deficit.

Below are pictures of the start position, anterior pelvic tilt, and a posterior pelvic tilt:



THE SWING

I failed the test, how is this going to hurt my golf game? To achieve a powerful ball strike, you need to have a transition from a slight anterior tilt at setup to a slight posterior tilt at ball strike.

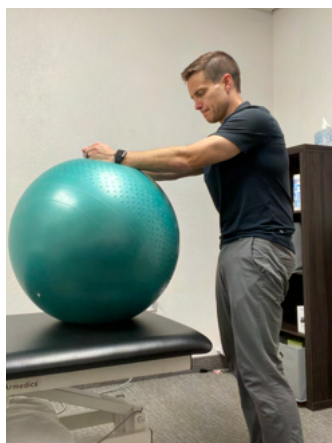
If you cannot tilt the pelvis anterior, you're more prone to setup in a c-posture, if you can't posteriorly tilt, you're more likely to setup in a s-posture. This can have a domino effect leading to loss of posture, early extension due to limited stability and motor control, bringing the club over-the-top during your down swing, and/or reverse spine angle. These swing characteristics combined will limit your power and accuracy on the course.

THE FIX

Many of the same exercises used in the previous two chapters can be used to help with the pelvic tilt test. If you are unable to go into an anterior tilt, try the exercises from

chapter 2 where we addressed c-posture. If you are unable to go into a posterior tilt, try the exercises from chapter 3 where s-posture was addressed. One additional exercise I will add for those that experience the stuttering during the transition from anterior to posterior or posterior to anterior pelvic tilts is below.

Core facilitated pelvic tilts - Stand in an upright posture and pull some resistance downward in front of you. This should be enough resistance to engage your core muscles but not so much where you are struggling to hold the resistance down. This is a facilitation exercise, not a strength building. While holding the resistance, move through your pelvic tilts. Start first in an upright position and move into your golf position as you progress.



6.

SEATED TRUNK ROTATION

Trunk rotation has to be able to occur during our swing in order to have proper timing and power which allows us to also avoid compensations that can lead to poor performance or injury. This is an area of the body where improving range of motion and control through the range of motion can drastically improve your golf game.

THE SCREEN

You will be seated for this screen with both feet flat on the floor or cross one ankle over the other while keeping your knees together. You will want to sit at the edge of a stable chair at a 45 degree angle. Use a club or dowel to place behind your shoulders as shown in the picture below. Turn to the right and the left with your torso while maintaining a tall sitting position. To successfully pass this screen, you should be able to rotate at least 45 degrees to each side. This can be eye-balled by seeing if the club or dowel you are holding lines up to the edge of the chair or is beyond the edge of the chair. If you don't quite reach the edge, then you have some work to do.

During this screen is it easy to cheat. You have to make sure you remain in a tall sitting position and knees stay together so you get a true measure of your trunk motion.

Below is a picture of the starting position and end position for the seated trunk rotation:



THE SWING

Trunk and thoracic rotation are obviously a huge factor in any golf swing. Specifically, if a player lacks 45 degrees of trunk rotation, they will be at a higher risk for the following swing characteristics: Loss of posture, flat shoulder plane, reverse spine angle, early extension, sway and slide.

Along with the golf swing characteristics, a lack of thoracic rotation can lead to excessive demand on the lumbar spine and shoulders to compensate for the motion leading to inefficient mechanics and increased injury risk.

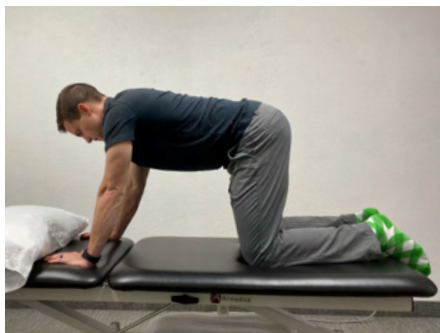
THE FIX

Thoracic mobility can be a difficult fix and most people could use a little more mobility through the thoracic spine to improve function and golf ability. These exercises require consistency.

Side Lying Arm Circles - Begin in a side lying position with your knees pulled up to at least hip height. Bring the hand of your bottom arm to rest on the top knee to help hold the knees together. With the top arm, reach as far forward as you can rotating through your ribcage and proceed to drawing circles with your arm as large as you can keeping the arm as close to the floor as possible. If you begin to get a pinch in the shoulder, move the shoulder away from the floor towards the ceiling slightly to get through that painful range of motion.



Thread the Needle - Begin on a hands and knees position. Bring the arm of your choosing underneath your body and reaching as far as you can rotating through your thoracic spine. Then return back to the start position.



Trunk Rotation with Side Bend - Start in a sitting position with your feet flat on the floor and a dowel or golf club behind your shoulders. Rotate to one side as far as you can then side bend to that same side. Hold this position and take a deep breath in. Return to an upright position and rotate further into the motion if possible and repeat the side bend, hold, breath.



7.

OVERHEAD DEEP SQUAT

The overhead squat is perhaps the single most complete assessment of movement that can be done to screen how well a golfer can swing. It incorporates so many moving parts and, when screened correctly, it can show anything from shoulder issues to foot/ankle issues along with strength, balance, and coordination limitations.

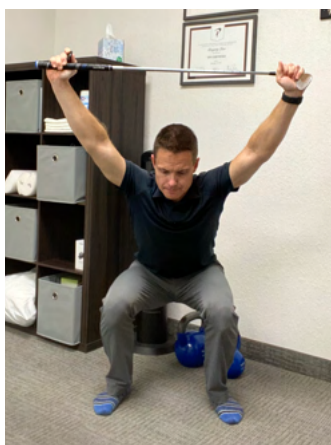
In this section, we will go over the basic screen and some easy modifications along with exercises to go with each. Since this is the most comprehensive screen, you can probably guess this will be the most in-depth chapter and I will try to break it down as clearly as possible while providing some corrective exercises for each area we discuss. Let's do this!

THE SCREEN

As I had mentioned before, this is the most comprehensive screen and can be broken down into many different parts based on a person's function and ability to complete the screen. The screen is designed so that if you complete the first part of the screen, you don't have to move on to the next screen. If you can't perform it correctly, continue to move down the list of screens to assess the potential limiting issue for the full overhead deep squat. The parts will be broken

into section titled, Full Squat, Arms Down Squat, and Ankle Limitation:

Full Squat - Let's begin with the feet shoulder width apart and toes pointing forward. Grab a club at a width that allows you to rest the club on your head with your elbows at 90 degrees. Next, extend your elbows to bring the club straight overhead. Then, perform a deep squat with the goals of keeping the torso upright, femurs (upper leg) below horizontal, knees over feet (not in front of toes), feet remaining pointed forward, and club staying overhead.



If you are unable to maintain the correct foot position, keep your heels on the ground, keep the club overhead, or are unable to perform the test correctly (this includes maintaining balance), move on to the next part of the screen.

Arms Down Squat - The setup for this aspect of the screen will be the same except for holding the club. For this screen, rather than holding a club overhead you will interlace your fingers behind your neck. If you are able to perform the screen with this modification, this will tell you the main limitations of your overhead squat are likely thoracic

extension and/or shoulder mobility. Unable to perform this correctly? On to the next one.



Ankle Limitations - The purpose of this part of the screen is to show if there is an ankle mobility limitation that is causing you to fail the screen. This is done by assuming a half kneeling position with one knee on the ground and the other foot in front of you. Place a target in front of the lead foot by setting up close to a wall or holding a club or foam roller in front of the foot. It should be about 4 inches in front of the lead foot. While keeping the heel on the ground, lean forward and try to touch your lead knee to the target in front of you. You will perform this screen on both sides to see if one ankle is more limited than the other.



If you are able to perform this, it eliminates the ankle range of motion variable from a possible limiting factor and indicates either a hip and/or knee mobility issue or a stability issue which will need further testing.

THE SWING

This is possibly the most important screen to be able to perform for your golf swing and for efficient movement in life. It encapsulates so many aspects including lower extremity mobility, thoracic extension mobility, strength, and balance necessary to perform life's essential movements.

In terms of your swing, a failed overhead deep squat test can lead to early extension and loss of posture. The two most common swing faults that can lead to injury!

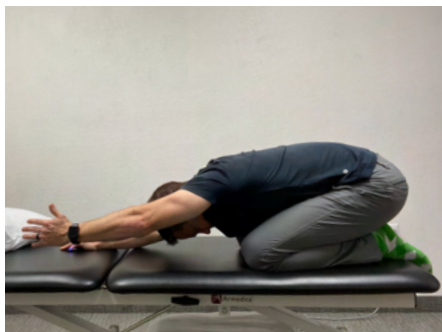
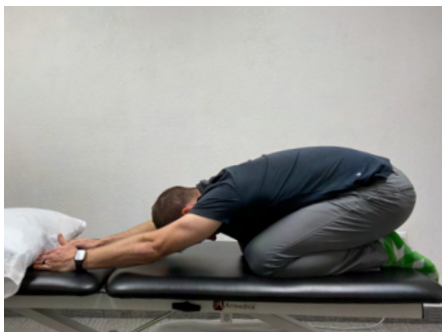
THE FIX

This is where this chapter can get very complex and detailed. For the sake of limiting this ebook to a transferable file, we'll go after the common issues that people have and start with the bigger slice of the pie.

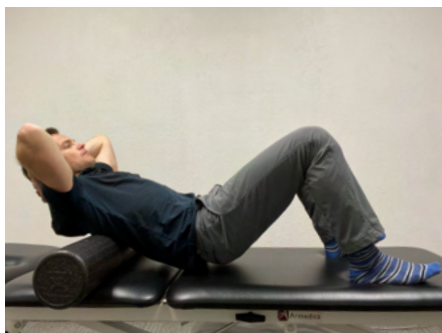
The overhead squat screen can be limited by many factors all of which will not be named. However, here are a few of the main limiting issues: Overhead shoulder mobility, thoracic mobility, core strength, hip strength/stability, hip flexion range of motion, knee flexion range of motion, ankle dorsiflexion range of motion, balance, and/or a combination of everything listed above.

Listed below are a few exercises that may help with performing an overhead deep squat:

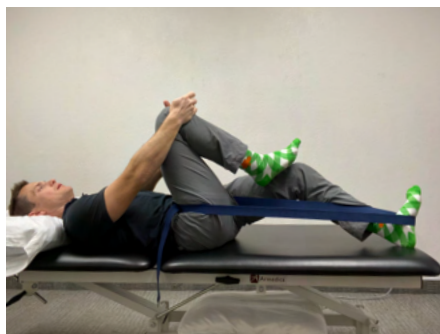
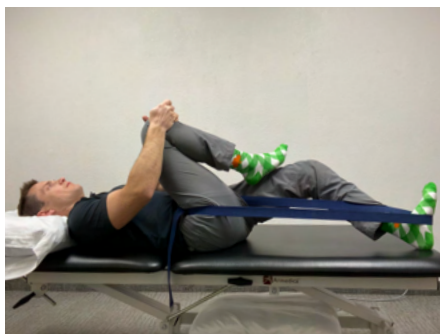
Child's Pose Y's - Assume a hands and knees position and, while keeping your hands in place, rock your hips back towards your heels as far as you can. Once you are as far back as you can go, allow your chest to drop down as you slightly lift your head. Maintain this position and attempt to lift one arm at a time while keeping the thumb of the hand that you are lifting pointing up towards the sky.



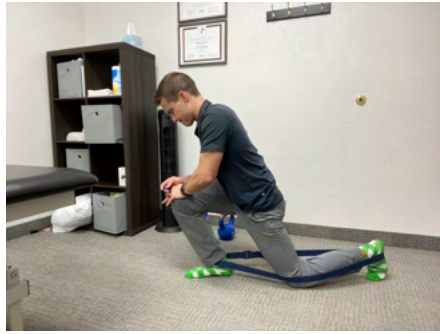
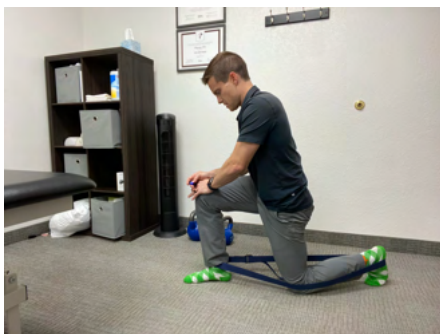
General to Specific Thoracic Extension - Lie on a foam roller with the roll perpendicular to you. Start by rolling up and down on the roll from the top of your shoulder blades to the bottom. Once you find a place where it feels the tightest, pause there and do a reverse sit-up allowing your thoracic spine to extend over top of the roller.



Hip flexion mobilization - Place a strap high up on the hip and anchor it to a stable surface at your feet. Ensure there is tension in the strap and pull the knee of the leg that has the strap wrapped around it toward your chest. You should feel the pressure build from the strap. For added mobilization, use the leg without the strap and press away from the anchor point at the same time you are pulling the other leg towards your chest.



Ankle dorsiflexion mobilization - Place a strap around the ankle to be mobilized and anchor it to the foot behind you as shown below. Ensure the strap is tight and lean forward while keeping the heel of your front leg on the ground. You should feel a build up a pressure from the strap at the top of the ankle.



8.

TOE TOUCH

The name says it all. This is another straight forward screen but you need to be honest with yourself when completing the screen. While it is very straight forward, some people like to embellish their ability to touch their toes so we will make this as basic and fool (cheat) proof as possible.

THE SCREEN

For this screen, and for the sake of consistency, you want to remove your shoes and place your feet and ankles together. To perform the screen, bend forward reaching for your toes without letting the knees bend. You touch the toes, you pass. You don't touch your toes, you don't.



If you are unable to touch your toes with both legs straight, you can see if you have one lower extremity that is tighter than the other. To screen out a more involved limb, place a slight bend in one knee and reach forward then repeat with the other knee bent. If you are able to bend further forward when the right knee is bent and left knee straight, for example, you know the right leg is more limited. If you bend forward with the left knee bent and right knee straight and notice more mobility, the left leg is more limited.

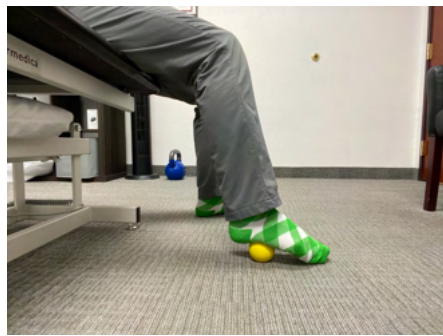
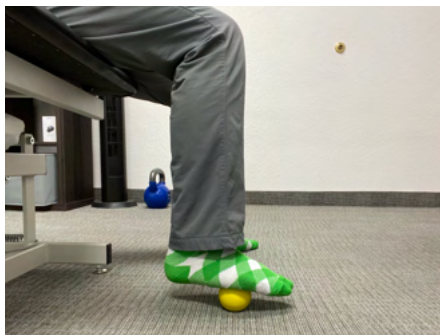


THE SWING

While the ability to bend forward and touch your toes may not seem like a necessary motion to perform an efficient swing, the inability to perform this motion can lead to C-posture, early extension, excessive knee flexion (bending), loss of posture and can take away a great deal of power from your swing. Beside the swing, you want to be able to gracefully get the ball out of the cup after sinking that long putt. Don't you???

THE FIX

Plantar Fascia Rollout - Place a ball such as a lacrosse ball or tennis ball under your foot and place a moderate amount of pressure on the ball. Roll your foot forward and back. You can make it more specific by finding the areas along the foot that feel tighter or more tender and hang out in the spot a little longer.



Walk the dog - I like calling this one walk the dog. You get into a “downward dog” yoga position and pedal your feet. Be sure when you are in the position, you are pressing your hands into the floor, shoulders away from you and shifting your weight back towards your heels. If you are unable to get into this position, it can be modified by leaning against a countertop or wall.



Bottoms up - Place your forearms and elbows on your thighs and assume a slight squatted position. And, like a center in football looking back to snap the ball to his quarterback, lift your butt up towards the sky, press your knees back and attempt to look between your legs.



9.

LAT LENGTH TEST

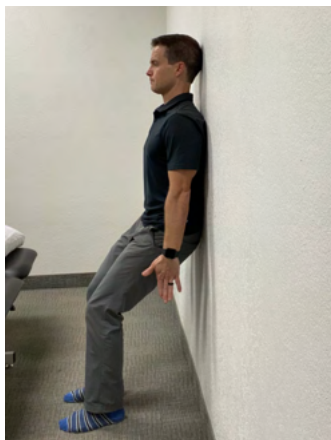
The latissimus dorsi or lat as it is commonly called is a very large, powerful muscle that goes from our pelvis up to our arms and can greatly help or hinder your golf swing. Get this muscle moving well and strong and you are going to see improved control and, more importantly, power. I've heard the long ball is something of importance.

This is also a helpful screen for shoulder range of motion and health which is vital to the chain of events that takes place when you transfer power from your backswing to the follow through. Good shoulder health allows your transfer of energy from the hips and core through the thoracic spine and ultimately to the club head.

THE SCREEN

To perform this screen, assume a wall-sit position with your feet hip width apart. Hold your arms down by your side with your thumbs pointing forward. While keeping the elbows straight, bring your arms overhead as if you were trying to touch your thumbs to the wall behind you. Throughout the test, the elbows must remain straight, the low back must be against the wall and it must be pain free. You should be able to touch the wall behind you with your thumbs. **NO CHEATING!**

Below you will see the screen. Notice, elbows must stay straight and low back remains on the wall.



THE SWING

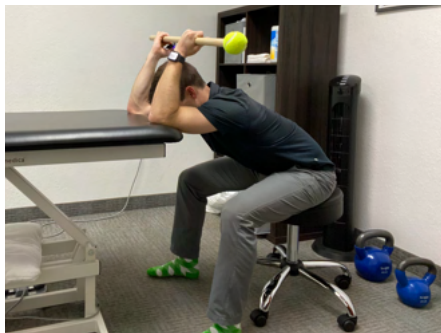
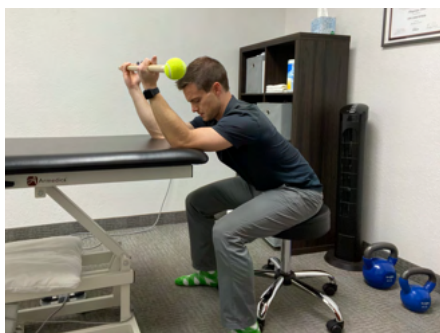
The lat length test is also a great test for shoulder range of motion and shoulder health. TPI has created a screen specifically to look at shoulder range of motion but is often difficult to self-assess so I decided to leave that specific test out of this manual. The inability to perform this test efficiently can, not only limit your distance off the tee box, but cause swing characteristics such as reverse spine angle, loss of posture, flat shoulder plane, and early extension.

THE FIX

Functional lat stretch - Grab the edge of a doorframe with one hand and step as far back as you can with the leg on the same side of the body. Right hand up, right leg back. Shift your weight towards your back heel and then rotate your body side to side reaching as far as you can with the arm that is not anchored to the doorframe.



Seated lat stretch - Sit facing a surface with your elbows up on the surface. Shift your hips back as far as you can while maintaining a seated posture. While holding a dowel or club with your palms up, slowly bend and straighten the elbows as far as you can.



Child's Pose Y's - Assume a hands and knees position and, while keeping your hands in place, rock your hips back towards your heels as far as you can. Once you are as far back as you can go, allow your chest to drop down as you slightly lift your head. Maintain this position and attempt to lift one arm at a time while keeping the thumb of the hand that you are lifting pointing up towards the sky.



10.

LOWER QUARTER ROTATION

Lower quarter rotation, specifically rotation at the hip, may be one of the biggest limiting factors that is hurting your golf game. For a right handed golfer, the right hip has to be able to internally rotate during the backswing and externally rotate during the follow through. The left hip has to be able to externally rotate during the backswing and internally rotate during the follow through.

There can be some common compensations made for loss of internal rotation by turning the foot outward but this can cause some issues during set and may cause some inconsistency with ball contact. Why not get this fixed!?

THE SCREEN

For this test you will need to remove your shoes to ensure your toes of the testing leg remain forward at all times. First, select the leg you will be testing first. Keep this leg straight and put a slight bend in the opposite knee with toes touching for balance. Turn your body as far as you can in each direction while keeping your hands on your hips. This will assess hip rotation, knee health, and foot/ankle health and mobility.

You will want to make sure you compare side to side when you rotate into internal and external rotation. An efficient

movement during this screen is the ability to rotate at least 60 degrees. As a cheat, you can place the elbow of a 5 iron in front of your foot and rotate towards the club shaft. If you get your pelvis equal to that of the shaft, this will be about 60 degrees. Internal rotation is assessed by rotating towards the straight leg and external rotation is assessed by rotating away from the straight leg. This test should not be painful and you should be able to maintain a tall, upright posture with your rotation. See below for pictures.



THE SWING

As you are doing the screen, it is easy to see why this is such an effective screen for the lower extremity. You are essentially isolating each leg through the backswing and follow through. The inability to perform the movements into your back swing, for a right handed golfer this is right lower extremity internal rotation and left lower extremity external rotation, can lead to sway and vice versa for slide for the follow through. Other swing characteristics can include reverse spine angle, hanging back, and early extension.

THE FIX

The fix for this section is primarily focused on improving hip internal and external rotation. For full benefit, you should include exercises that emphasize total LE mobilization and stability.

Single Leg Stance with Rotation - Assume a single leg stance position. While balancing on one leg, rotate your body to the left and right pausing at the end range of motion for a few seconds then rotating back to the other direction. If you have trouble with balance, perform the exercise as if you were performing the screen by keeping on leg in a toe touch position.



Switchbacks - In a seated position assume the position below by bringing one hip into external rotation and one hip into internal rotation. Hold this stretch and breath. While maintaining a sitting position, switch the position of the hips bringing the hip that was in external rotation into internal rotation and vice versa. Be sure to maintain a tall, upright trunk position to emphasize the hip mobility. If you are unable to get the legs down to the ground while in this position, use a pillow or yoga block under the knee as support.



11.

HIP STRENGTH/CORE STABILITY

Stability is likely the single most important factor in our swing. Without hip and core stability, you lose the ability to access the power you can generate because you have no stable base to push from. Without stability it would be like trying to fire a cannon from a canoe. You're not going to have much luck.

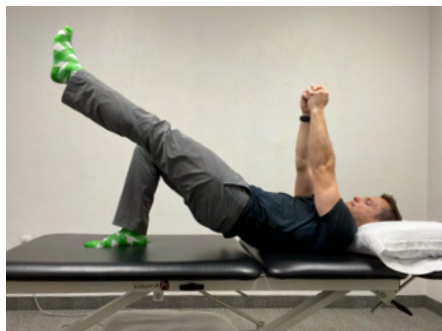
During our swing, our pelvis and core initiate the swing. Each phase of the swing following the initiation builds from this stable base generating more and more speed as you progress from pelvis, to torso, to arms, and finally to the club head.

THE SCREEN

Begin by laying on your back in a supine position with your knees bent, feet flat on the floor. Lift your pelvis up off the floor and maintain a neutral pelvic position (no rotation). Keep the hands up towards the ceiling to eliminate the upper body from helping compensate for weakness. You will want to monitor pelvic rotation throughout the screen. To assess the right glute and core, lift the left leg as shown in the picture. Hold this position for 10 seconds.

Throughout the hold, monitor to see if the left side of the pelvis drops down towards the floor, you begin shaking in the

right leg or core, or you start to get cramping in the right leg. You will test the other side in the same fashion.



If any of the prior mentioned pelvic drop, shaking, or cramping occur in the legs, you will need to address hip and core strength/stability to improve this screen.

THE SWING

What you read earlier is a lie. While I think you can tell a lot about how efficient a person can move during the overhead squat, this is the most important screen in comparisons to an efficient golf swing. Without strength and stability there can be no mobility.

Trouble performing this test? Cramping in your hamstrings while performing this test? Get ready for the truth. **You are at a high risk for all 12 swing faults identified by Titleist Performance Institute.** S-Posture, C-Posture, loss of posture, flat shoulder plane, early extension, over-the-top, sway, slide, reverse spine angle, hanging back, early release, and chicken winging. Yikes!

THE FIX

Hip flexor/core strengthening - While lying on your back, keep the low back pressed into the floor and slowly extend one leg as far as you can bringing it as close to the floor as you can without touching the floor. During this, the low back should remain flattened and not arch. Too difficult or easy? Click [here](#) for a simple core progression.



Reverse Lunge with Press - Begin by holding a kettlebell or weight in your hands. You will hold the weight at chest height and perform reverse lunge by stepping back with one leg while bending the lead leg. When you bend the lead knee, you should drop your chest slightly forward as well so most of your weight stays in the lead leg throughout the exercise. For an added challenge (as pictured below) press the weight forward as you step back.

Trunk Rotation with Wall Facilitation - This can be a challenging exercise especially if you have difficulty with balance so I would not recommend it for those that have difficulty performing the **reverse lunge with press** or have difficulty with single leg stance balance. To perform this exercise, grab a kettlebell and stand near a wall. You are going to get into a lunge position with one foot forward and



the other on the wall behind you. Press both feet hard into the surface they are against to engage and stabilize the lower extremities. Hold the kettlebell in the hand opposite the forward leg. Rotate through your thoracic spine.

This is a complex exercise so I highly recommend watching the video to get a good feel for this one first.



12.

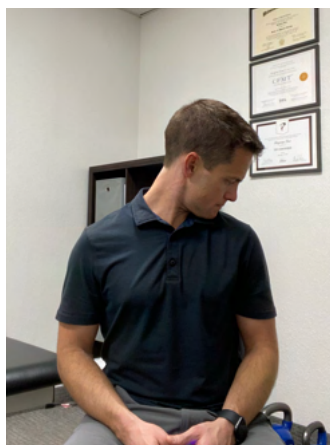
CERVICAL ROTATION

Few think of the ability for their neck to move efficiently to improve their golf swing. Keep your eye on the ball they say. It becomes very hard to keep your eye on the ball if (for right handed golfers) you can't turn your head to the left during your backswing and to the right during your follow through.

THE SCREEN

Begin by rotating your head as far as you can to one side and then tucking your chin downward to try and touch the clavicle (collar bone). Test both sides. Don't forget the cheesy grin.

During this movement, be sure to keep your mouth closed and avoid elevating your shoulder to meet your chin



THE SWING

Keep your eye on the ball! Trouble performing this screen can lead to loss of posture, early extension, and reverse spine angle along with the frustration of a lot of chunks and topping the ball.

THE FIX

Cervical Matrix - This is a three part exercise designed to improve cervical and thoracic rotation. Throughout the description we are going to discuss improving right rotation. You will want to do this exercise to improve rotation in both directions. Do each step 10 times.

Step 1 - Start in a standing position and turn your head as far as you can to the right. At the end range, take note of how far you can rotate by picking a target object you can see out of the corner of your eye. Hold the right rotation through a breath and return to the starting position.

Step 2 - Keep your head and eyes focused forward and hold your arms in front of you. Turn your arms and body to the left but keep your head and eyes facing forward

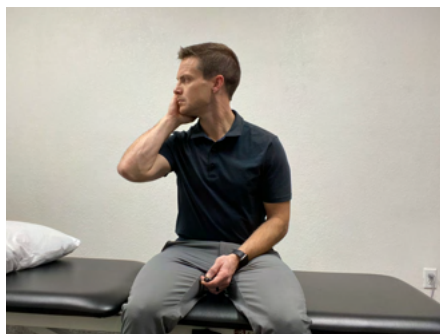
Step 3 - Keep your head and eyes forward throughout. Rotate your body to the left and step back with your left foot.



Chin Tuck with Cervical Rotation - Retract your chin as if you are slightly making a double chin. Turn your head to the right and hold at the end range. Take a deep breath in and return to the starting position. Perform this at least 10 times to the right then perform in the same manner rotating to the left.



Cervical Rotation Isometric - Begin in a seated position and rotate your head to one side as far as you can without pain. Place your hand on the side of the face in the direction you rotated (right cervical rotation, right hand on the side of you face) and **gently** press with your hand attempting to rotate your head back to neutral. You want enough pressure to feel the neck muscles engage. Hold this position for 10-15 seconds and then attempt to rotate further and repeat with the pressure.





Thank you for taking the time to enjoy the ebook. Don't feel like you are alone in your golf journey. Let me know your thoughts and if you have any questions.

As a reminder, these screens and exercises should be pain free. If you have any pain or difficulty in completing, please do not hesitate to reach out and let's get your golf game back on track.

Local to the Scottsdale community or in town for a golf trip? Email me for a complimentary 30 minute assessment or to book a treatment session!!

greg@lawsofmotionpt.com