

Murphy's Vinyl Fence Laws

WamBam
The only fence that's fun to install.

*"How to Fight with Murphy
...and WIN!"*

REALLY

**^ Important stuff
to know about
installing your
WamBam fence.**

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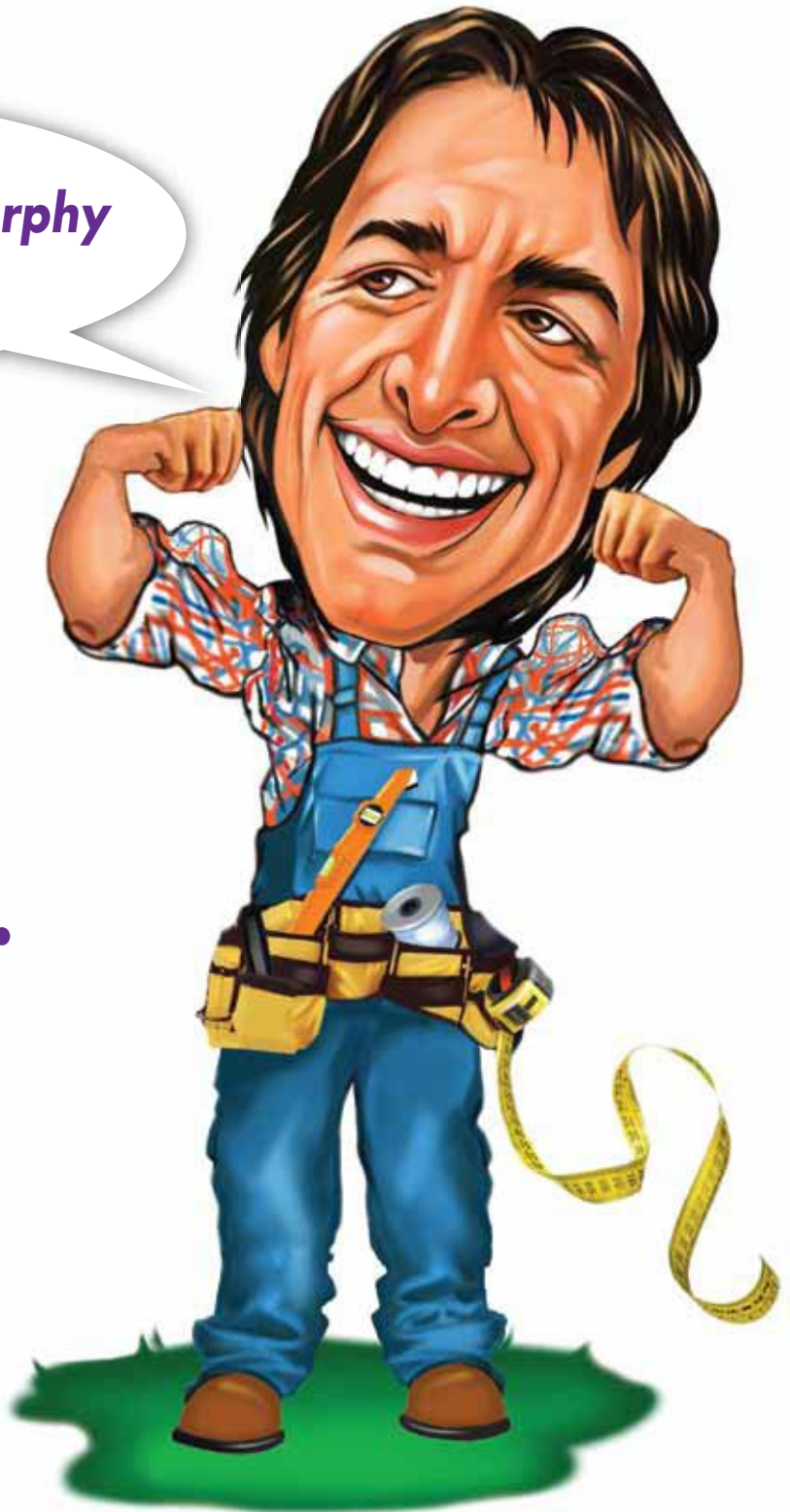


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Welcome to the World of WamBam

WamBam
The only fence that's fun to install.

A Word From Clever Joe

Howdy again! I'm assuming that you've read over your specific fence and gate instructions before getting this far. If not, please do so.

My intent with the following information is to try and help you foresee some of the possible problems you may encounter with your fence project. After almost twelve years of installing fence the WamBam way, I've seen almost every scenario under the sun. Emphasis on "almost". Solutions to the most common problems I've encountered are outlined in the following pages. If you have a unique problem that we do not cover, please feel free to call us. We'd love to hear from you!

What's Murphy's Law?

Murphy's Law is an old adage that basically means "anything that can go wrong, generally does". Unfortunately, because we live on planet earth (and not in heaven) it applies to both you and I. Another old saying goes like this, "fail to plan, plan to fail". Please take the time to plan your fence project. Walk your fence line. Re-walk your fence line. Planning around potential problems before you get to them allows for options and no unpleasant surprises. If you don't see any obvious problems, you are not home free. Odds are that you could run into some obstructions under the ground, such as rocks, utilities or otherwise. If you are able to complete your fence project without running into one snag or another, be grateful!

One Last Word

I have built this information around installing a typical privacy fence. You may be installing a different fence style. The principles (with a few more or less nuances) are the same for every fence. All right...let's go!



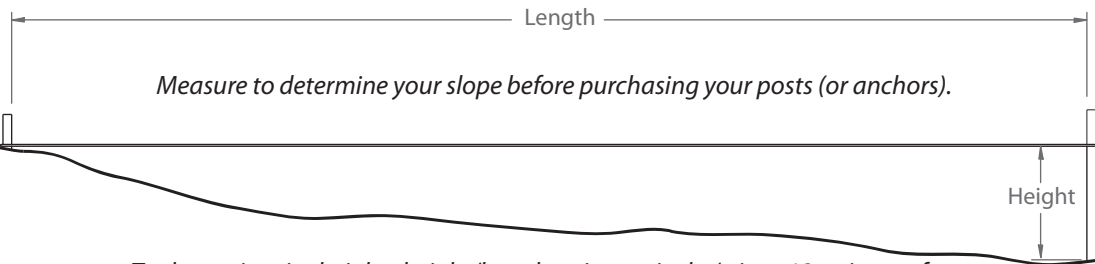
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How do I determine whether or not my fence line has a slope?

Run a level string line from the start to the finish of your fence line. This will help you understand how much of a fall your fence line has. You will need to compensate for this difference in height either equally throughout your fence panels, or whatever is most visually pleasing to you.



Often the ground slope of your fence line will be much greater than you think it is.



Measure to determine your slope before purchasing your posts (or anchors).

To determine rise height: $\text{height/length} = \text{rise per inch} / \text{rise} \times 12 = \text{rise per foot}$
If slope is greater than 10 degrees, please order large anchors regardless of your fence style.

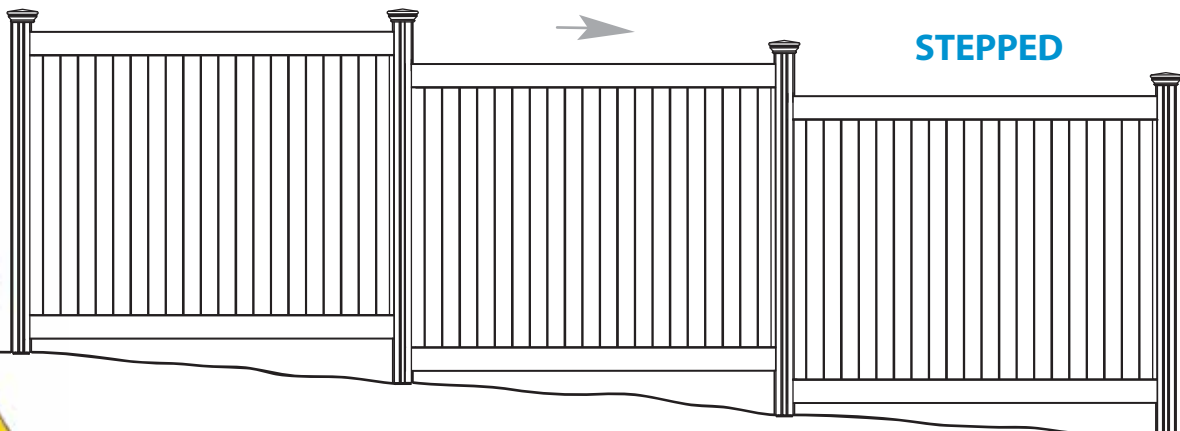
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How do I deal with sloping ground?

There are two ways to tackle a fence line with ground that slopes either up or down. You can step or slope your fence as illustrated below, or on the next page. Because no other man-made vertical element in your backyard is generally installed with a noticeable slope, neither should your fence. However, this is just my personal preference. Yours may be different. The exception is the Even Stephen and Simple Simon fence styles. They should be only installed using the slope method flowing up or down with the changes in your elevation. For all other vinyl fence styles, keeping the top of your fence level generally takes a little more installation time and is a little more costly (you need to order the next longer post size up), but the overall effect is more pleasing to the eye.



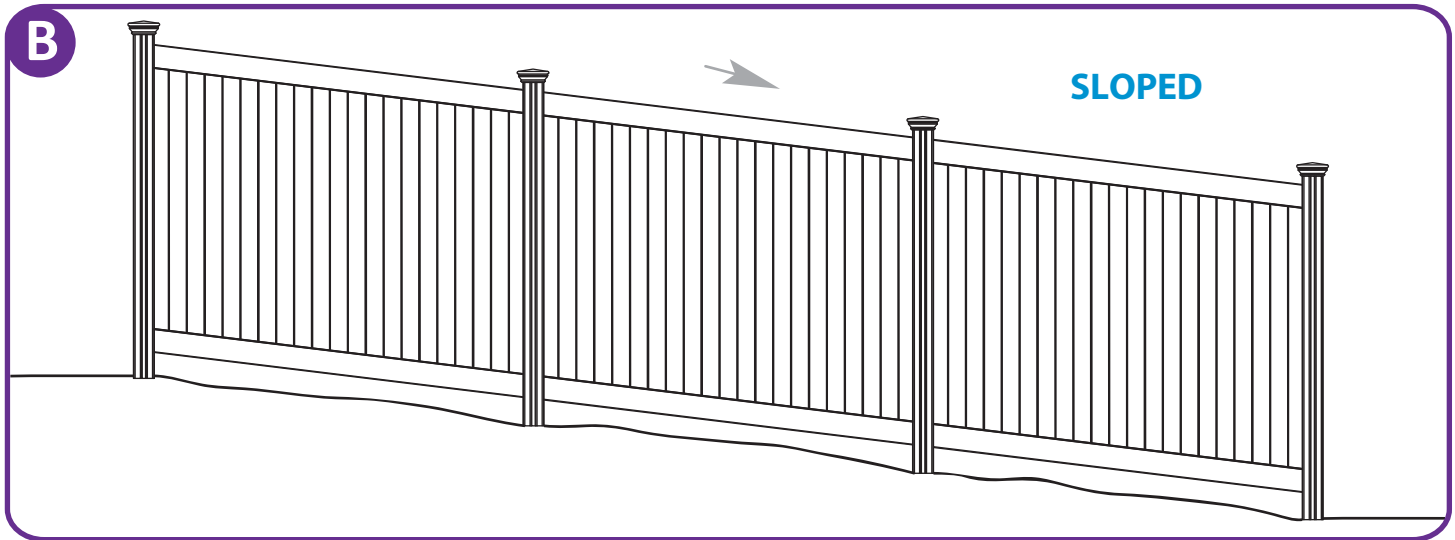
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Please order longer posts to accommodate this style of fence installation, and large anchors regardless of your fence style chosen.

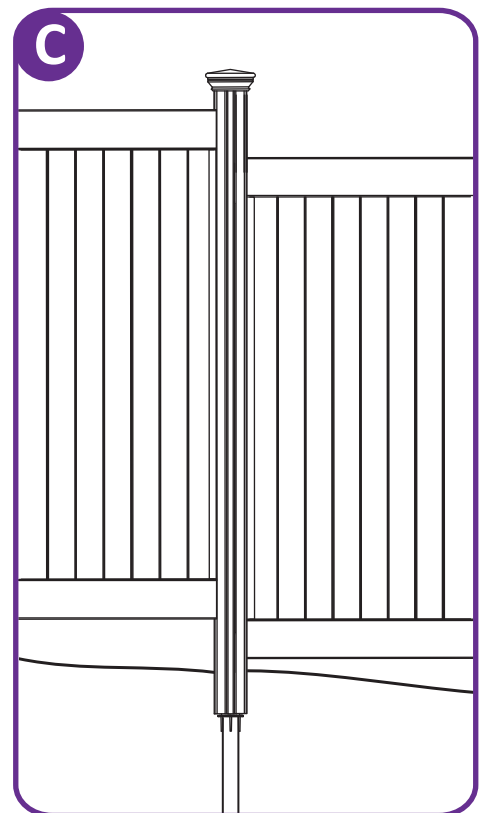
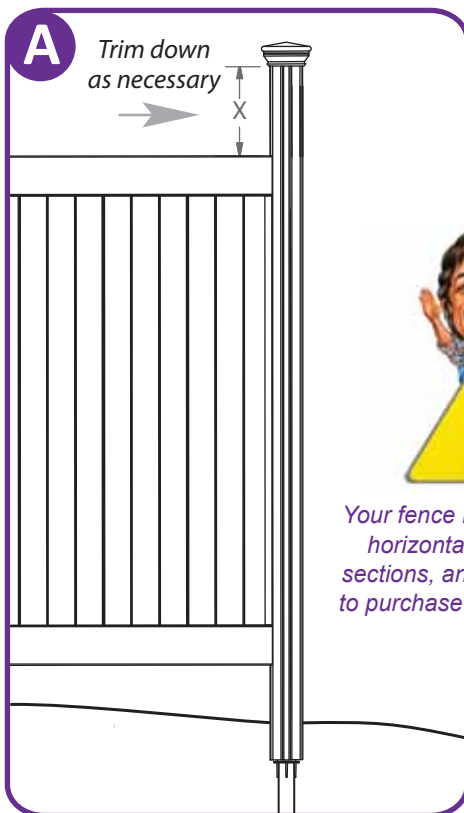
Your fence rails will remain horizontal for all fence sections, and you will need to purchase extended posts.

For installation videos and more information, visit www.wambamfence.com



Stepped Fence Considerations

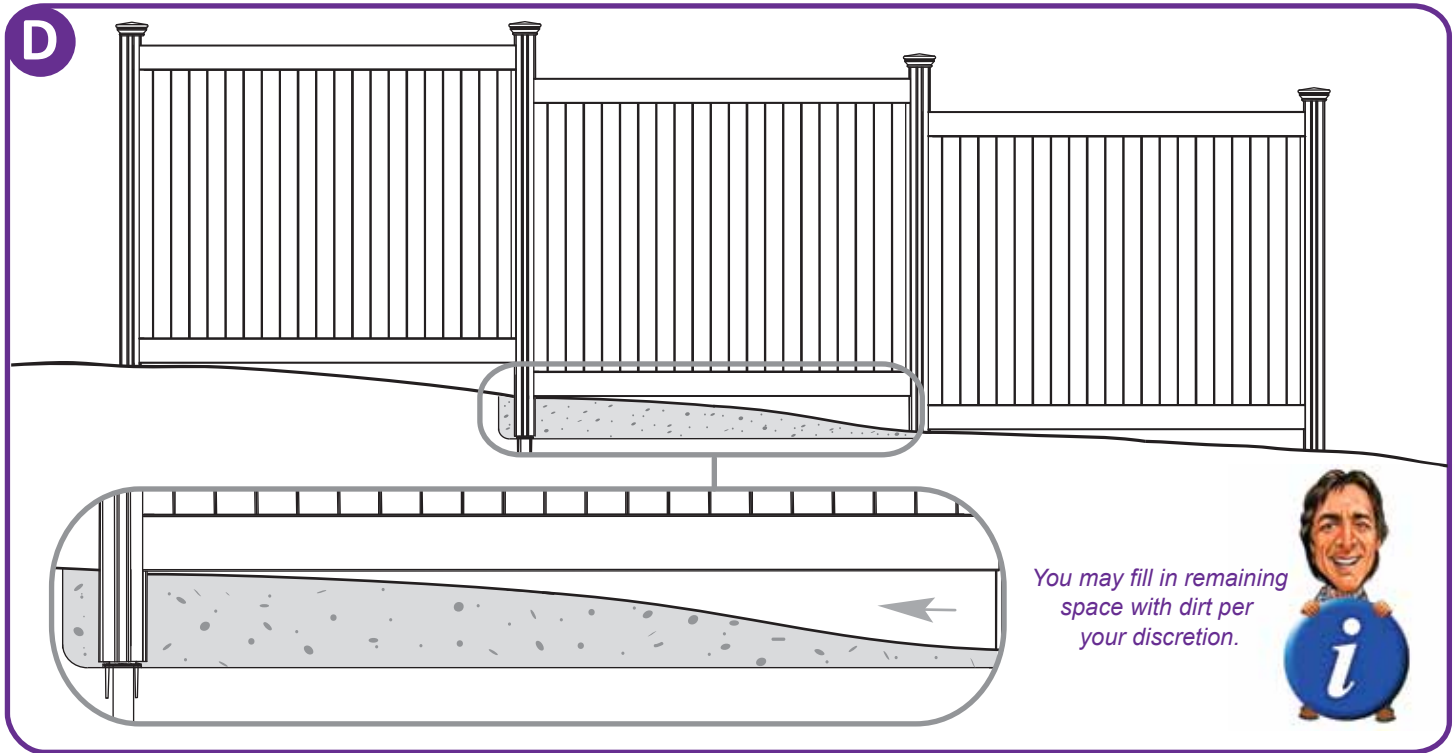
You will need to trim down your posts length (because you've ordered extra long posts) either as you install your fence (see illustrations below), or leave them all randomly high and trim at completion. See tips on how to cut vinyl at the back of this guide.



Your fence rails will remain horizontal for all fence sections, and you will need to purchase extended posts.

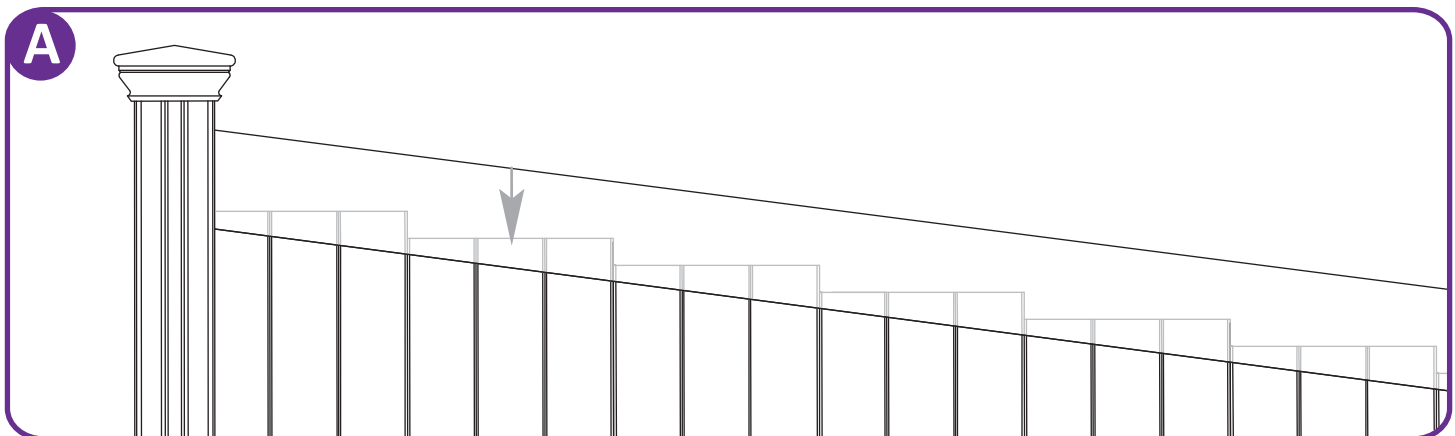
Your transition in a stepped fence design from one panel of fence to the next should look similar to this.

At the higher ground, keep the bottom rail either as close to the ground as possible, or even bury it down a few inches. This will help keep the gap on the bottom rail at the lower ground as minimal as possible. Once your fence is complete, you can "feather in" backfill dirt to minimize the gap between the bottom rail and the ground.

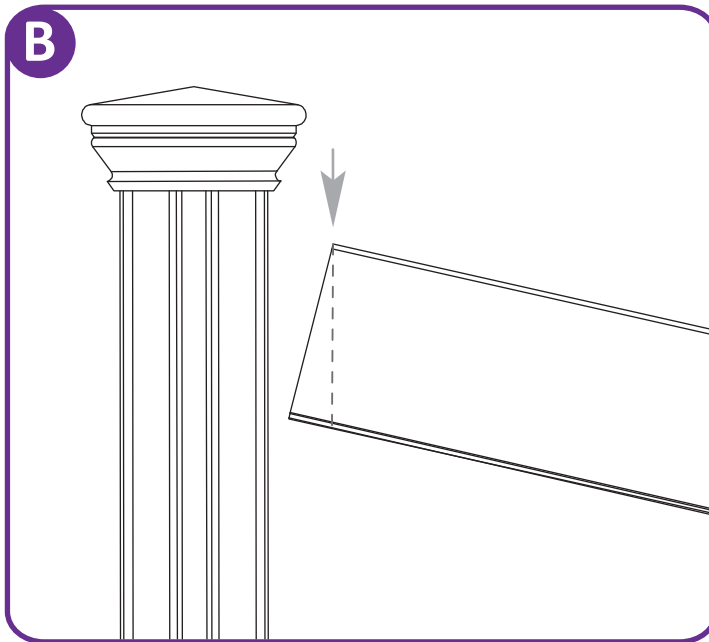


Sloped Fence Considerations

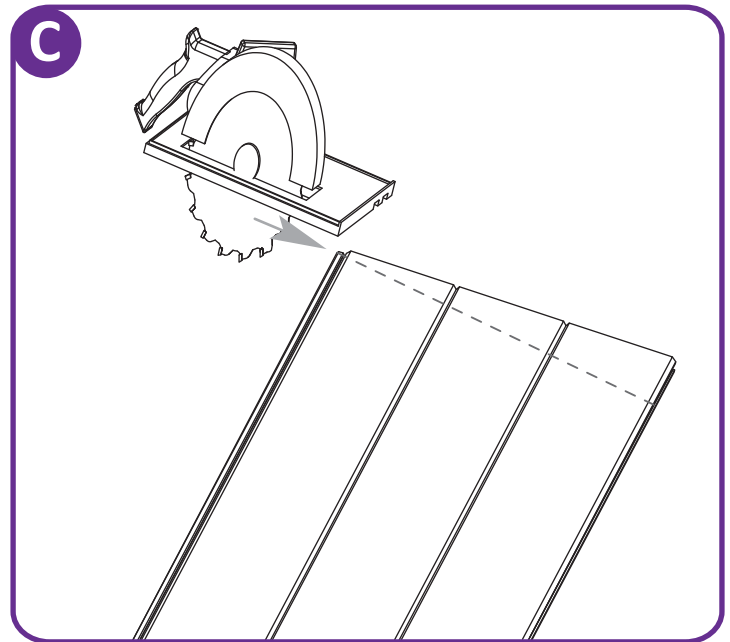
If you choose to go with the slope method, you need to be aware of the following potential conflicts. If your slope is severe (greater than 10 degrees) you will need to angle cut your rails and the top and bottom of your fence boards (on certain styles only) to fit and function properly.



For small angles, no trimming needs to be done to the panel.

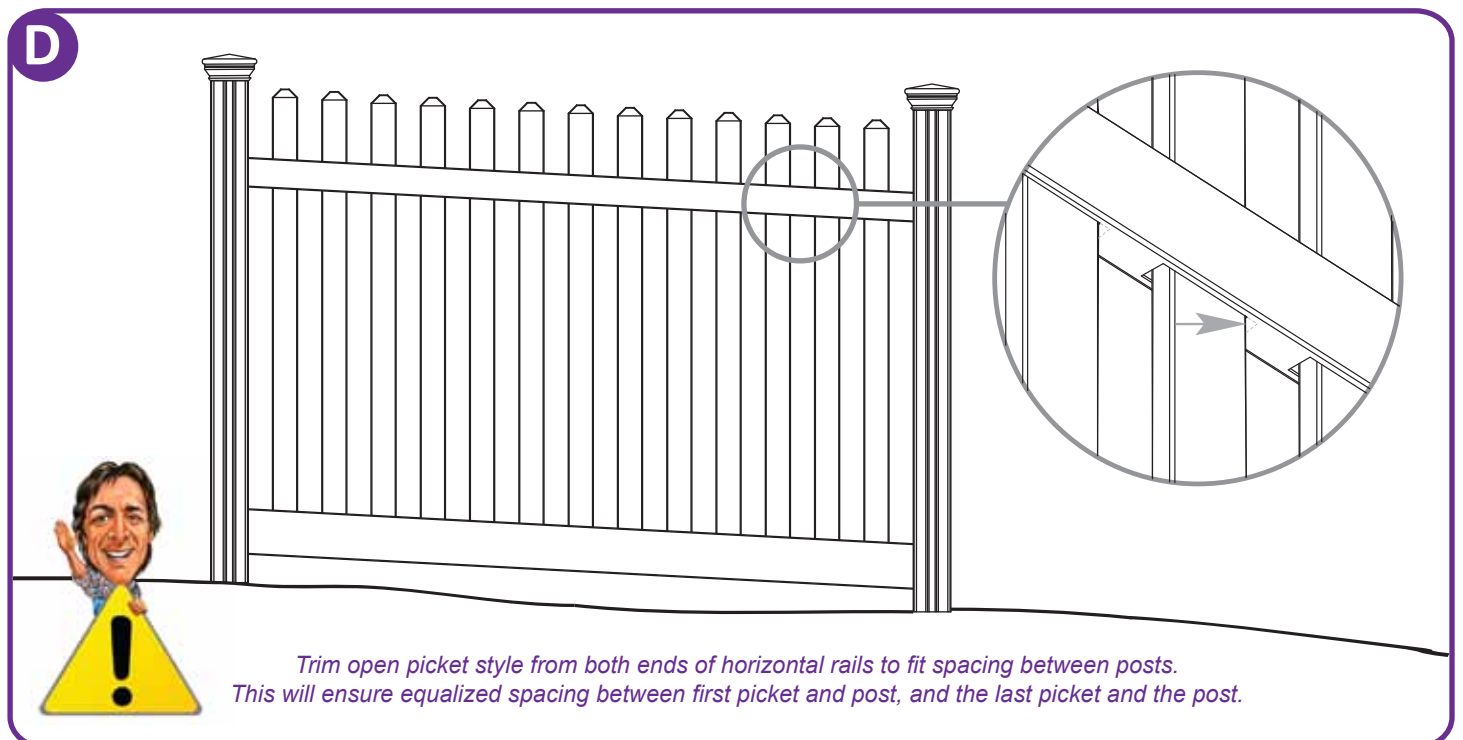


For severe angles, mark angle on top and bottom and cut accordingly.



Trim panels accordingly to fit between top and bottom rails.

If you use the slope method to install the Jiminy Picket, Nervous Nelly, or the Peeping Tom Fence, you may need to enlarge the holes on the bottom of the top fence rail. This will allow your pickets to remain vertical while your rails are sloped. These holes already come enlarged for moderately sloped fence lines. You can use a rat tail file to accomplish this rather quickly.



Trim open picket style from both ends of horizontal rails to fit spacing between posts. This will ensure equalized spacing between first picket and post, and the last picket and the post.

Rail holes will have to be enlarged for extreme slopes.

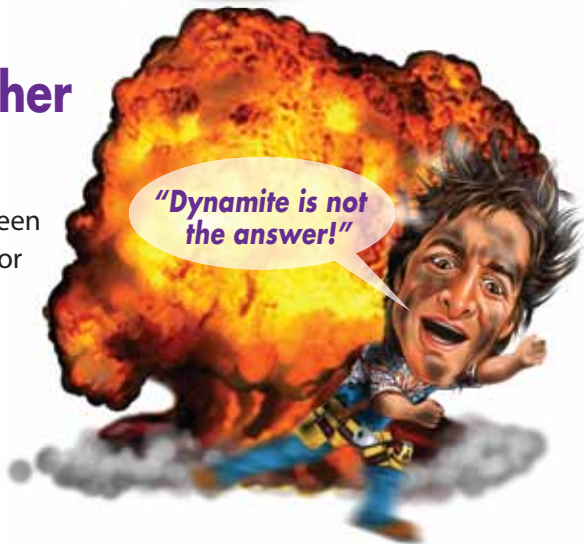
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How do I deal with rocks and other underground obstructions?

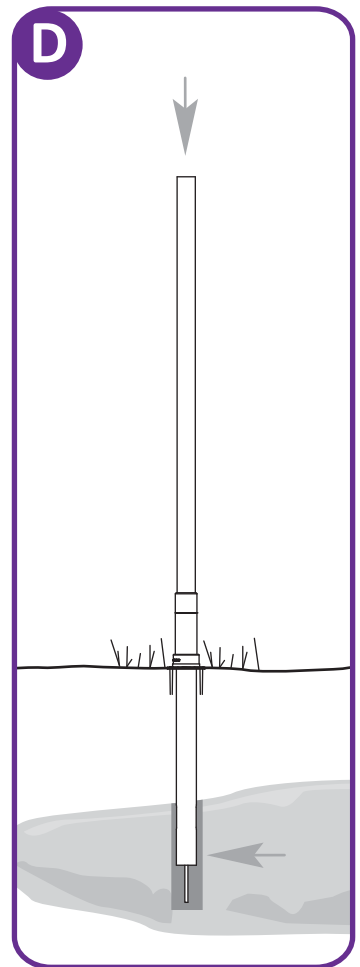
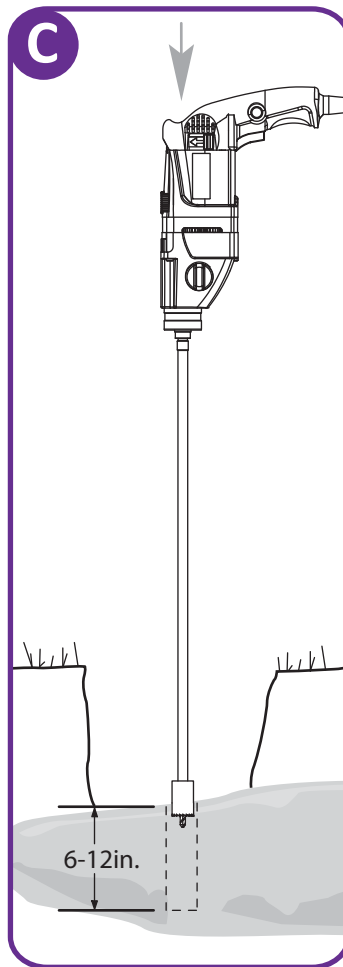
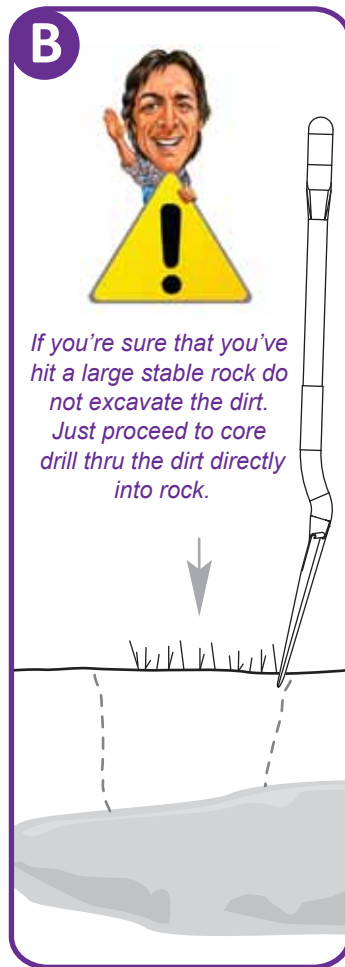
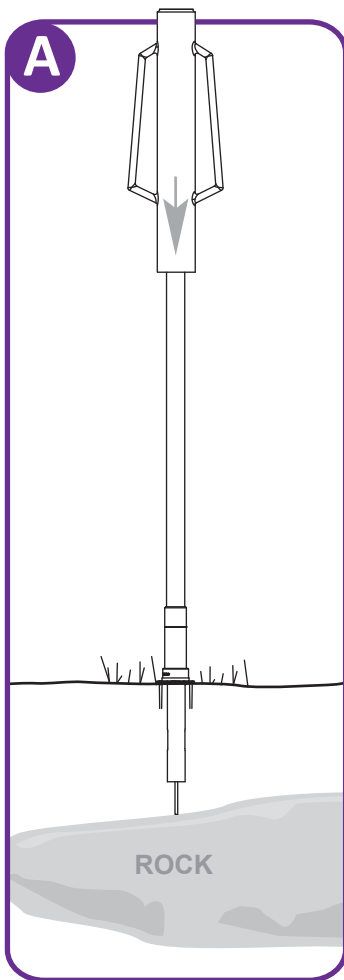
By far the most frustrating part of installing a fence is running into unforeseen obstacles under the ground. It doesn't matter if you go the WamBam way or the traditional way...a big rock or tree root is going to cause you grief.

Large Rocks?

If the rock is large and stable enough it may be the perfect foundation to support your fence. We would recommend a technique called core drilling to mount your anchors (illustrated below) or using our surface mount.



OPTION 1 - CORE DRILLING

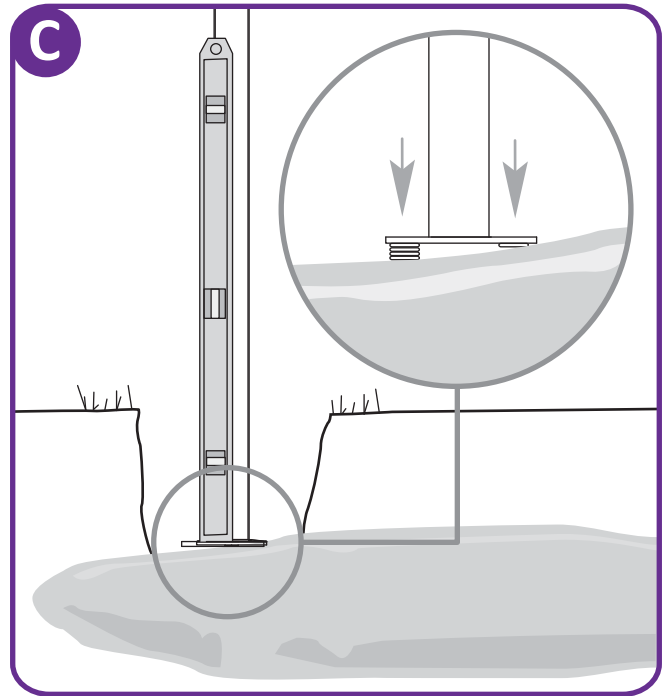
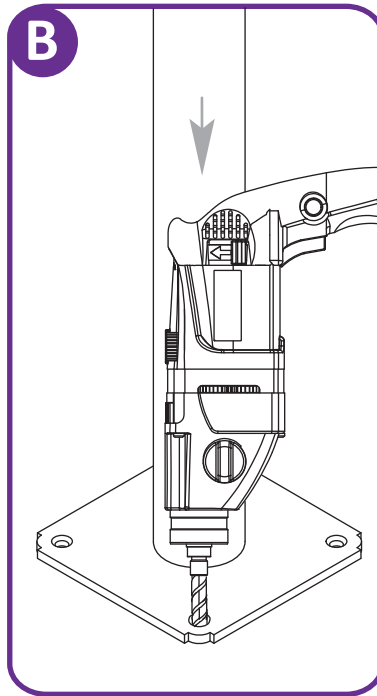
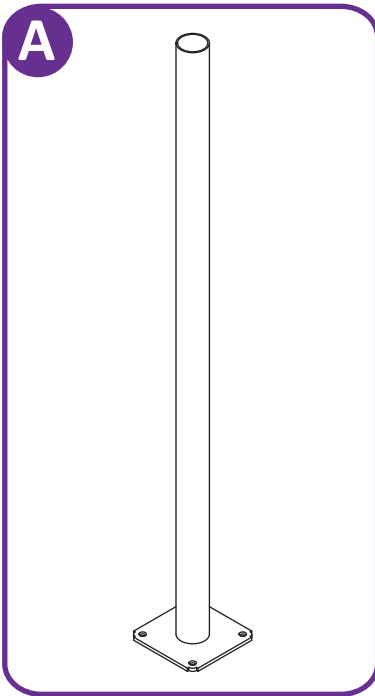


Excavate dirt to determine how large of a rock you have hit.

Use a core drill (a powerful drill designed to drill holes in solid rock), create a 1 5/8in. to 1 7/8in. diameter hole, anywhere from 6in. to 12in. deep.

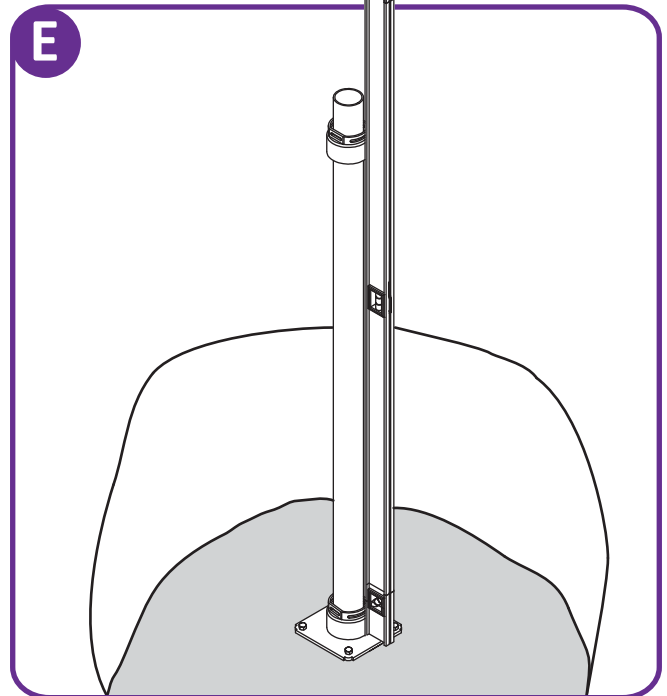
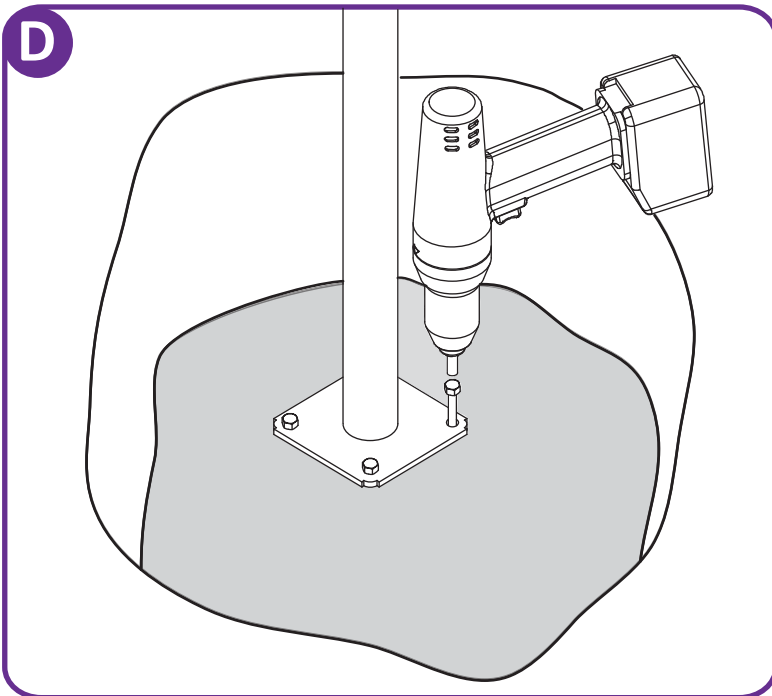
Fill hole with liquid concrete, or wedge the anchor directly into the hole if it is tight enough to create solid compression.

OPTION 2 - SURFACE MOUNT



Using a hammer drill, create the holes necessary for the anchors. You may want to enlarge the holes on the base plate and use expanding bolts to create a stronger connection than the regular fasteners included.

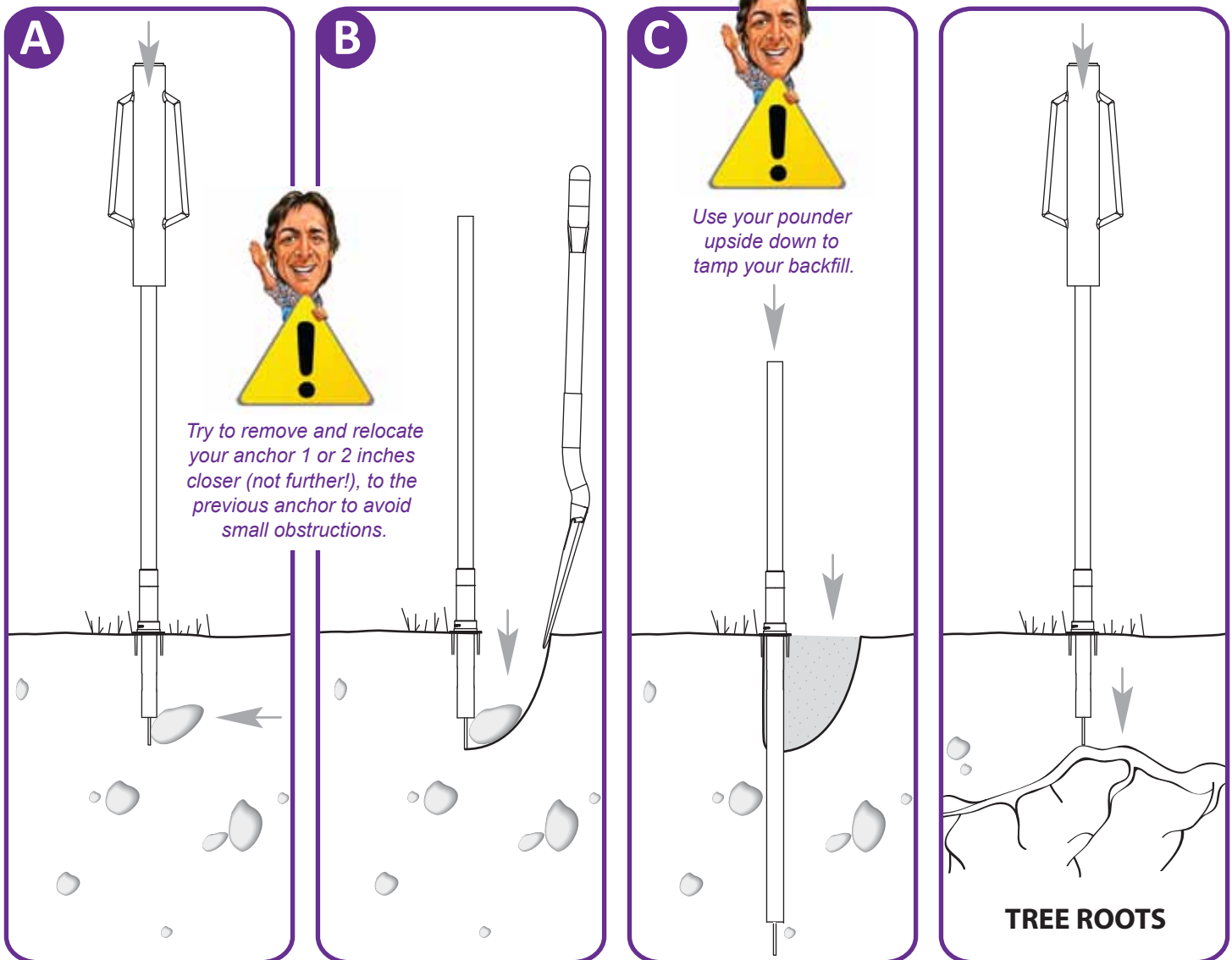
Level surface mount with galvanized washers.



Use the leveling donuts to compensate for any crookedness that still exists in the anchor shaft.

Small Rocks?

Your anchor will penetrate smaller intermittent stones (less than 1 inch) with relative ease. For larger rocks, dig them out of the way much in the same way if you were installing a traditional fence footing. Depending how far they are under the surface will determine if you can backfill with granular material (gravel that will compact) and re-drive your anchor into the ground.



Try to remove and relocate your anchor 1 or 2 inches closer (not further!), to the previous anchor to avoid small obstructions.

Use your pounder upside down to tamp your backfill.

You may need to excavate and dig out the small rocks to gain penetration.

Backfill with material (dirt or gravel) that will compress tightly around the anchor and provide adequate stabilization.

Tree Roots?

The blade on the bottom of the anchor is designed to slice through tree roots up to about 2in. in diameter. For larger tree roots either relocate the anchor (if possible) or excavate and cut out the section of offending root.

-4- How do I deal with extremely hard or dry ground?

OPTION 1 - Use Water to Loosen Soil



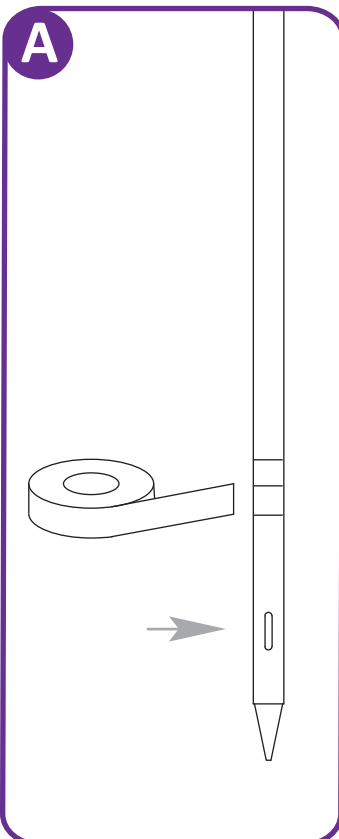
Let a garden hose run for a minimum of 5 to 10 minutes over the spot you intend to pound your anchor into.

Doing this the day before will allow time for the water to thoroughly saturate your ground.

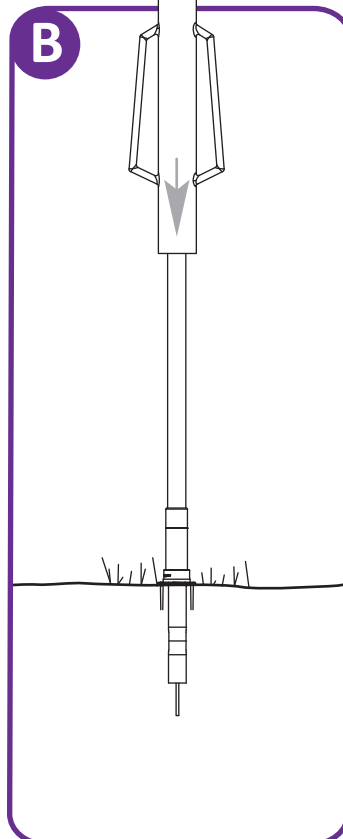


Outlined below are some additional things you can do if you still find pounding your anchor is going too slow.

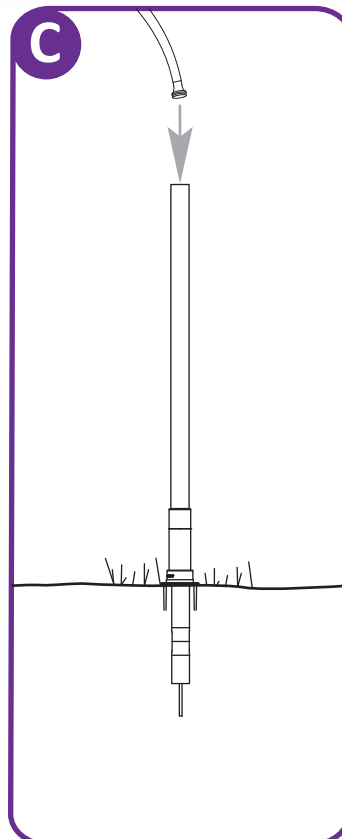
OPTION 2 - Use Concentrated Water to Loosen Soil



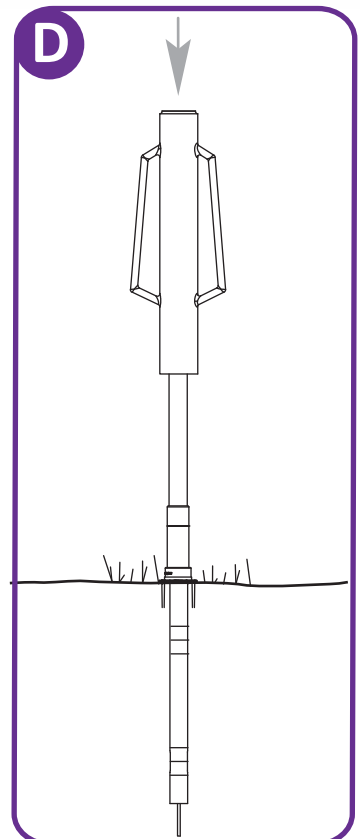
Tape off holes with duct tape.



Pound anchor into ground as far as possible.



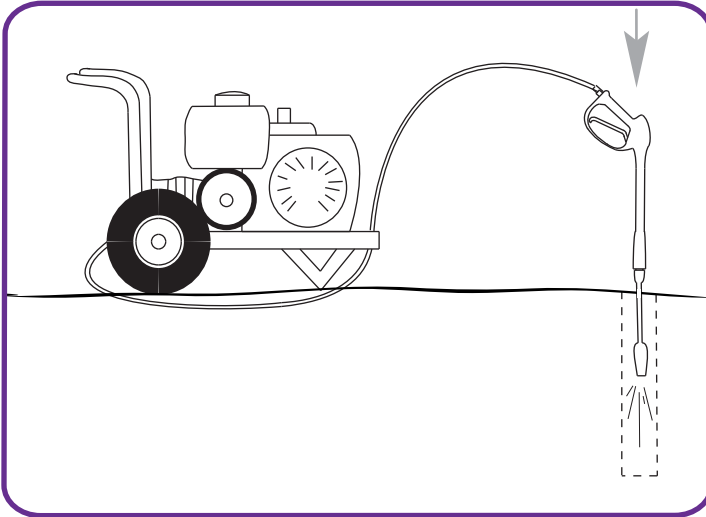
Fill anchor to the top with water and let sit until water is completely drained.



Continue to pound anchor into ground and repeat steps at separate intervals as needed.

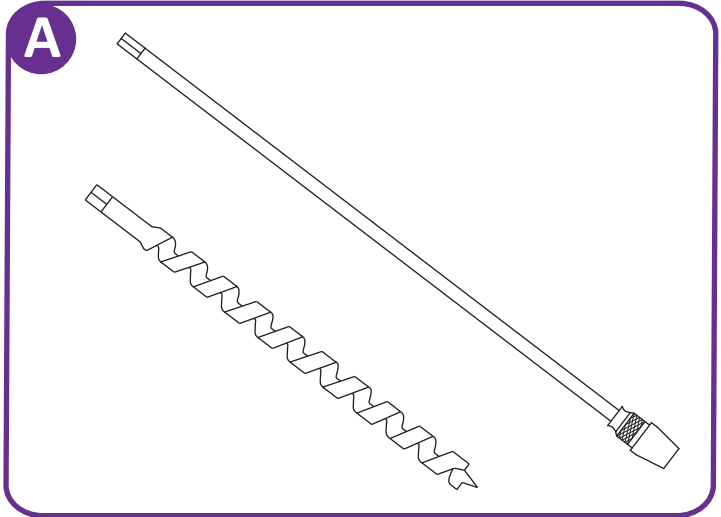


OPTION 3 - Use High Pressure Water to Loosen Soil

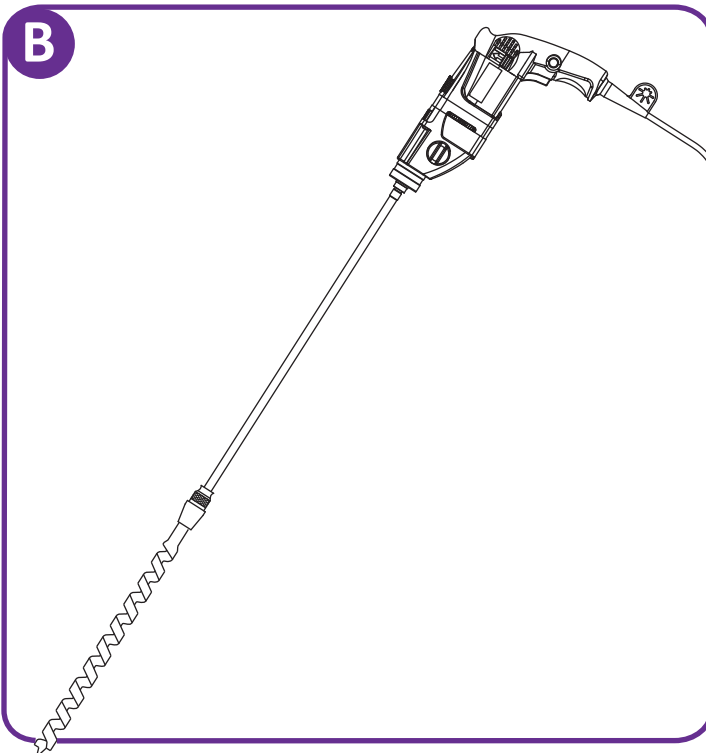


A powerwasher can optionally work well as a pre-drilling device into the ground in advance of the anchor being pounded in. Prepare to get messy even if you fashion a temporary shield. Do not go any deeper than about 18in. using this technique. The anchor needs to penetrate virgin and undisturbed soil beneath the pre-drilled hole, much like a screw being pre-drilled into hardwood.

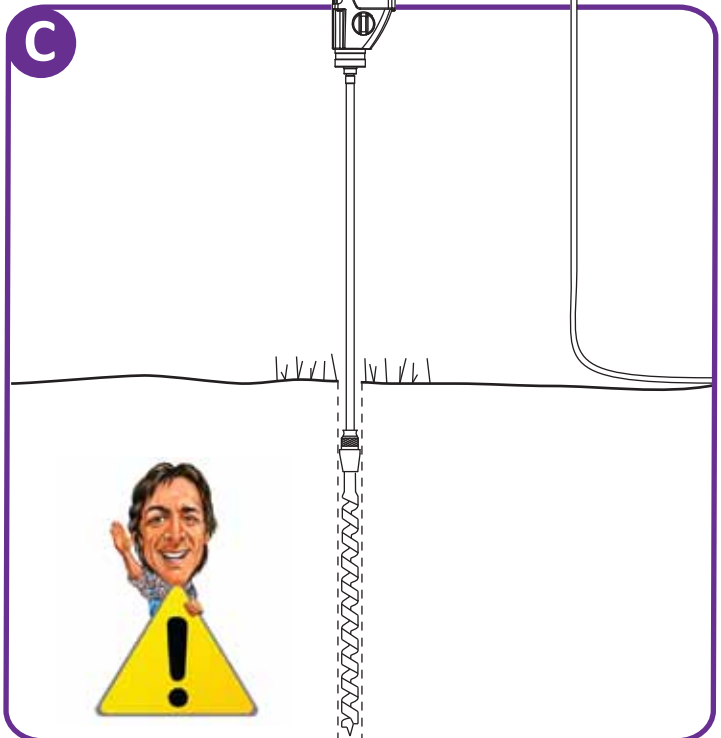
OPTION 4 - Pre-Drill a Pilot Hole into the Ground



Attempting to pre-drill a pilot hole into the ground before pounding in your anchor may be a possible solution.



Use a 1" or 1 1/2" diameter x 18" long auger bit with an 18" extension (both are available at most hardware stores). Preferably use a pistol style electrical drill (heavy duty cordless may even be acceptable in some conditions).



Ensure that you drill your hole straight and level into the ground, otherwise when you pound your anchor into the ground, it will follow a crooked hole and your anchor will end up being crooked.

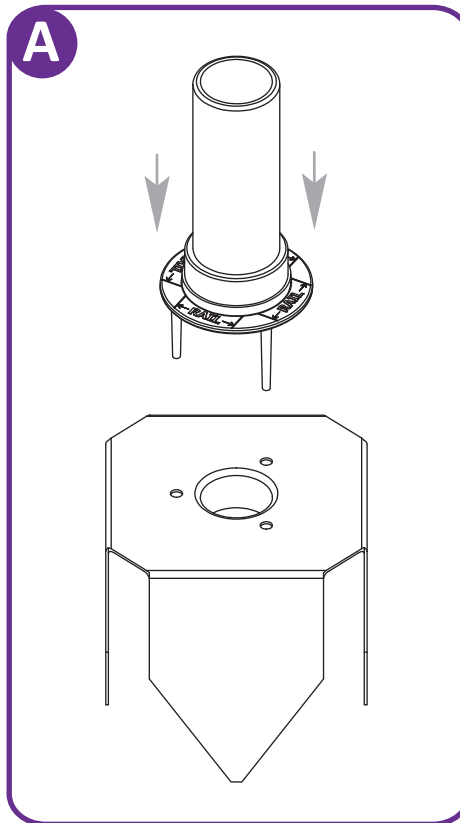
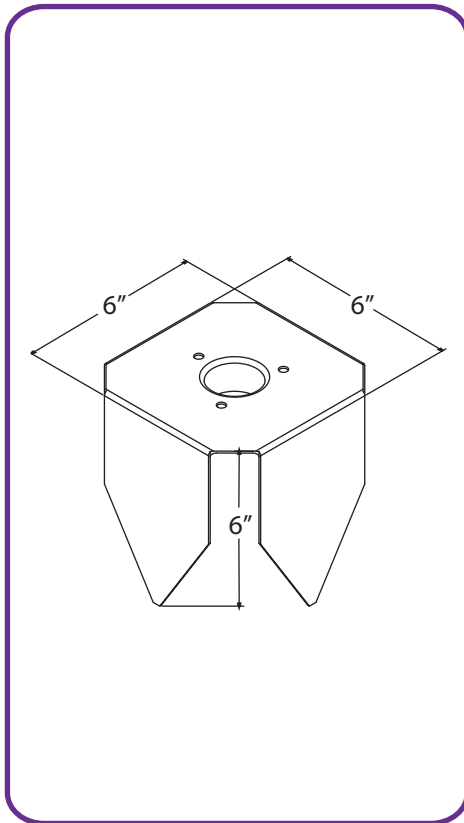
-5- **How do I deal with loose or disturbed soil?**

Your pipe anchors, even when driven to the recommended depths of 36 inches AND 48 inches, will have a wind load resistance problem if the ground around them is unstable. If your entire fence line is located in loose or extremely loamy conditions, you can install our fence system much like you would if you were installing a traditional fence with concrete footings. Unfortunately you did not purchase our fence to do that. You wanted to avoid drilling, digging, cementing etc. However, maybe in the course of installing your fence, you've run across a few occasional spots in your fence line that have shifty soil conditions. The following illustrations outline three options to overcome those isolated spots.

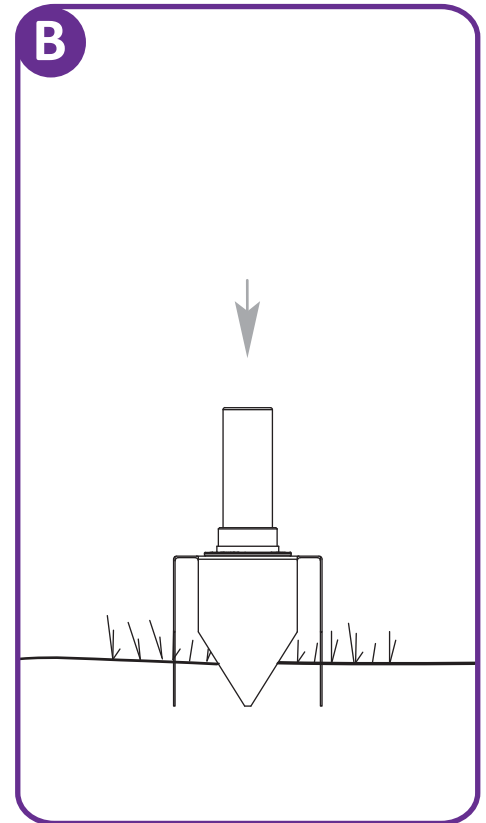


OPTION 1

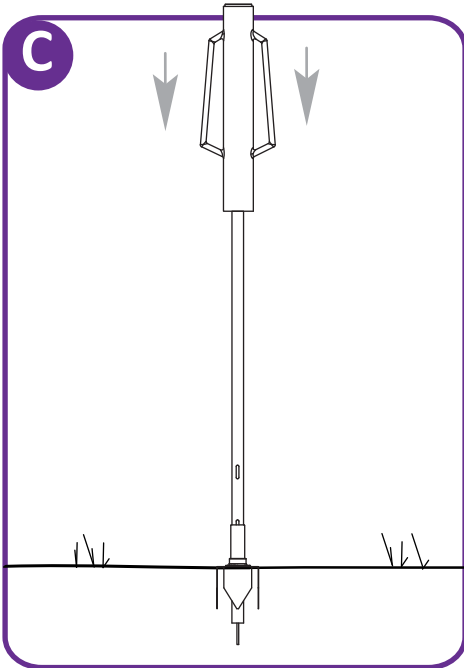
Install Metal Post Stabilizers (purchase separately).



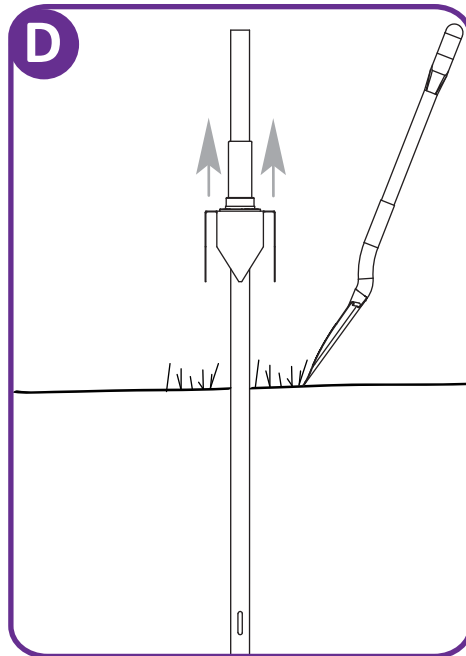
Insert the three legs on the Anchor Positioner into the three holes on the Metal Post Stabilizer.



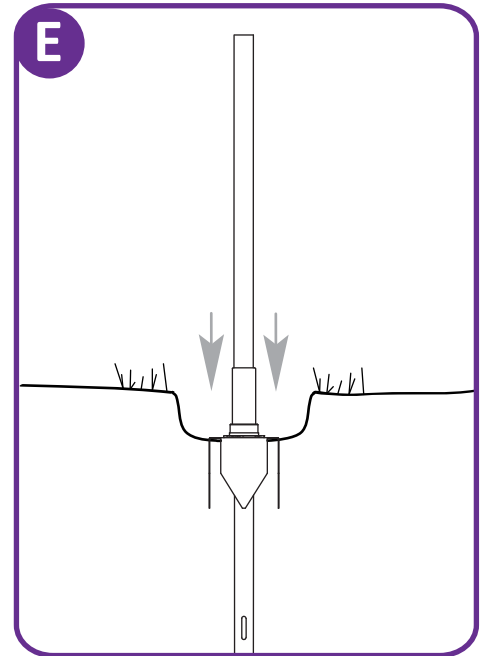
Identify location and insert flush into the ground using hand force.



Once position is identified insert your anchor and begin to pound into place.



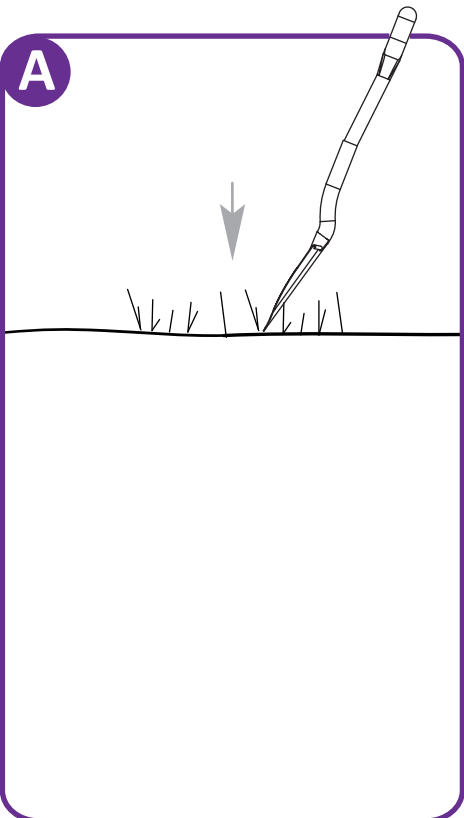
Remove 1" to 4" of soil underneath the unit



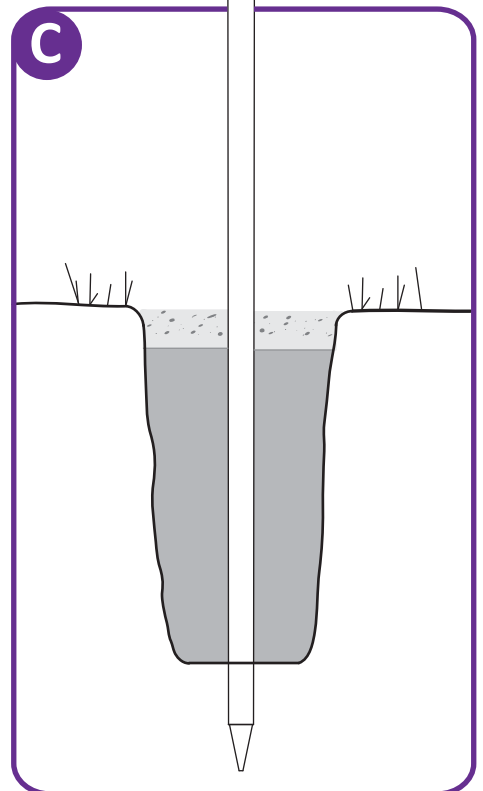
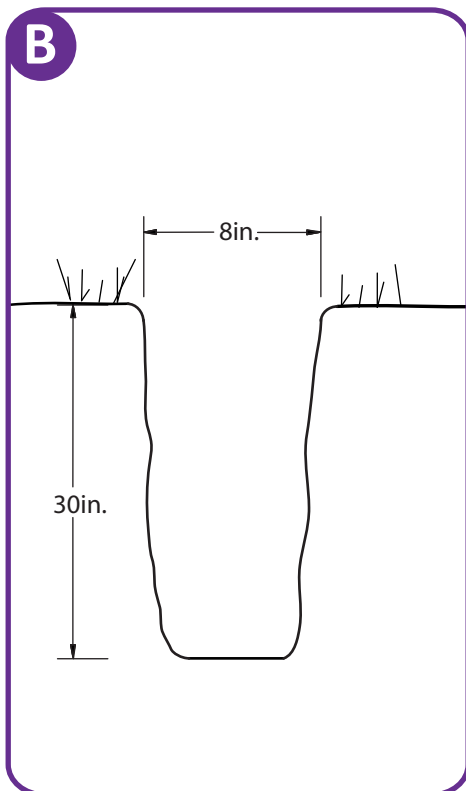
Ensure the entire unit is stumped tightly into the ground. Use hammer on exposed metal edges if required.

OPTION 2

Install a traditional concrete footing around your anchor.



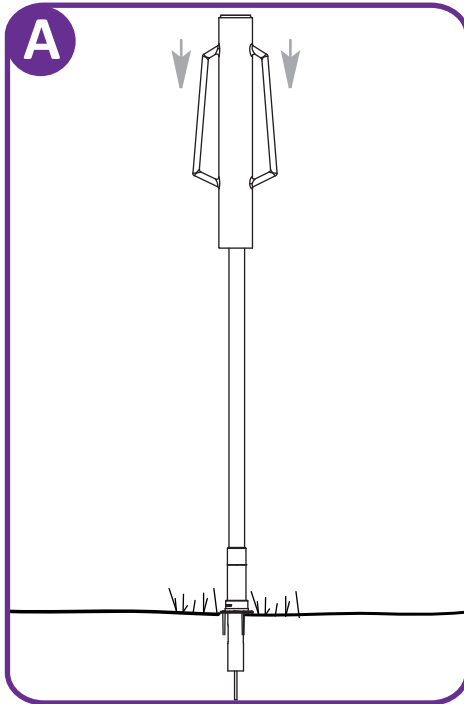
Dig hole 8 inches in diameter by 30 inches deep.



Pour 3 to 5 bags of pre-mixed concrete into the hole and install your anchor.

OPTION 3

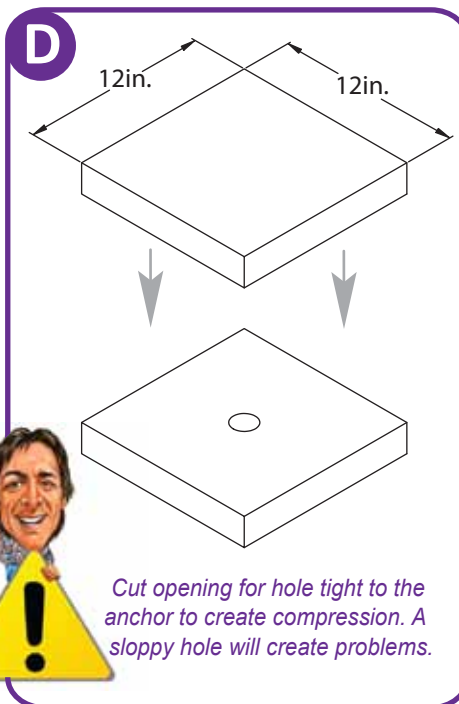
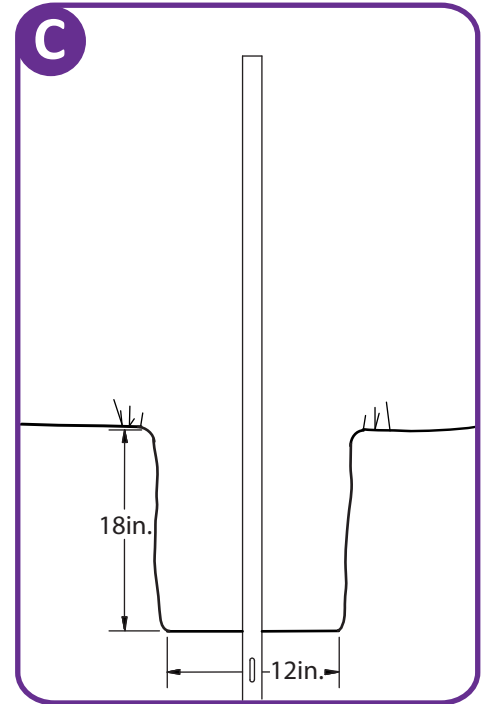
Use Styrofoam filler around your anchor.



WamBam your anchor into the suggested depth, either 36in. or 48in deep.



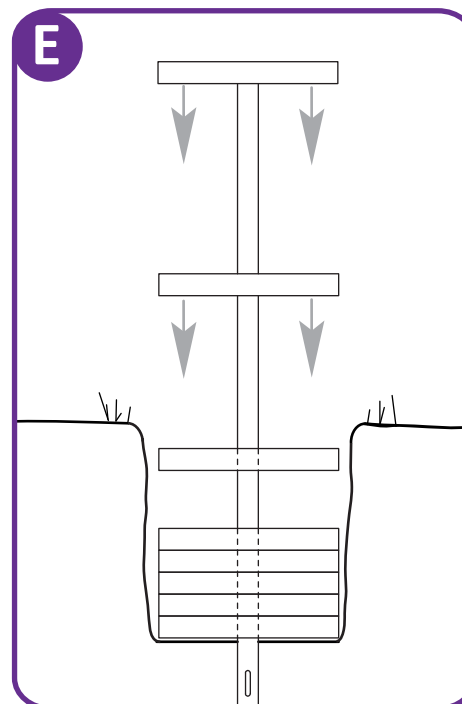
Remove anchor positioner and dig around the anchor a minimum of 18in. deep x 12in. square hole.



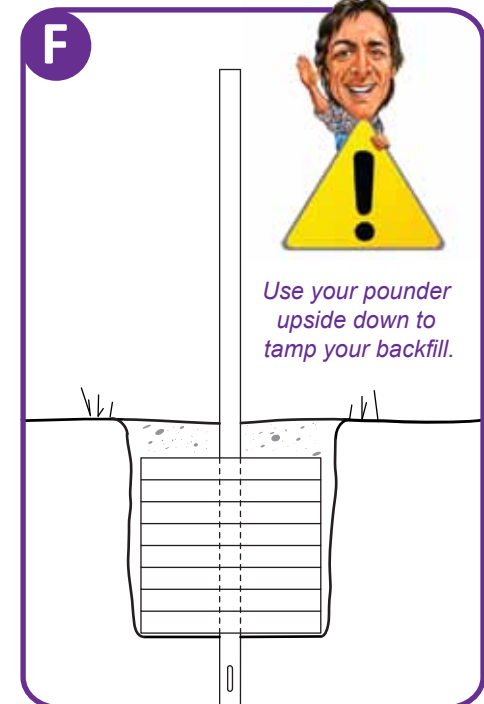
Cut opening for hole tight to the anchor to create compression. A sloppy hole will create problems.



Cut 1 or 2in. Styrofoam into 12in. x 12in. square blocks and cut 1 5/8in. hole in the center.
(Purchase large Styrofoam sheets from BigBox store)



Load Styrofoam blocks over the anchor down into the bottom of the hole.



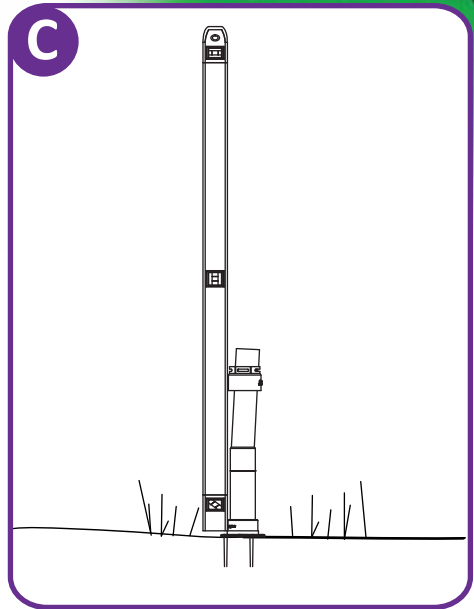
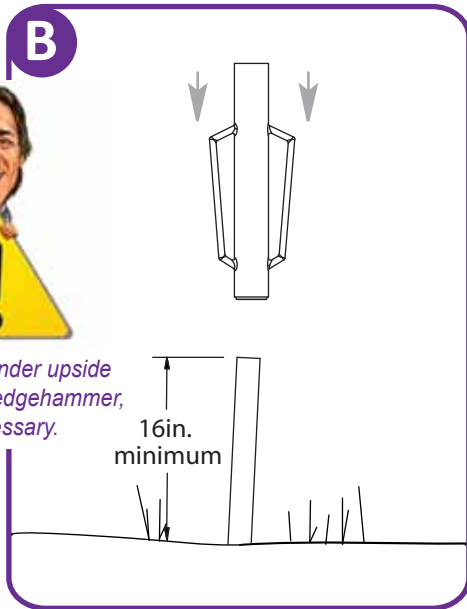
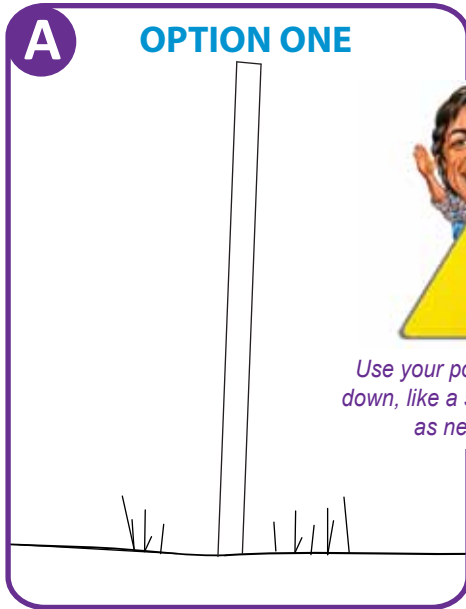
Use your pounder upside down to tamp your backfill.

Fill in the last 3in. or 4in. with backfilled dirt.

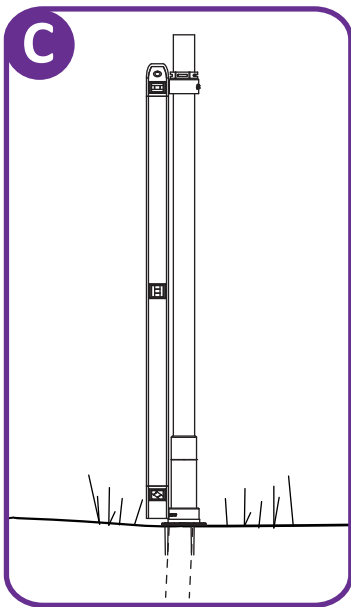
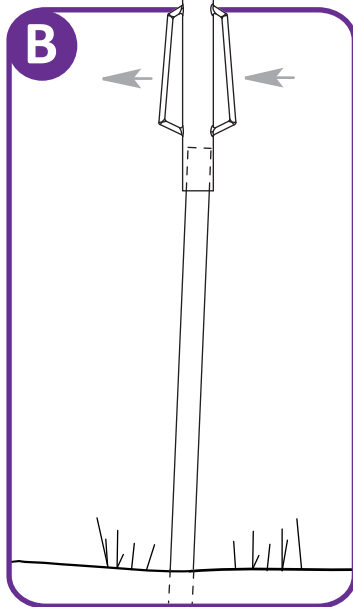
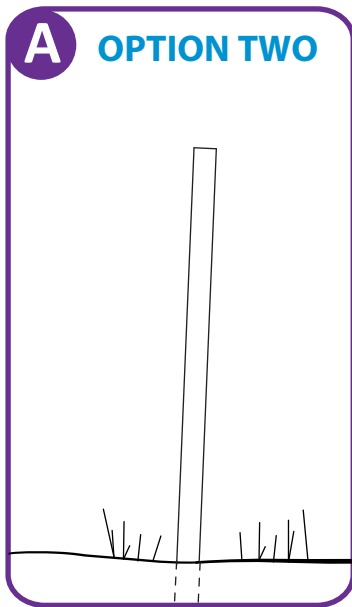


-6- How do I compensate for anchors that have been pounded in severely crooked?

If your leveling donut will not allow for compensation of a severely crooked anchor, then you have at least two options:



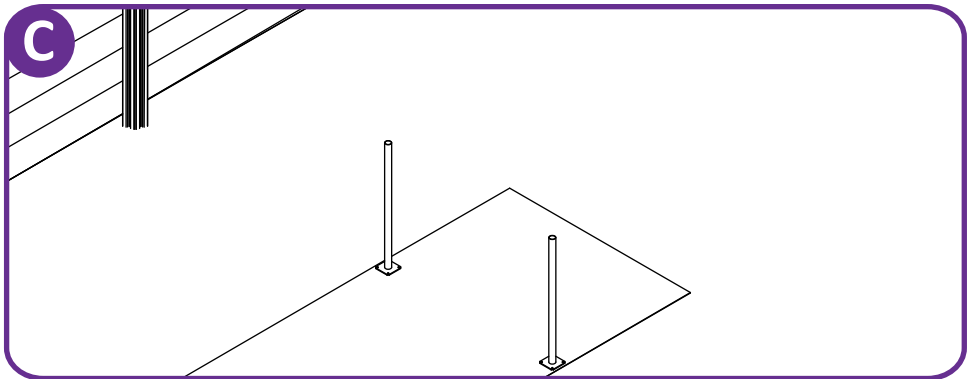
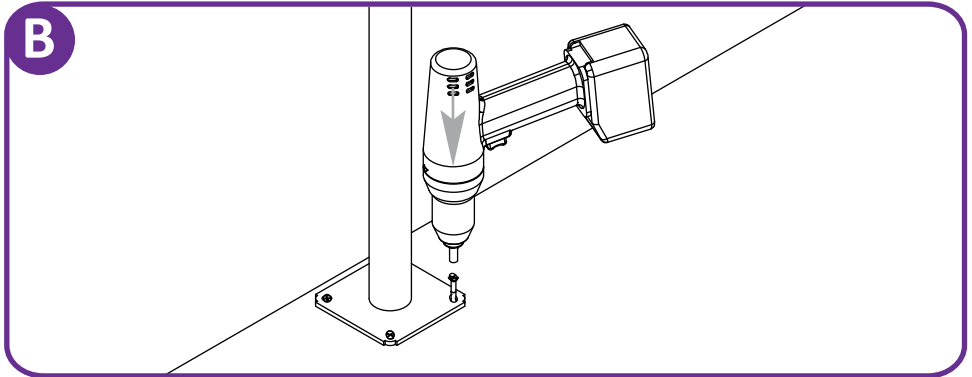
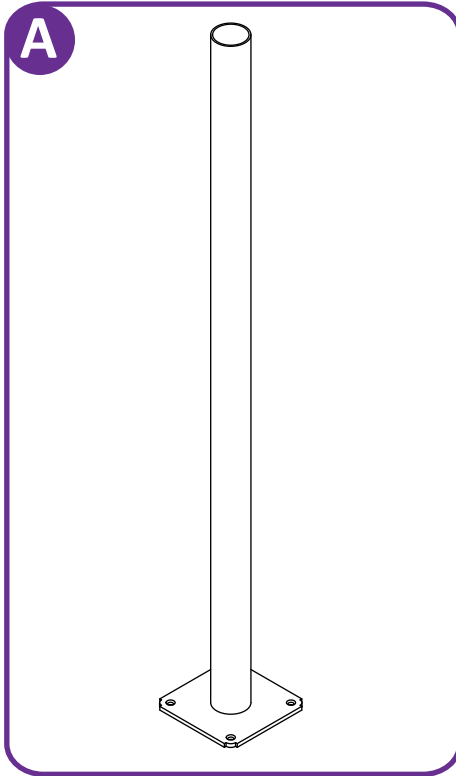
Continue to pound the anchor deeper into the ground than what we typically recommend. This corrective ability of your leveling donut is amplified the closer it gets to the Anchor Positioner.



This technique should be used in isolated events. In other words, do not correct back to back anchors using this technique or you may compromise the integrity of your fence panel's resistance to heavy winds, etc.

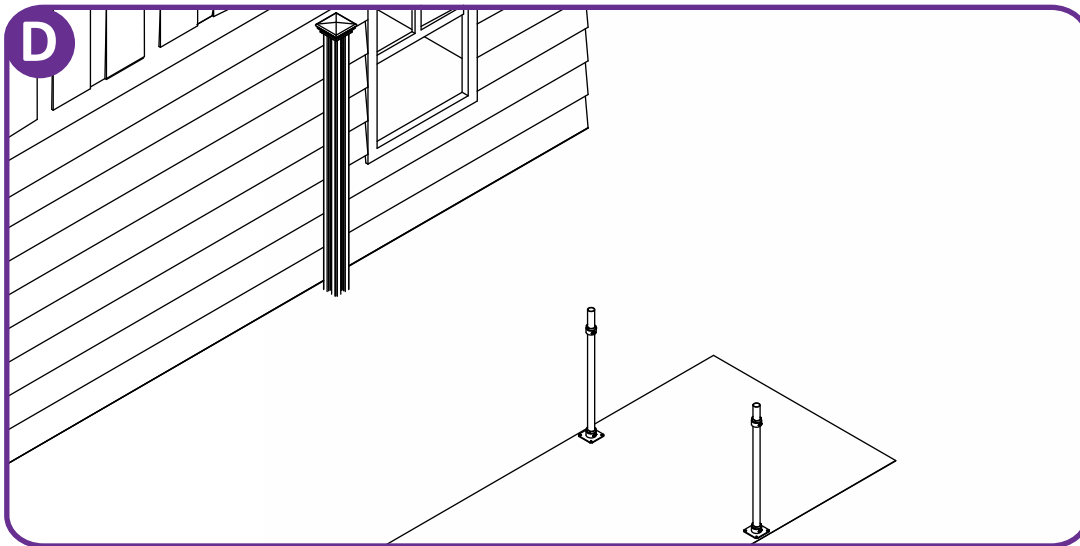
If the ground that your anchor has been driven into is tight, you may be able to bend the anchor as illustrated to compensate. Slip your pounder down over the anchor about 3 to 4 inches. Use the leverage in the pounder to bend your anchor into straight position. The integrity of your anchor will be slightly compromised, but will still perform acceptably.

-7- How do I mount my posts to a concrete or wood surface?



Any WamBam vinyl fence can be mounted to a wood, or concrete surface using our surface mounts.

Use concrete screws included, and hammer drill (if concrete surface) to drill and mount.



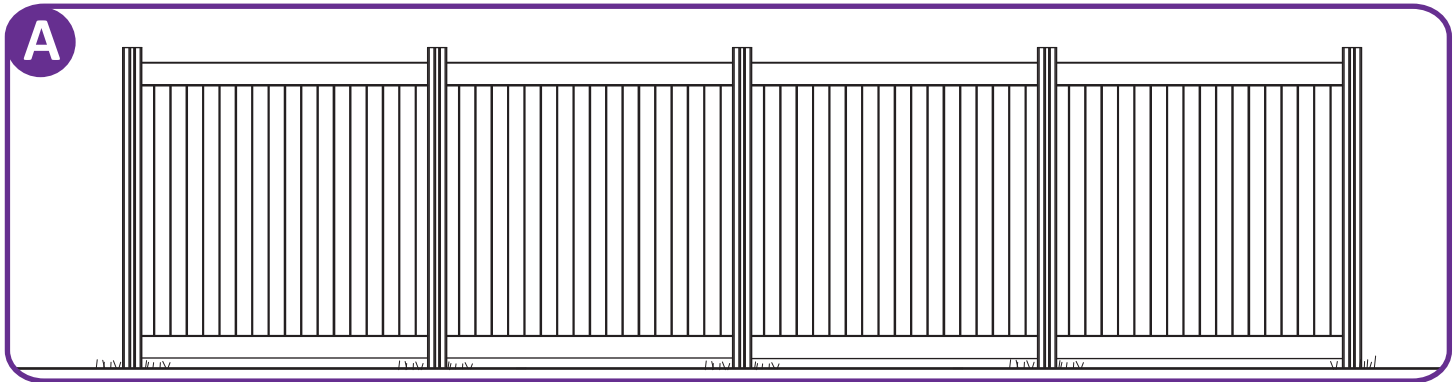
Leveling donuts can be adjusted to compensate for uneven mounting surfaces (see fence or gate instructions).

www.wambamfence.com



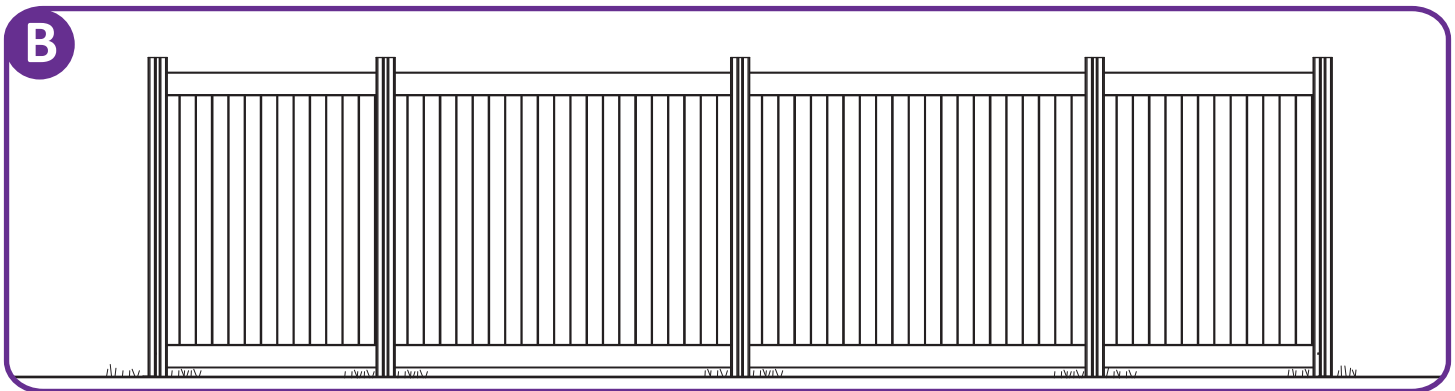
-8- **How do I equalize my fence sections to fit my overall fence run?**

Very rarely will your fence sections all fit perfectly into your fence line. You have three options. You must consider these three options before installing your first anchor.



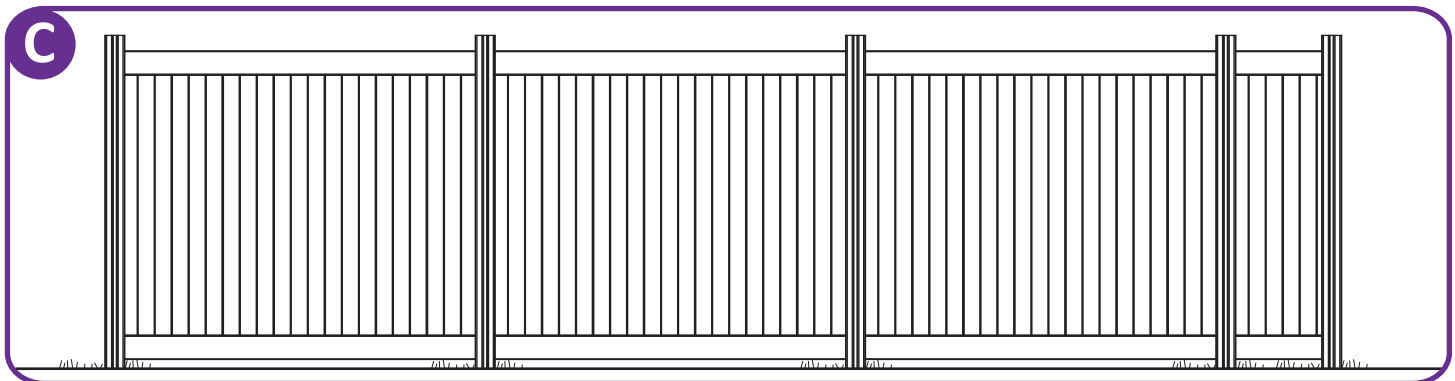
BEST

This is the most pleasing to the eye way to equalize your fence sections. It also is the most work as you will need to trim every panel down in length. If you take pride in what you do, and have the time, this is the way most professional companies would tackle your project.



ACCEPTABLE

Trimming down both end panels is an acceptable way to equalize your fence panels. This will minimize having one panel stand out like a sore thumb.



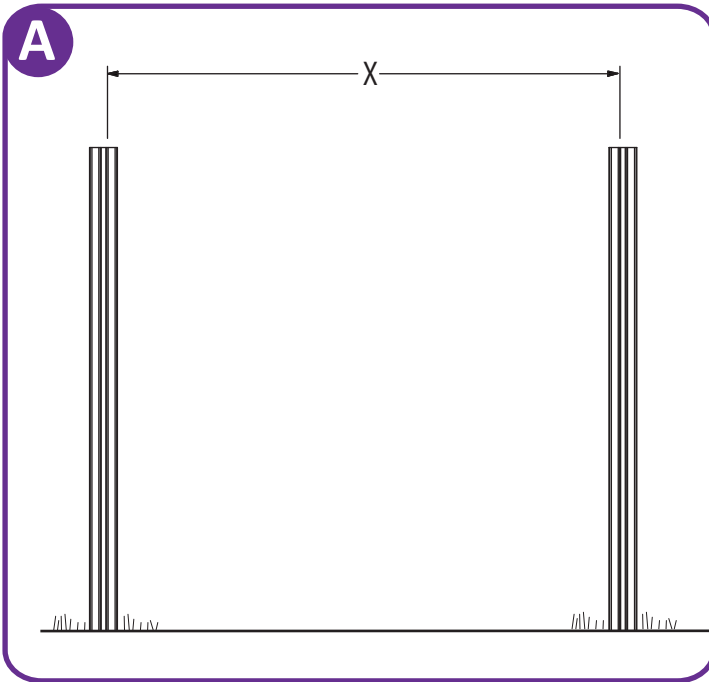
ACCEPTABLE

This is not the ideal situation, but this method provides for the least amount of work and the least amount of waste. Professionals typically would not install your fence this way.

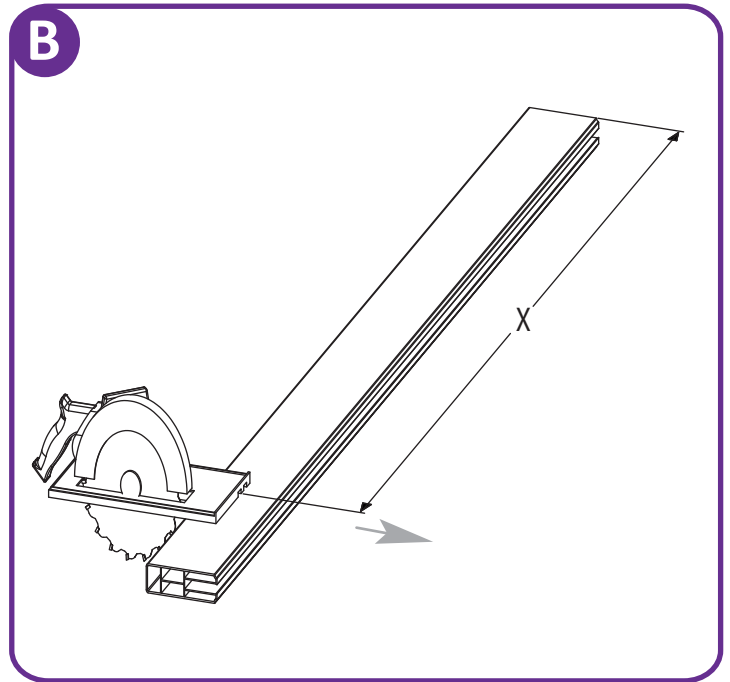
For installation videos and more information, visit www.wambamfence.com

-9-

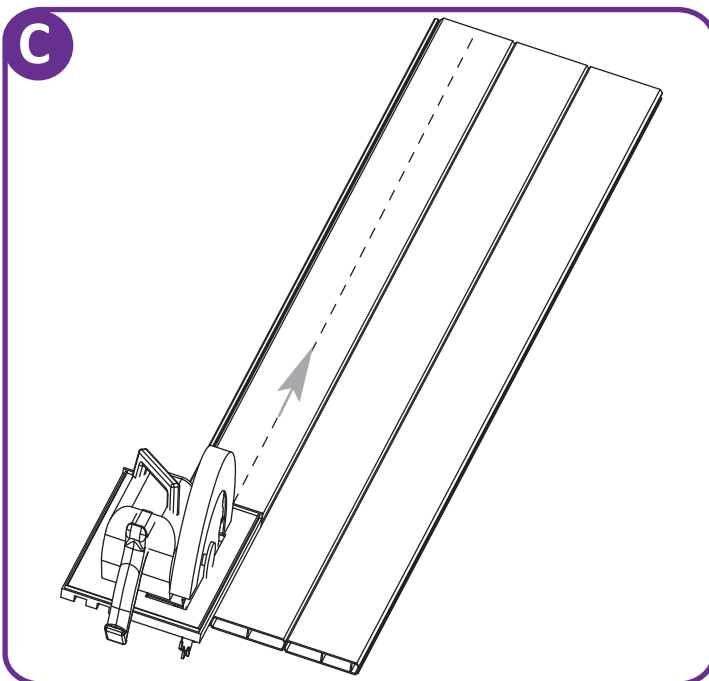
How do I trim down or extend my fence panel for a custom fit if necessary?



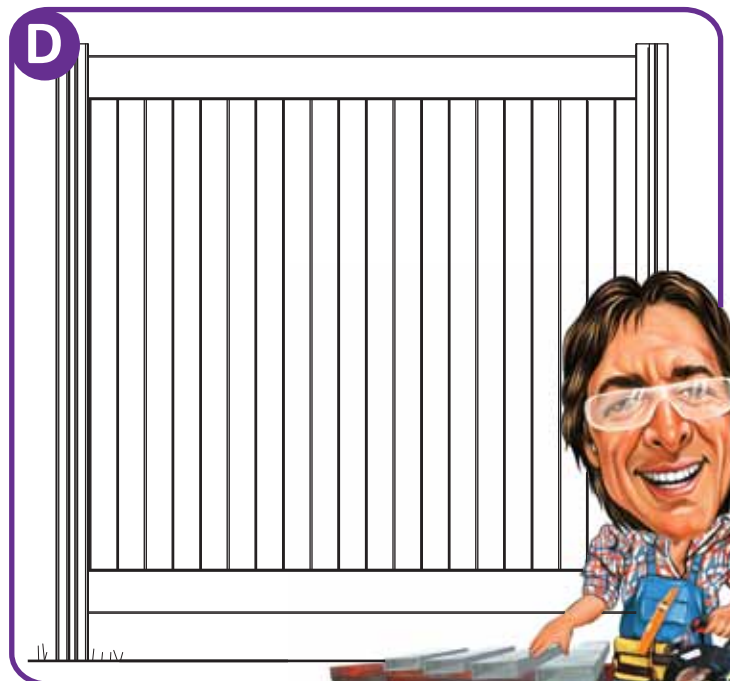
Measure distance between posts and cut to the measured length.



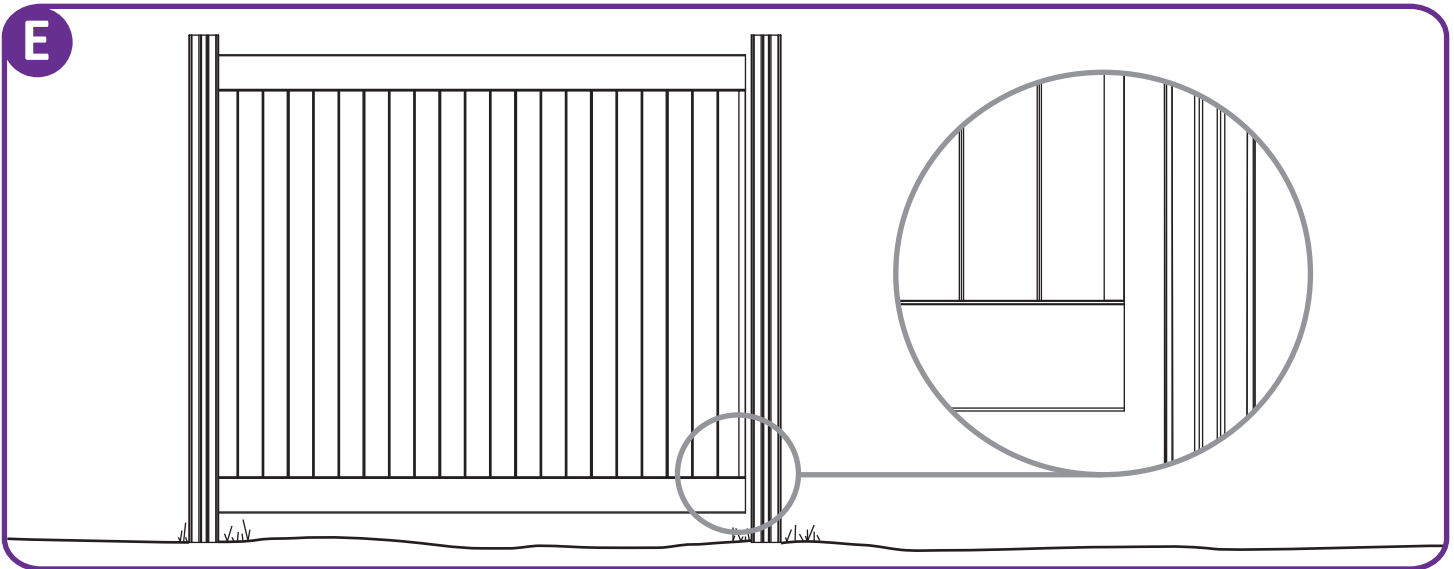
Measure both top and bottom rail to ensure both are the same length before cutting.



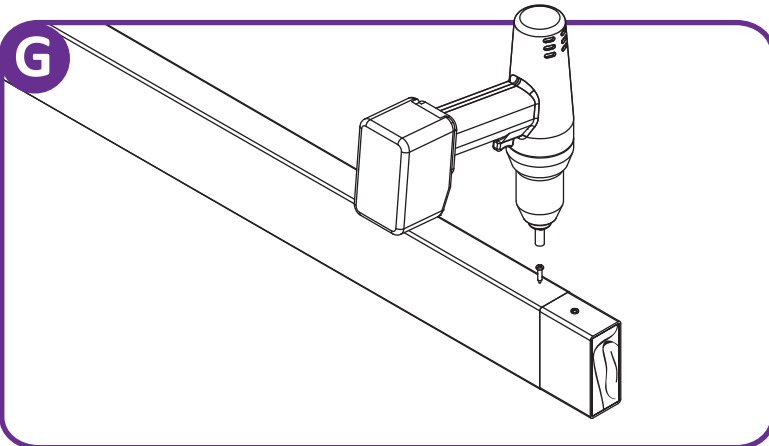
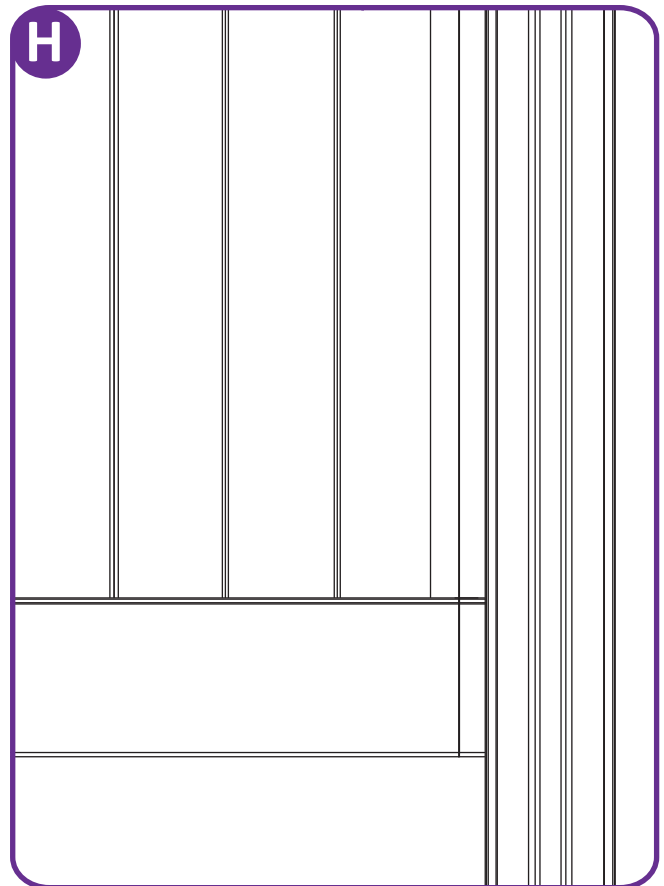
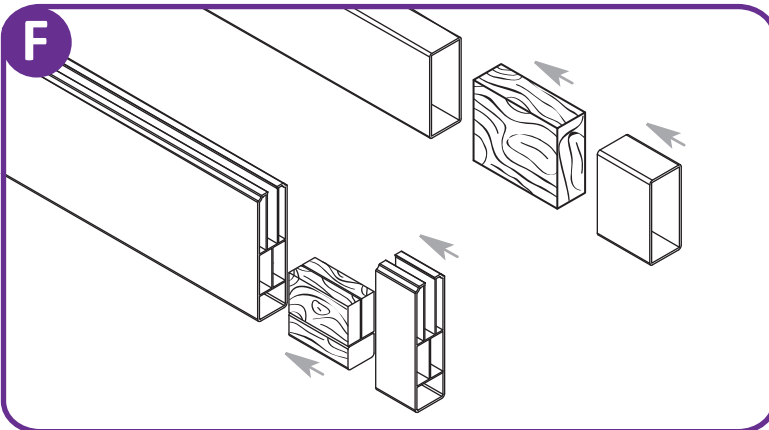
Trim last panel as needed to fit within the posts and rails.



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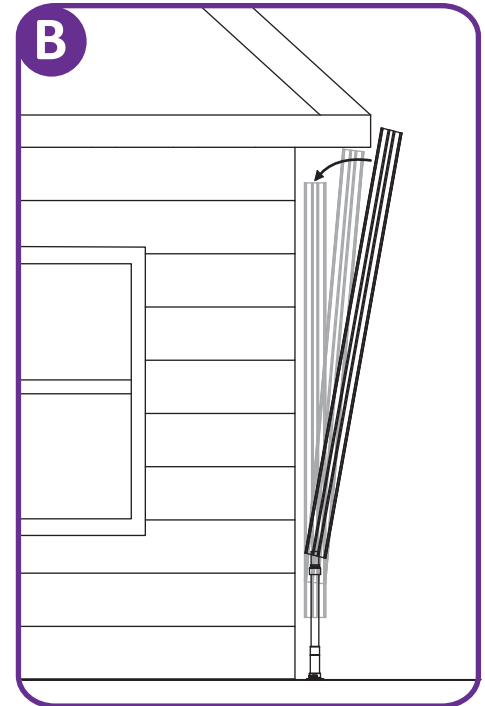
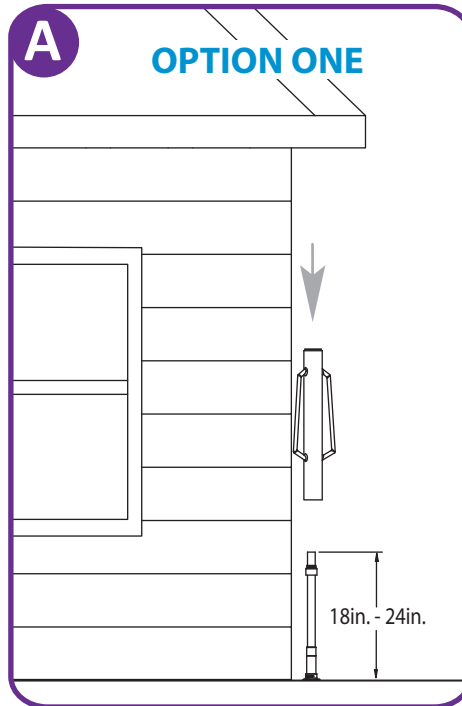
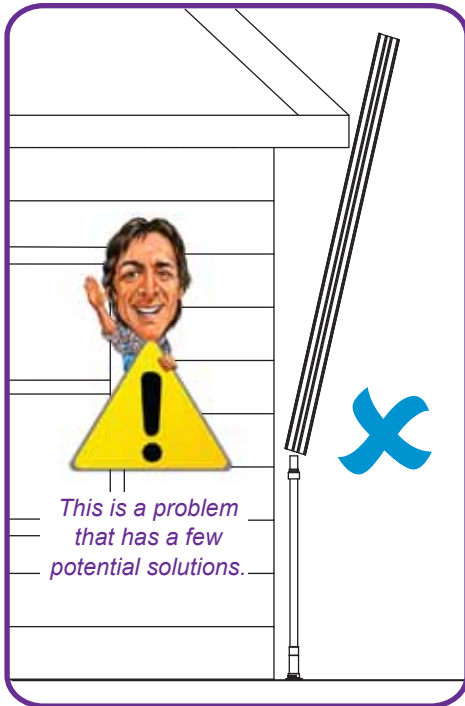


If your anchors inadvertently were spaced too far apart, you can extend your horizontal rails using wood blocking cut to fill the void in the extruded cavity

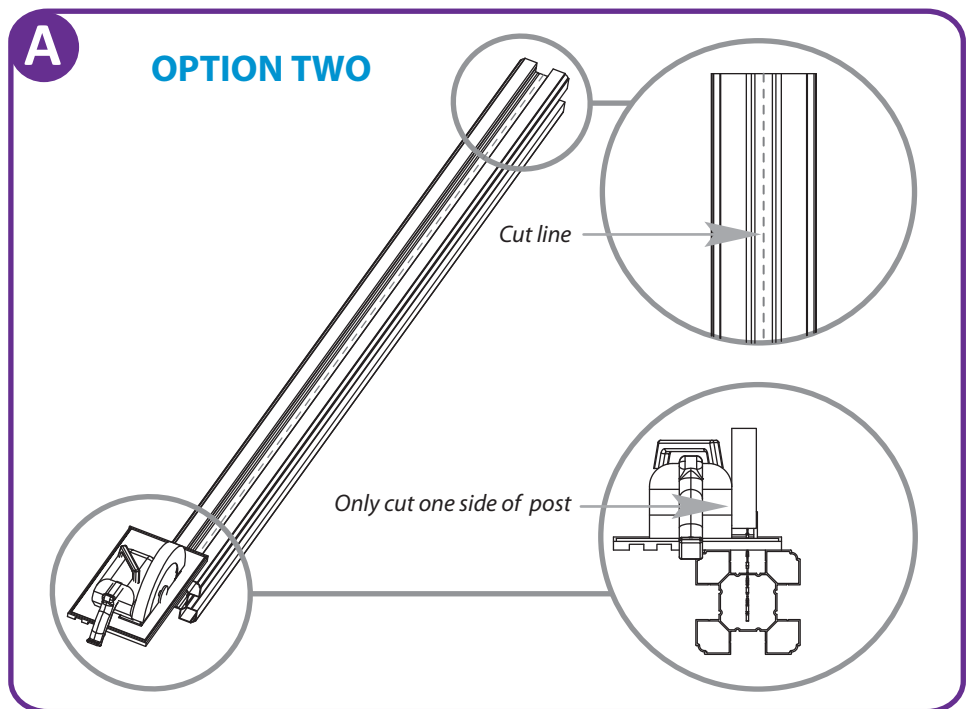
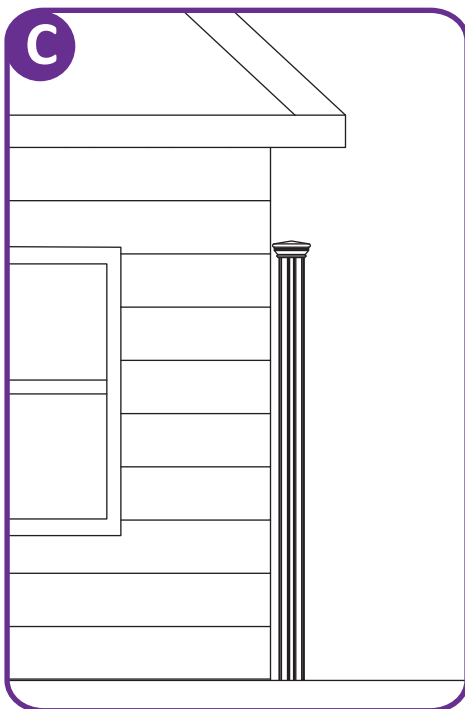


Sleeve over your wood blocking by using the same size extruded vinyl. If you do not have any left over waste, please call us as we may be able to help you with finding a solution.

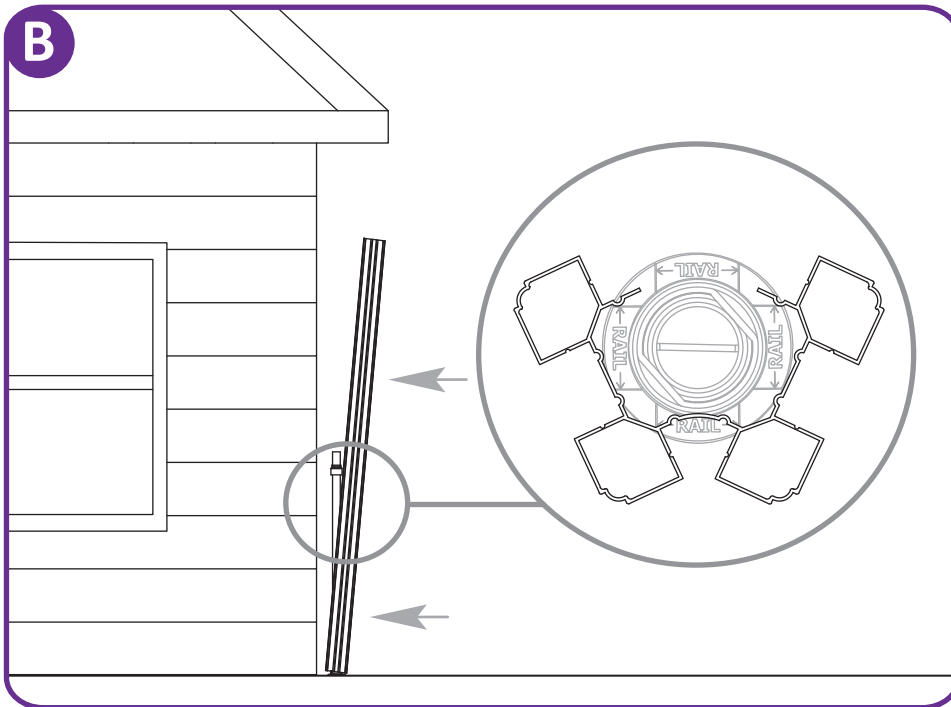
-10- How do I deal with low hanging roof lines?



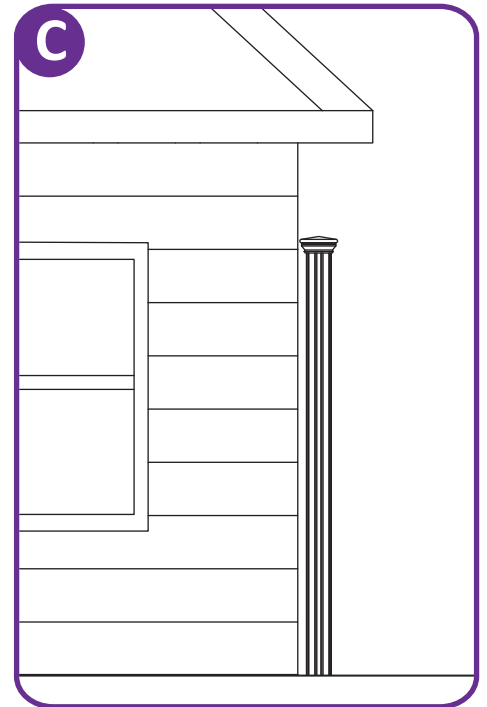
If possible, continue to pound the anchor lower into the ground just enough to accommodate the installation of the vinyl post over the top of the anchor and leveling donut.



Cut open your vinyl post so it can wrap itself around your leveling donut and anchor positioner.



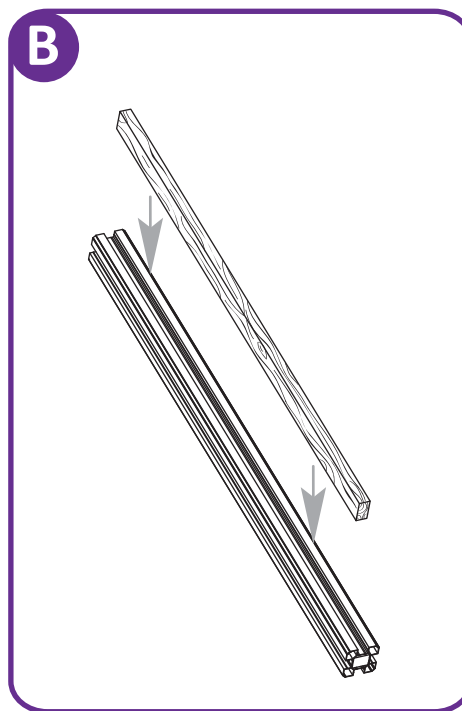
Cut open your vinyl post so it can wrap itself around your leveling donut and anchor positioner.



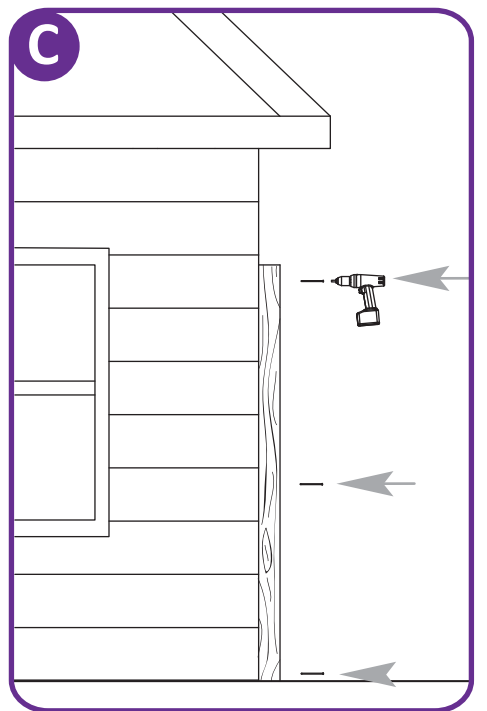
Secure in place as necessary.



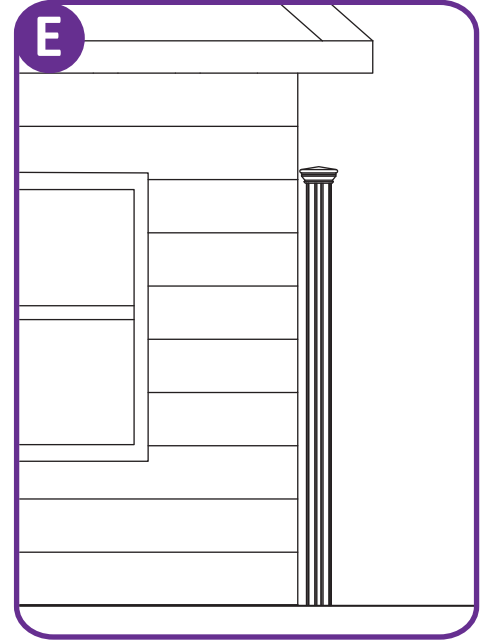
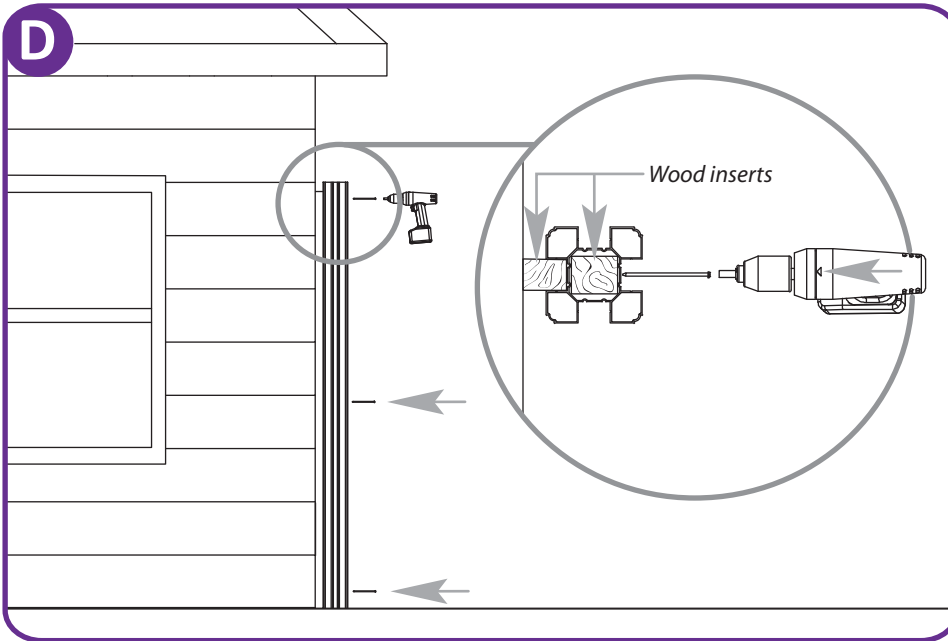
Cut down a piece of wood to fit inside of your post.



Cut a second piece of wood to fit between post and wall. Leave enough space for post cap to fit.

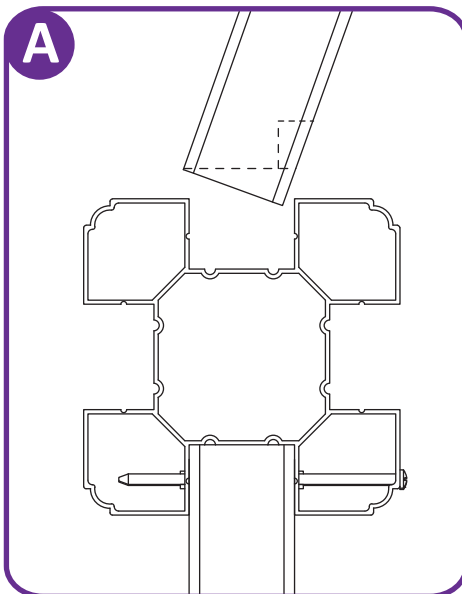


Screw outer piece of wood to wall first.

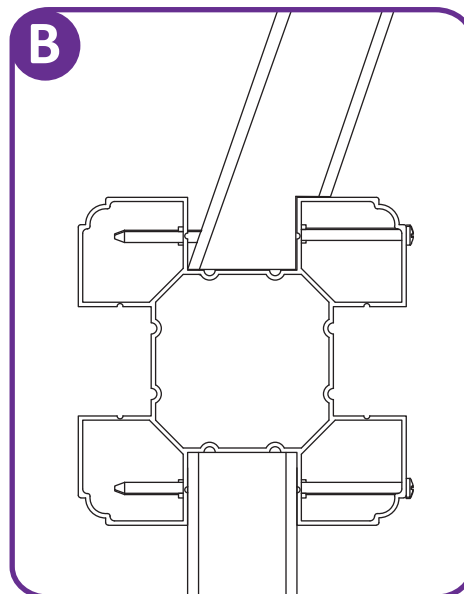


Secure in place as necessary.

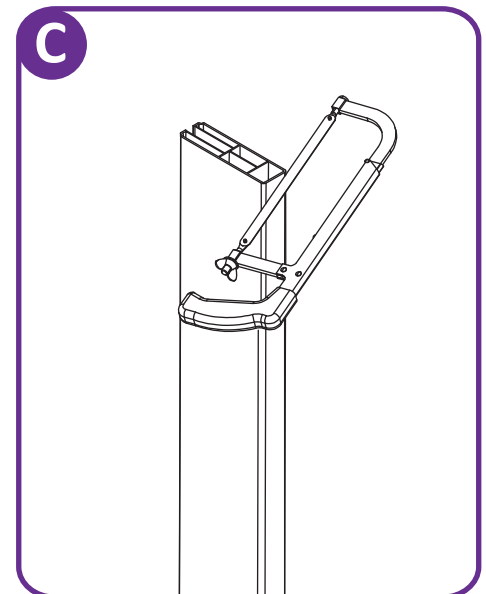
-11- How do I deal with angles in my fence line?



Mark angle and post channel corner to cut on top and bottom rail according to your fence angle.



Cut on marked lines previously made on both top and bottom rails.



Insert wood into the end of the rail. This will create a strong connection between the rail and the post because your screw will have more to bite into other than one vertical wall surface on your rail.

-12- Warnings on Using Manual Post Pounder

1 - You're gonna sweat!

Getting something that's about 20 or even 30lbs to move up and down repeatedly takes a lot of work. You can see this by watching the "Manual Post Drivers in Action Video" on our website. Even on a cool day you are going to sweat. Remember you will be sweating about half as much (or less) compared to using a gas powered auger, mixing concrete and getting rid all of your excavated soil. If you want to sweat a little less, you can use a pneumatic pounder. See our website for more details.

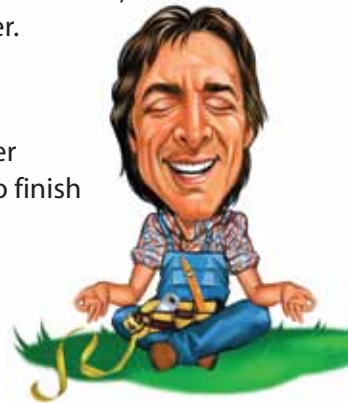


2 - Relax your grip on the pounder!

Relax your grip on the down-stroke to minimize vibration fatigue. If it's possible hang on to the shaft of the pounder versus hanging onto to the handles. The handles will tend to give off more vibration and shock. You'll be a little less sore in the morning as well. Clever Joe suggests that "throwing" the pounder down can avoid this completely. In other words, release your hands completely before anchor and pounder impact each other.

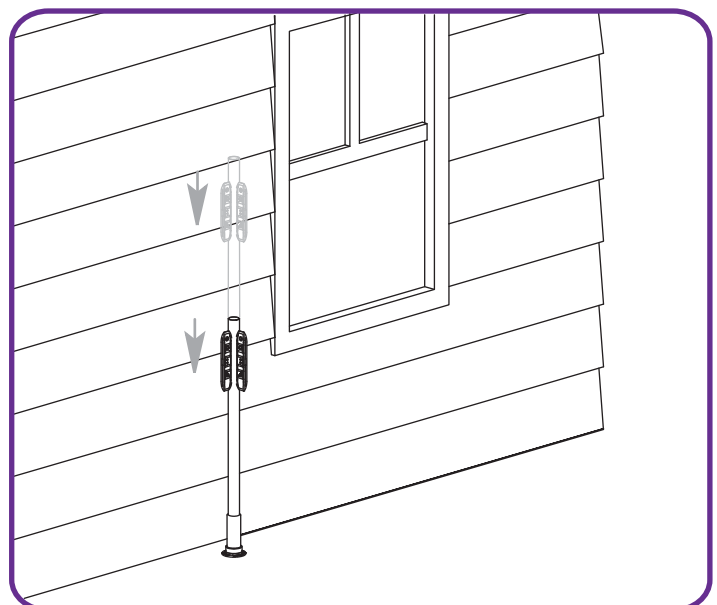
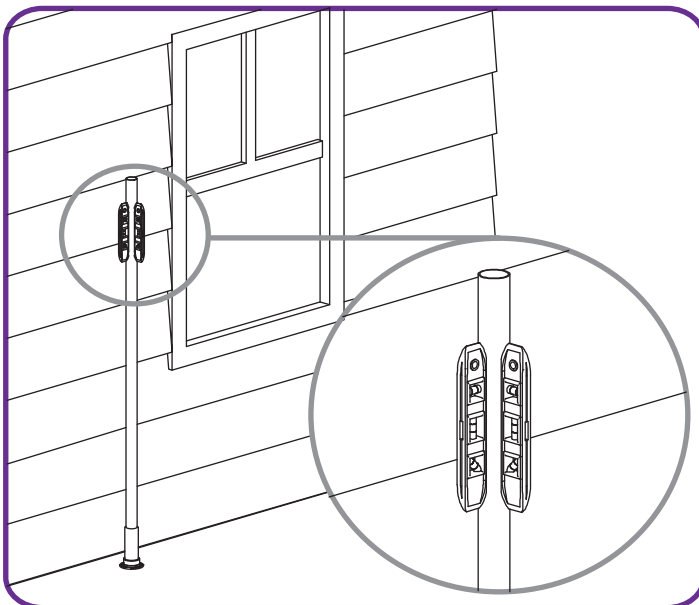
3 - Take a break!

Breaking down the most demanding physical part of your project into smaller chunks will make it easier. Slow down and enjoy yourself. You're still going to finish faster than if you had to auger, mix concrete and clean up.



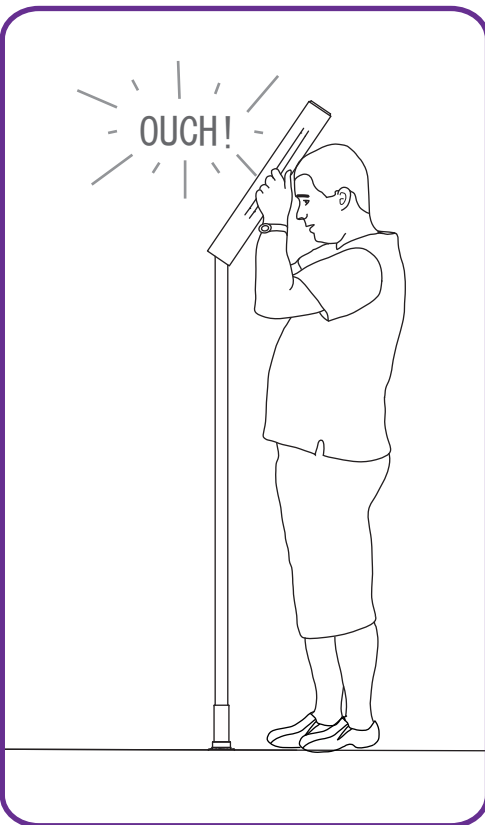
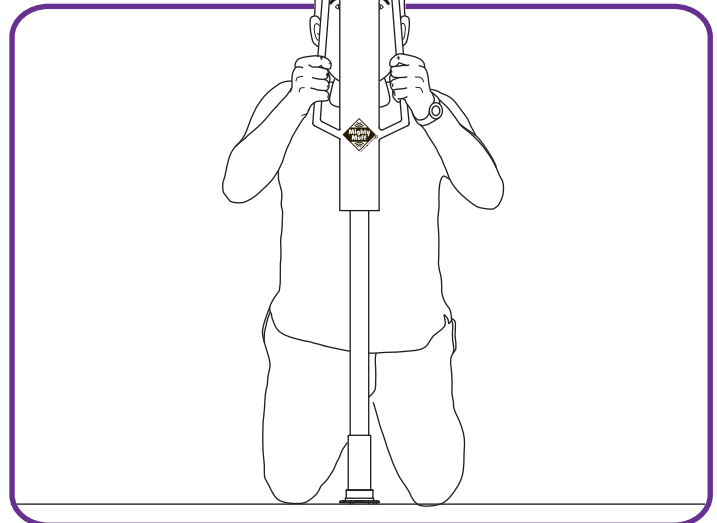
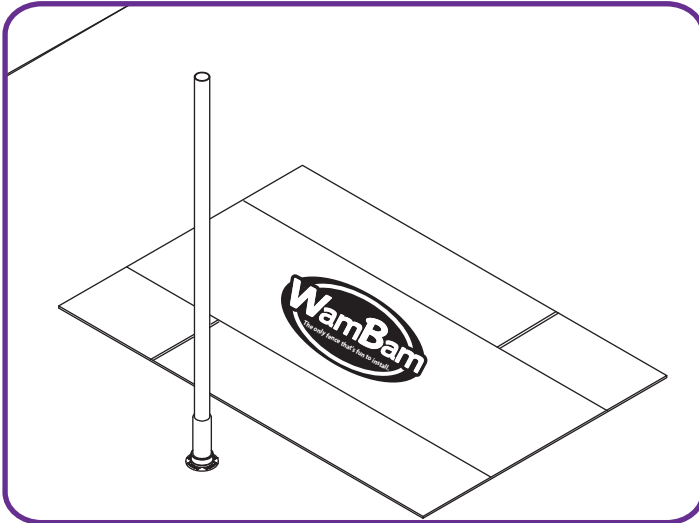
4 - Your anchor can get out of level very quickly.

After your anchor is about 18in. into the ground, begin to check for level at about 6in. intervals during penetration into the ground. This will slow you down significantly but ultimately will save you time by avoiding a severely crooked anchor.



5 - Get down on your knees!

Use cardboard box as a mat for your knees when you get down so far into the ground. This position for obvious reasons is the way to go at lower heights.



6 - Watch your head!

I've had the post pounder hit me in the head once or twice when getting a little too rigorous on the upstroke. When the pounder comes up just above the anchor, on the down-stroke (especially if you're tired), you can get a little off center. Because you are powering it back down, you might hit the top of the anchor. When this happens, it can cause the post pounder to come down unto your noggin. This is primarily an issue when the pounder is being used at head level or above. If you have a hard helmet, why not wear it? Don't be afraid to look like a slightly anal safety inspector. Those guys and gals have jobs for a reason.

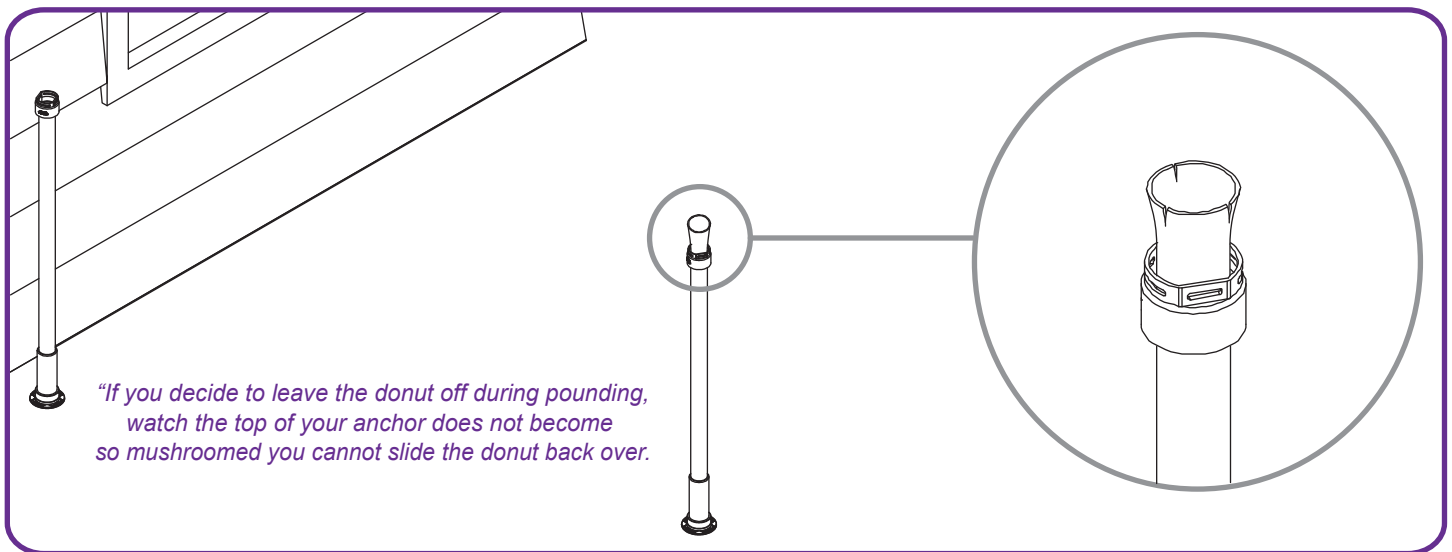
7 - Use Gloves

If your hands are not conditioned to manual work, you may want to wear gloves when pounding to avoid blisters. This is especially true on very warm days as the skin on your hands begins to sweat.

TIPS & TRICKS On Using the Post Pounder

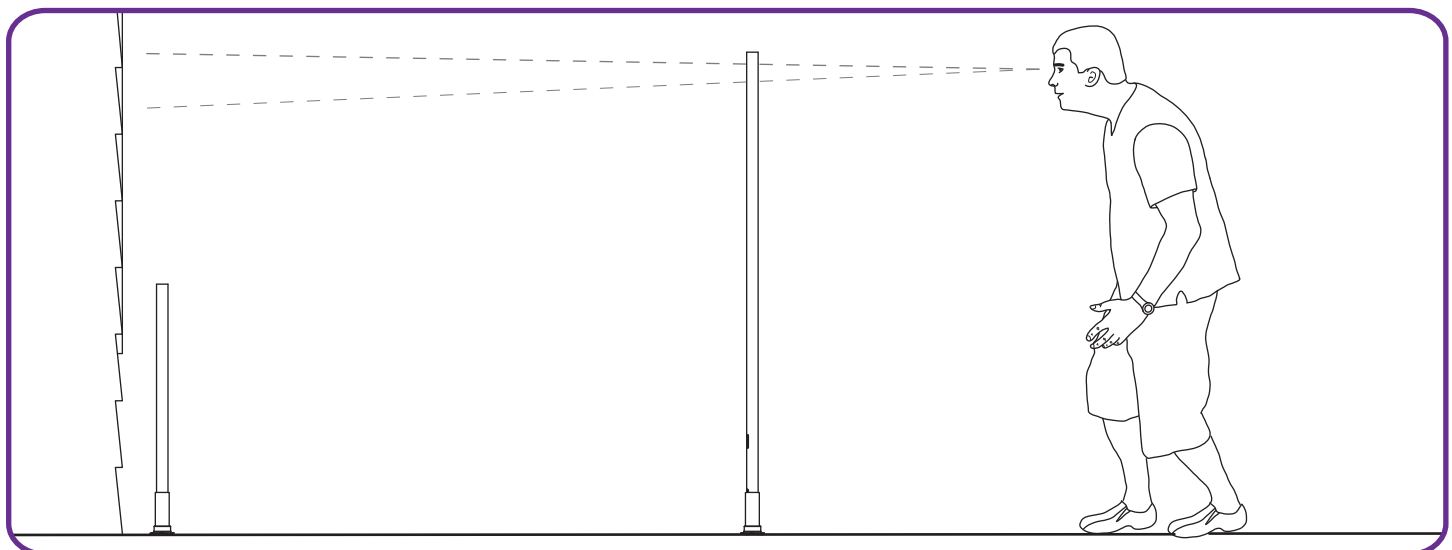
1 - You can either leave the leveling donut off or on during pounding.

In the vast majority of installations, the top of your anchor will not mushroom enough to cause conflict when putting the donut back over the anchor. The only potential problem is really hard or dry ground where repeated blows with the pounder are required.

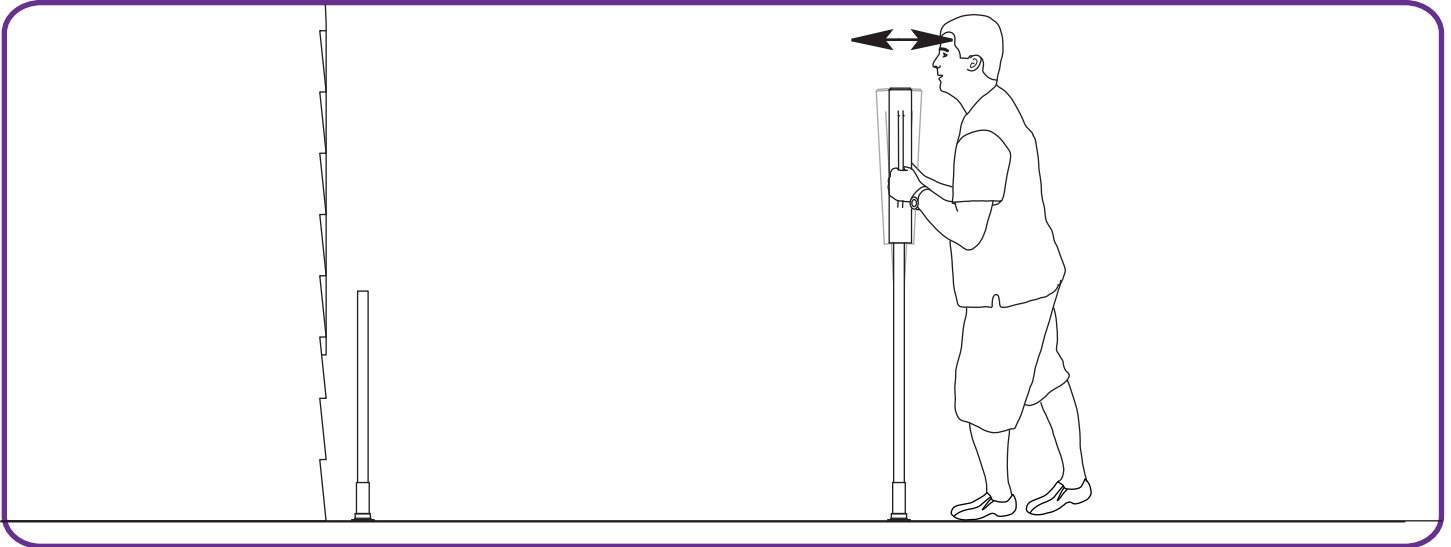


2 - Begin to use your level only after your anchor has been pounded about 18 inches into the ground.

Initially you can use other level reference points (house, another fence etc.) to eyeball level from. Step back 3 or 4 feet from your anchor in both directions to do this.



3 - Use the handles of your pounder to either push or pull your anchor into alignment.



4 - Slightly over compensate when pushing or pulling your anchor back into alignment.

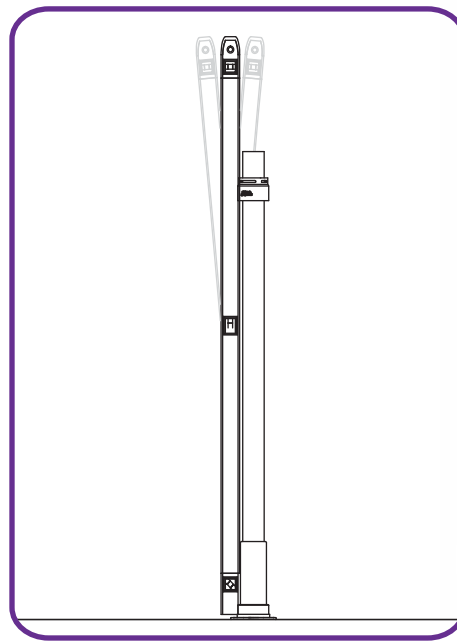
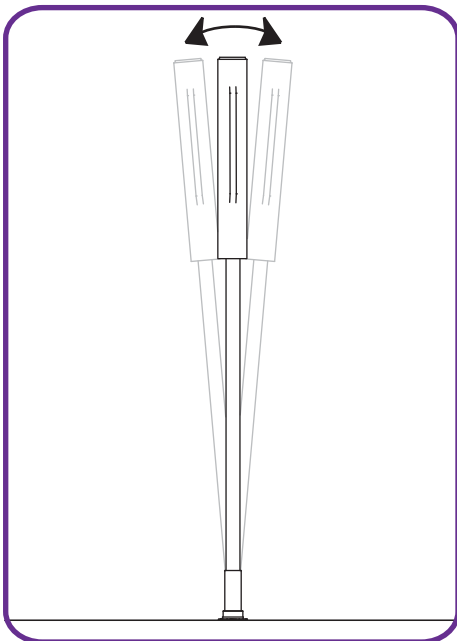
Your anchor will have a tendency to want to revert or spring back to where it was being adjusted from, especially as it penetrates deeper into the ground. Pounding from the same side you want the anchor to travel towards is also recommended.

5 - Try not to adjust your anchor into alignment for the last 6 to 12 inches of penetration.

Adjustment at this stage requires the entire anchor shaft to be overly corrected which can enlarge the side of the hole you have just created during penetration. You want the ground to be as tight as possible around your anchor. Remember your anchor can be corrected into level using your leveling donut.

6 - Speed things up by using two people on the pounder.

Two people working together in rhythm can really speed things up, and lighten the overall burden. Grab a buddy and get into it.



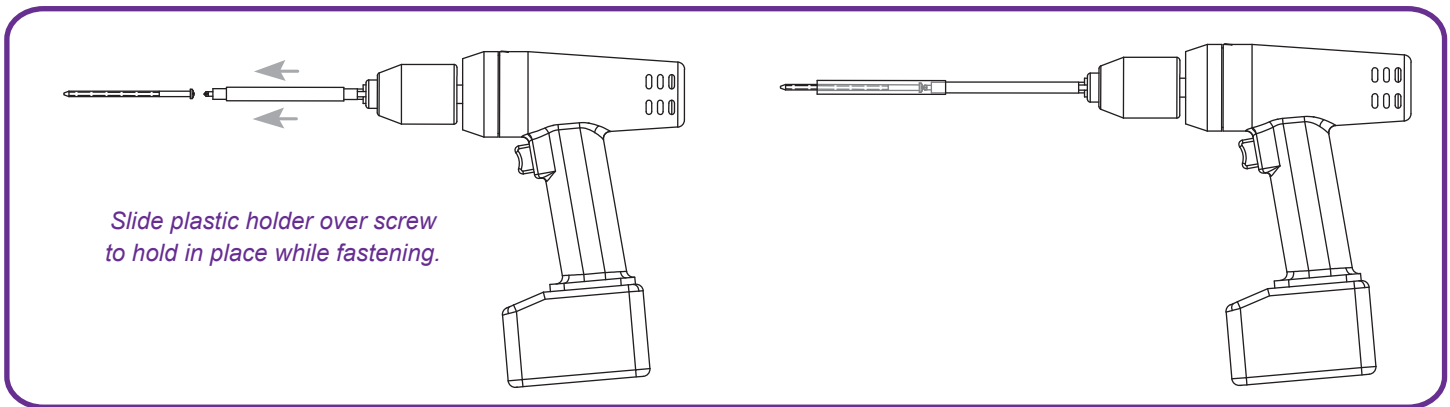
More TIPS & TRICKS

2 - What saw blade should I use when cutting vinyl?

Vinyl fencing can be cut just like wood. Preferably use a circular saw with a PVC blade or a sharp and straight fine-tooth carbide blade. If your saw blade is designed for rough cutting lumber and dull, it could shatter the vinyl. This is especially true if the vinyl is cold.

3 - Use 'Bit & Screw Holder' when using 3 1/2 inch screws.

This handy little device comes in most drill sets, and really helps to set up and screw the 3 1/2 inch screws into place. It totally prevents you from dropping the screw and having to hold on to it at point of entry. If you have one, we highly recommend using it, and if you don't, you might want to consider purchasing one.



"If you come across a problem or situation that you've found a novel solution to and would like to share it with others, please contact us. This is an expanding document, so we would love to include it for others to enjoy."

CLEVER JOE