

WHAT CAN LANCELOT DO?

Plunge Cuts For Rough Carving: This is the easiest of all the cuts to execute. Holding the disc grinder and Lancelot in the vertical position with the end of the blade about 2 -3' above the wood, press downwards into the wood and use slight pressure on the handle to cut deeper. Lift out of the wood and down again next to the first cut, repeating this movement until completed. Using this motion constantly with cuts close to each other will result in rapid wood removal leaving ridged surfaces at the bottom which you can smooth out using the side to side or raker cuts.

Straight Cuts: There are so many different applications, lengths and positions for making long or short straight cuts. Is it a log or board requiring one long straight cut or do you need a groove or trench wider than the width of a Lancelot or Squire blade? Are you removing a stump below ground level? Do you want to slice the sides off wood? Is your work piece upright, horizontal, on the ground, on a work bench at waist height or somewhere in between. Whatever your application, the tips below will work for you.

A Major Rule: To make long or short straight cuts, hold the disc grinder in front of you. The grinder must be switched on prior to making contact with the wood. Cut

the wood by pulling Lancelot toward you, against the direction of blade rotation and motor direction. It works safest this way. This cut is totally opposite to the way you make a cut using a circular saw where you push the blade forward and away from you. AGAIN, DO NOT PUSH THE BLADE AWAY FROM YOUR BODY. It is unsafe and you may experience the tendency of Lancelot starting to "run" away from you. Inexperienced users will face the potential of losing control as it "skims" the wood.

Long Cuts: In general, when making a long cut, position your body and legs comfortably so that you can pull the disc grinder toward you. This is an example of a technique which can apply to any long straight cut. You can either do this with or without a line to guide your direction.

For the straightest cut, I suggest you mark a pencil line down the middle of the board. Secure the board so that about 18" is protruding out the left side of the work bench. This is to give sufficient support and prevent the board from swaying underneath as you cut. A second person would be helpful to hold the other end (right hand side) for better balance. In this case, you stand in front of the work bench and turn your body to the left so that the disc grinder is at the end of board.

Comfortably lean and position your body to the left of the work bench, switch the disc grinder on and position Lancelot so that the left side of the blade cuts down the center line. Hold the grinder a comfortable arm's length from your waist and start cutting by pulling Lancelot toward your waist. You will control the approximate depth by the amount of downward pressure you apply. Don't press too hard or you may go down deeper than you expected. You can easily adjust the depth after your initial pass. Pull Lancelot out once you reach your waist and inspect your line. Readjust your board in the workbench and continue the cut from your last position. Repeat until you complete the cut. Practice will enable you to walk backwards and make long cuts with minimal adjustment to the board in the workbench and achieve even cuts.

Short Straight Cuts: For cuts of one foot or shorter, start by depressing Lancelot into the wood to the depth you want or as far as the wood will allow, and pull toward you. Repeat this method, making cuts to the left or right, until completed. This method will enable you to cut as wide as you want to go. Once you have widened out the wood to accommodate the width of

the disc grinder, repeat the straight cut procedure,
but this time you'll be cutting at the new, lower
level. Repeating this will allow you to go deeper
and deeper into the wood. Obviously, you can
increase the width and length with each pass.

Sideway Cutting: Hold Lancelot above the wood in a vertical position, handle straight up. Switch the grinder on and tilt it slightly to the left. The handle will be on the right of the blade at about 80° to 85°. Sweep lightly from left to right, left to right about three to four times in the same place across the surface of the

the surface of the wood so that you get the cut started. Then start sweeping left to right, right to left in a continuous motion from side to side. This will allow you to go deeper into the wood with each pass and give you an arched design.

Raker Cuts: You can achieve different effects by using Lancelot in a raking position either from left to right or right to left where removal and shaping is performed with the face of the chain saw teeth. Right to left motion. Turn the grinder on its side so that the face of Lancelot is at about 10° to the wood surface. Not quite horizontal but close! With this cut it is very important that you change the position of your left hand over the auxiliary handle, similar to holding a bicycle handlebar, palm down. Adjust your left hand over the right hand side of the grinder. With your left and right arms extended slightly to the right, pull Lancelot lightly across the surface of the wood toward your waist. This cutting action leaves an incredibly smooth surface finish and lets you remove layers of material without gouging the wood. Left to right motion. Everything is the same as "right to left" above except that your arms are extended to the left and you pull the blade across the wood from the left toward your waist. While removing wood rapidly, this motion leaves a nice ridged or "arched" effect on the surface. A word of caution. Any of these cutting actions result in wood shavings being directed rapidly toward your face, which is why we recommend using a full face visor. At 10,000 rpms, they can sting!

Horizontal Cuts: In combination with a short straight cut and horizontal cut, this method is great for notching, removing stumps and accelerated wood removal by taking 1" blocks out at a time. Firstly, hold the disc grinder in the same way as a raker cut. Simply turn the grinder on its side so that the face of Lancelot is horizontal to the wood. Hold your left hand over the auxiliary handle, similar to holding a bicycle handlebar, palm down. Comfortably adjust your left hand over the right hand side of the grinder. Brace your legs in a slightly bent but firm position so that they balance your body as you make a forward cut as follows. Place Lancelot horizontally against the side of the wood, lean into and apply slight pressure as you cut straight into the side. Follow the cut around the edge of the wood as required. The blade will penetrate a maximum of 13/16".

Notching: Let's say you want to make a notch in a 2×4 . You can free form cut it out if you like or pencil mark the notch. Do a short vertical cut across the top, again pulling Lancelot toward your waist and down to the required depth. Then make a horizontal cut into the side of the wood. This simple process is great for small notches, however, if the length is longer than $1\frac{1}{4}$ ", make several vertical cuts, the first one being the butt end followed by a series of side by side vertical cuts. You can finish the notch with either a side to side or raker cut. The other method is to make a series of vertical cuts about 1" apart followed by a combination of horizontal and side to side cuts. You can also use the raking cut to finish.

Stump Removal: Finally, a way to remove unwanted stumps below ground level. If you've got a stump grinder I won't kid you it will do a much faster job but if you've felled a tree or have old useless stumps still in the way of your lawn mower, Lancelot is the only hand held power tool that will do such an incredible job. You'll be working on your knees a majority of the time so you may want to invest in a set of knee pads as well as making sure to have power reaching out to the stump via an approved extension cord for your disc grinder. This job will allow you to use the full range of cuts but here's a simple technique to remove chunks at a time. Make sure you clear dirt away from the base as much as possible to give you room to work below ground level. You'll make short straight cuts in the shape of a series of tic-tac-toe patterns. #, pulling down and across. To start, make your first series of short straight cuts about 1" apart and pull them down to the edge of the stump. These can be as many as the width of the stump will allow. Make the second series of cuts

across the first so that you have a pattern of small squares. Position Lancelot horizontally to the stump at the bottom of these squares (about 1" below the top of the squares) and proceed to horizontally cut them out as you scythe through the base of the squares and across the new surface of the stump. Keep repeating this cut to continue lowering the height of the stump as quickly as possible.

Cutting Upwards In A Curved Surface: If you're into free form bowl carving, this is a great cut to shape the inside of bowls. You must already have removed a lot of the center and see a rough shape to the sides. This technique can be used in conjunction with raking and side to side cuts. Looking at the inside of the bowl, hold the disc grinder in the raking position. Pick a starting point at the base of the inside of the bowl. Brace and balance yourself as you gently but firmly push upwards and away from your body toward the top of the wood. Use a smooth controlled motion. Continue this action to shape the inside of the bowl. It will result in rapid wood removal and smooth shaping, taking off light layers at a time.

Feathering: Using a gentle touch, you can move across the surface of the wood in any direction using repetitive side to side or up and down motions. Whether you want to shape the sides or top, hold the grinder in the vertical or horizontal position to gently feather small sections at a time. You will find this technique extremely useful toward to the end of your power carving for final shaping and detailing. Always remember to use a very light feather touch – Lancelot can be unforgiving if you make a mistake.

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