HOW TO MAKE A FELLING CUT

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There are many different ways to make a safe felling cut. The method you should use depends on tree size, slope of the terrain and the size of your chainsaw, for example. Here are the most common felling cut methods:

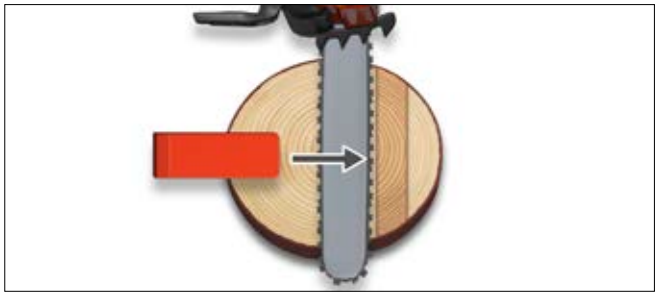
Straight from behind felling cut

For small trees, the easiest way to saw the felling cut is straight from behind. This can be done with or without the bumper spike, depending on the tree to be felled.

METHOD

Straight from behind

If you are inexperienced, saw with a pulling chain (bottom of the guide bar). This way the saw is not pushed against you, making the work a bit easier. Otherwise it is quicker to saw with a pushing chain (top of the guide bar) since you can stay in the same position as you were in for the directional notch.



It is very important that the felling cut is sawn parallel to the directional notch to ensure an equal thickness along the length of the hinge.

For small trees, it is difficult to use a breaking bar or felling wedge. If the tree leans a little, the guide bar will pinch. However, you can normally push the tree forward using your hand against the trunk or a pole with spikes. With a 4-5 metre long pole with spikes, you can even push forward rather tail-heavy trees by hand.

This method can also be used on thick trees as long as the tree does not lean backward and if there are no adverse winds. If there is a risk that the tree will fall backward and is too heavy to be pushed forward, you should use the felling tools. In this case, saw until you can fit a wedge or breaking bar in the saw cut. When you start to reach the final thickness of the hinge, be careful to ensure that the hinge has an even thickness.

For trees that lean heavily forward, the risk of danger as well as damage from the wood splitting increases if you saw the felling cut from behind. Instead, make a bore if possible and saw backward.

METHOD

From behind felling cut using bumper spike

The bumper spike acts as a pivot between the engine body and guide bar. Apply the bumper spike's lower tip at the intended hinge width. Press with your left hand against the front handle while lifting the rear handle with your right hand. Saw with a pulling chain until you have achieved the appropriate hinge width (and uniform thickness!).

Remember to insert the felling wedge into the saw cut after sawing half of the diameter.

You can also saw from the opposite direction using a pushing chain and apply the upper tip of the bumper spike. However, sawing this way usually becomes more irregular and there is greater engine resistance.

Saved edge method

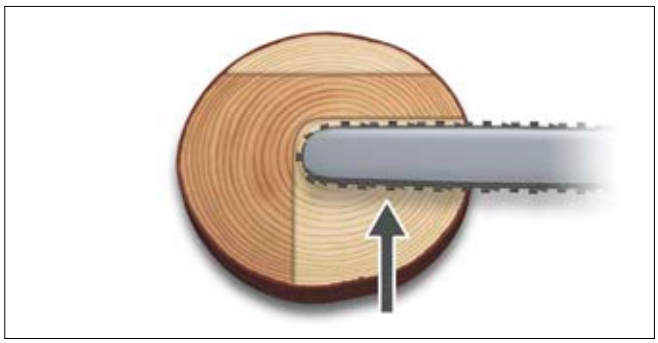
Instead of sawing through the full tree diameter when cutting from behind, with this method you save an edge on the opposite side. This prevents the tree from falling backward, allowing a felling tool to be used in the felling cut.

METHOD

Saved edge method, smaller trees

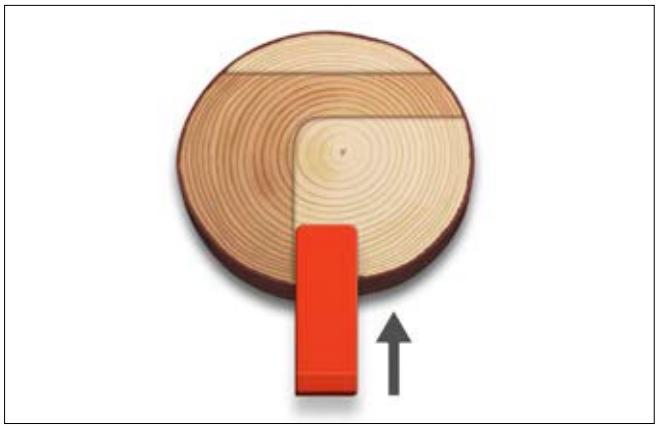
STEP-BY-STEP

1. Cut a part of the diameter



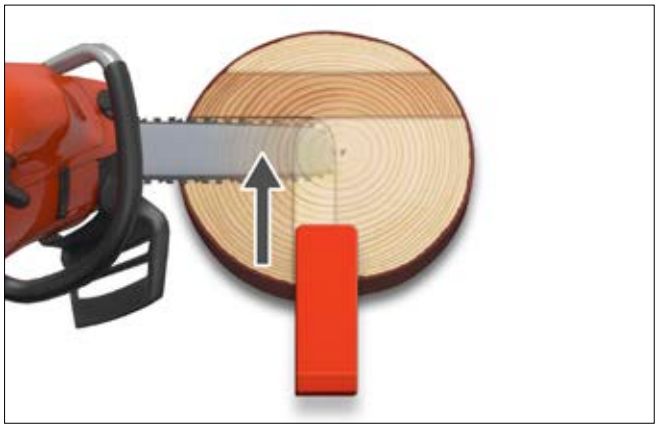
Make the first cut from behind but make sure to save an edge on the opposite side of the tree.

2. Secure the tree



Use a wedge or a breaking bar.

3. Cut the saved edge



This saw cut can be slightly below the previous cut so that you avoid sawing against the wedge or breaking bar.

Bore cutting

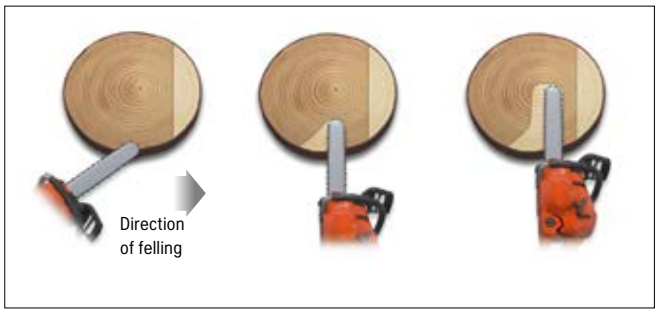
To be able to perform the safe corner method and turn around method you need to master bore cutting. This involves making a cut into the tree using the tip of the chainsaw's bar. A bore can be used with most felling methods and can be applied regardless of guide bar length and tree size.

It is essential that bore cutting is done exactly as described here. Any deviation can mean a major risk of kickback since the tip of the guide bar is used first.

METHOD

How to make a bore cut

At full throttle, apply the bottom part of the guide bar tip (pulling chain) slightly behind the desired hinge width. When the guide bar tip has entered the trunk, carefully turn the guide bar until it is parallel with the directional notch. Now push the guide bar into the tree as deep as necessary. Adjust the hinge width at the end to ensure a uniform thickness.



Safe corner method

As the name suggests, a corner of the tree trunk is left unsawn for one last cut before the tree is felled. A big advantage of this method is that the hinge can be clearly cut and inspected before the tree is felled. In addition, the saved corner prevents the tree from falling backwards. This method is also well suited for moderately forward or backward leaning trees.

RECOMMENDED METHOD

Safe corner method | Medium-sized trees

For tree diameters smaller than the guide bar length.

STEP-BY-STEP

1. Make the hinge with a bore cut

Start by making a bore. Saw through the trunk and complete the hinge width.

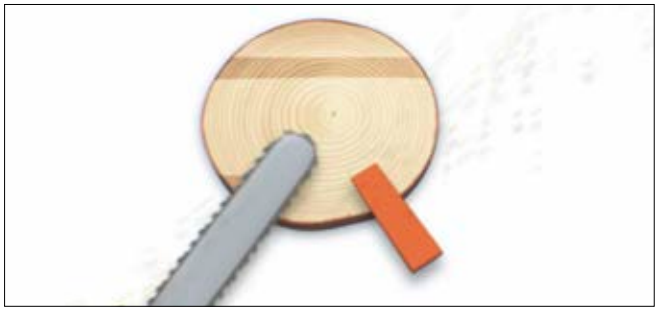
2. Saw backwards but leave the corner

Continue to saw backwards until two-thirds of the trunk is sawn. Pull back the guide bar to create a 5–10 cm wide corner. Then continue sawing until you cut through the tree. All that then remains is a corner of unsawn timber. The corner should have roughly the same total area as the hinge.

3. Place the wedge

Drive a wedge in the saw cut straight from behind.

4. Saw off the corner



Finally, saw off the corner and the tree will fall.

Safe corner method | Large trees

For tree diameters larger than the guide bar length.

STEP-BY-STEP

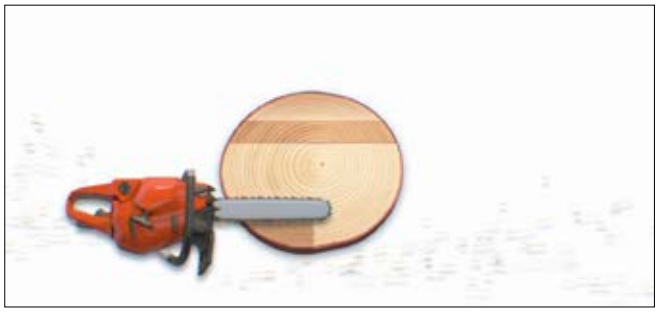
1. Make a bore cut

Make a bore cut to about 60 % of the tree diameter.

2. Cut backwards

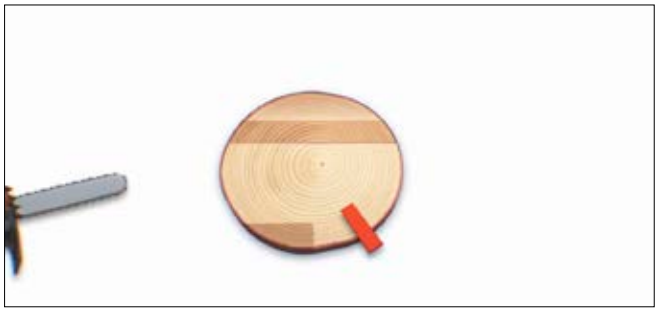
Cut straight backwards through the whole tree.

3. Cut the other side of the tree



Change your position to the other side of the tree. Make a bore at 60 % of the tree diameter and cut straight backward until you have shaped a suitable corner.

4. Insert the wedge



Insert the wedge or breaking bar.

5. Saw off the corner

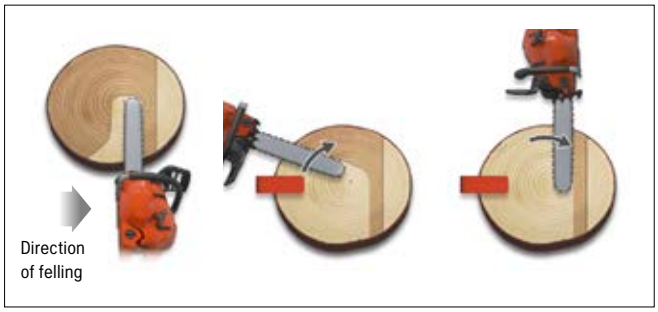
Finally saw off the corner, preferably diagonally down to avoid cutting into the breaking bar / wedge.

Turn around method

This method also uses bore cutting. For trees with a diameter larger than the guide bar length.

METHOD

Turn around method | Large trees



Make a bore as deep as possible. Saw to a suitable hinge thickness parallel to the directional notch. Saw straight back, approximately one guide bar width. Swing the saw around the trunk but avoid sawing into the hinge. Do not forget to paus to insert the wedge or breaking bar. Continue to swing the saw, completing the felling cut and creating a hinge with a uniform thickness and even cut (very important!).