

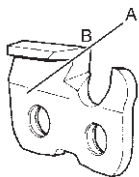
# 64 Square-Ground Filing

## WHO SHOULD PERFORM SQUARE GROUND FILING?

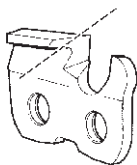
Most chainsaw users will probably never need to use square ground chain, nor learn to perform square-ground filing. But in areas where the timber is larger and the guide bars used are longer, the performance advantages of square-ground chain can outweigh the fact that square-ground filing is more difficult and much less forgiving of filing errors.

## FILE POSITIONING

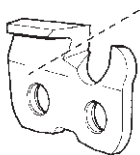
The file will sharpen the top plate, and the side plate, simultaneously. This creates a line, (A), where the top-plate cutting angle meets the side-plate angle. For best results, file so that the line joins the cutting corner (B).



CORRECTLY  
FILED CORNER

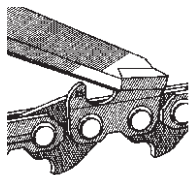


INCORRECT  
TOO HIGH

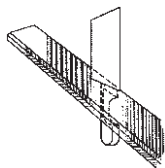
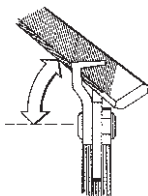


INCORRECT  
TOO LOW

To properly sharpen the cutter, use the correct filing position, as shown here from three different points of view:



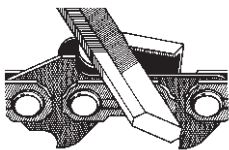
END VIEW  
TOP VIEW



SIDE VIEW

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## FILE DIRECTION



DOWNWARD FILING  
DIRECTION

Oregon® recommends that square-ground chain be filed from the outside in (in a downward direction). This leaves a better edge on the chromed cutting surfaces and makes it easier to keep the file's position, and the resulting cutting

edges, in correct alignment as shown in the preceding "File Positioning" section. However, filing from the outside in will wear out your file faster.

Some square-ground chain users may prefer to file from the inside out (in an upward direction). You should be aware that inside-out filing is much more difficult.

But whichever direction you choose, be sure your file and your cutting edges stay positioned as shown in the preceding "File Positioning" section. File all cutters on one side of the chain, then reverse the chain and repeat the process. Use the same file positions for cutters on the opposite side of the chain.

## TOOLS

Only use files specially designed for square-ground chisel cutters, available from your chainsaw dealer.



DOUBLE BEVEL



HEXAGON



"GOOFY"

# 66 Square-Ground Filing

## GULLET FILING

Approximately every 5th sharpening, clean out gullets by filing them back with a  $7/32$ " round file. File gullets from the inside out (the side opposite from sharpening). Always leave a  $1/8$ " shelf behind the gullet.



BEFORE

AFTER

If not cleaned out regularly, the outer edge of your gullets will eventually prevent the working corners of your cutters from getting an adequate bite into the wood.



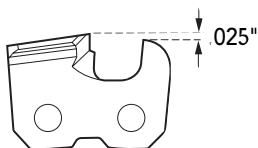
Wrong

Right

Little or no clearance between the working corner and the gullet's outer edge.

Clearance is maintained between the working corner and the gullet's outer edge.

## DEPTH-GAUGE SETTING



**NOTE** The depth-gauge setting for all square-ground chisel chain is  $.025$ ".