



CENTRAL FILE COPY

TECHNICAL NOTE

MASTER
P/2/2/10 T/N-10
Filing Code 1525 (P-400)
Date Issued May 1969

Bureau of Land Management U.S. DEPARTMENT OF THE INTERIOR

CHAINSAW MAINTENANCE

Insufficient lubrication is a source of many chainsaw problems. The bar and chain must be oiled regularly, particularly if the chain is new or when cutting is hard, e.g., when cutting frozen timber where resistance is high. As a rule of thumb, figure on using at least one tank of oil with every tank of fuel. Use SAE 30 Chain Oil when the temperature is above 30° Fahrenheit and SAE 10 W Chain Oil when it is colder than 30° Fahrenheit.

When filing or sharpening a chain, always use a special angle file holder. Secure the chain so it can not wobble. When sharpening, make firm, long, even strokes. A few passes at the correct angle is all that is necessary.

The two most important positions to remember in chain filing is to maintain the file at an angle of 35° to the length of the chain when filing the top plate of the cutter and keep 1/10th of the file diameter above the top plate while filing.

Improper depth gauge setting is also a frequent problem. Keep all the depth gauges uniform in height. Check the proper setting for your particular chain. Don't guess; use a depth gauge jointer in making your setting.

The point to remember about taking care of chainsaw bars is that the rails must remain perfectly flat and even in line with the sides of the bar. The groove width between the rails must be .004 inches larger than the gauge of your chain. If the bar requires repairs, take it to a qualified bar repair shop.

Proper tension of the chain is also a factor of life expectancy. How do you know when the chain is properly tensioned? The most simple answer is when it can be pulled around the bar easily by hand. If it can't be, it is important that you adjust it right away to avoid serious damage to chain, bar, and sprocket. Check the tension often before you start the engine, after the engine has been running for about five minutes and after you have made a few cuts. Remember, a chain that is too tight is as bad as one too loose; it can cause cutters and tie straps to crack.

Chains can be seriously damaged by allowing them to run into the earth, strike a rock or touch metal. This can not be over-emphasized.

FOR ADDITIONAL COPIES WRITE TO DIRECTOR, PORTLAND SERVICE CENTER, BOX 3861, PORTLAND, ORE., 97208

Before you cut, inspect the area in which you are going to work and if necessary, clear away any loose stones or rocks. To avoid the risk of burrowing in dirt after completing a cut, undercut instead. If you run a saw in dirt or sand, stop the saw and wipe the chain clean and sharpen the cutters before resuming cutting.

As a final remark, don't attempt to make repairs in areas in which you don't have the knowledge or the equipment. Most problems with chainsaws are easy to remedy but don't take the risk of causing further damage to the saw by tinkering with parts you don't understand. Take the tool to your distributor to be sure the job is done right.

When operating chainsaw, always use protective chainsaw leggings. These may be secured through the PSC Safety Officer.