

## CHAINSAW REPAIR AND MAINTENANCE



### INTRODUCTION

In an attempt to accurately document chainsaw repairs and maintenance, LIRO has initiated a study to investigate the cost of operating a saw for a 12 month period or the life of a saw, whichever comes first.

The survey is investigating three brands of chainsaws (Husqvarna, Stihl and Jonsered). The saws have been divided into three cc ratings, <70, 70 to 90 and >90. It is envisaged that 10 saws per category will be included in the survey.

New chainsaw purchasers are introduced to the survey by their local chainsaw agents. LIRO then contacts the purchaser if they show an interest in participating in the study and a detailed introduction is given. A booklet is sent to those operators who agree to collect information for the life of their saw. Data are collected by the chainsaw operator and entered in the booklet on a weekly basis. As a reward for collecting this information the operator is given a 20% discount off the next saw they purchase to replace the one in the study. Each booklet consists of a brief introduction to the study, the data collection sheets and an exploded diagram of the saw. Each part of the saw has been given a component number which is quoted on the data collection sheets when that particular part requires replacement or repair. There is provision on the data collection sheets to include the price of new components, the time that is spent repairing and maintaining the saw and the cost of labour if the saw was repaired in a workshop. The booklet permits 58 weeks of data to be collected.

The study began in November 1990. To date a total of 32 operators are collecting data, the sample comprises of 24 Husqvarnas, 7 Stihls and 1 Jonsered.

## RESULTS

One saw which was in the survey was damaged beyond repair by a tree. The booklet has been returned to LIRO. The operator kept excellent records reporting why each part failed and maintenance carried out.

The saw was a Husqvarna 281 with a 20 inch bar used predominantly for skidwork in a clearfell operation in Kinleith Forest.

The main expense was maintaining the guide bar and chain. On two occasions the roller nose required attention. On the first occasion the roller tip required replacement after a log pinched and damaged it.

Replacement took a quarter of an hour at work. The cost of a new roller tip was \$39.95. On the second occasion replacement was not necessary.

Chains were lasting approximately one week. Chain sharpening occurred 8 to 10 times per day when the saw was used on the skid and 2 to 3 times when the saw was used in the bush. The cost of a new chain was \$37.50. Files were bought by the box at a cost of \$22.50. Files were replaced each week. A new saw spanner was purchased when the original was lost, costing \$11.50.

Each week the saw was cleaned at home, taking approximately a quarter of a hour. A cracked motor cover was also repaired at home as a result of the saw being accidentally dropped.

The total time spent repairing and maintaining the saw in the first month of operation was 9.75 hours, of this only 1 hour was spent maintaining the saw at home. The total cost of spare parts was \$136.00 or \$6.80/day

## CONCLUSION

The saw had had 20 days use before it was damaged beyond repair. During this time the major repair and maintenance expense involved the guide bar and chain. A total

of 9.75 hours were spent repairing and maintaining the saw in its first month of operation.

The owner of this saw was very diligent in his record keeping and was given a 20% discount off his next saw purchase.

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