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Manufacturer Tells Why Clubs Are

When consideration is given to the various and numerous processes that go into the manufacture of a high grade golf club, it becomes apparent that clubs are very reasonably priced. In fact, everything in the way of playing equipment sold in pro shops today has increased less in price than most commodities such as butter, milk, bread and other staples.

We refer to the tools of golf as clubs. Contrary to the popular definition of a club as a thing cavemen used as a weapon, a golf club is a very delicate instrument.

The average wood club used by professionals playing the PGA tour weighs from 13¼ to 13¾ ozs. That is relatively light considering the terrific shock a club absorbs upon striking a ball at the terrific speed a clubhead travels. Occasionally the clubhead doesn't hit the ball first, but rather strikes the ground. Yet, there is very little breakage of golf clubs even though they are delicate instruments that do the work of a hammer.

Why Price Is What It Is

A great number of people do not understand why a set of top grade wood clubs sells for approximately \$100. These people think of a wood club as being made up of only three parts — a head, a shaft and a grip. What they don't realize

is that there are 43 separate parts, put together in 90 operations. What makes a golf club a *good* golf club?

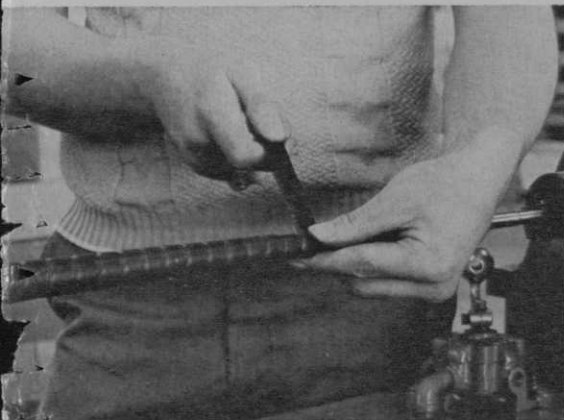
First of all, proper distribution of weight is basic. Each part must be exactly the right weight to make possible the predetermined overall weight of the club. To that end, a good manufacturer may weigh a club as many as 10 times during production. Constant inspection takes place from the time production of the club is started until it is placed in the shipping container and started on its way to the pro shop.

Little Tolerance

If every part of a club is not right all sorts of things can happen. If the shaft is cut only ¼-inch too short, the swing weight will be two points lower than it should be. If the head weight is 1/8-ounce too much, the swing weight will be one point higher than it should be, or vice versa. An additional 1/32-inch diameter in grip size decreases the swing weight of the club one point.

The head of a club must be bored exactly. If the bore is the least bit off, the club is not basically a good one. I feel that 56 degrees is the proper lie for a driver. The No. 2 wood should have a 57

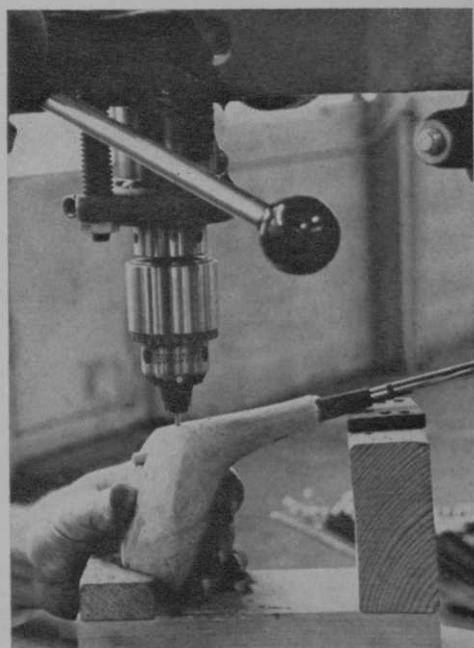
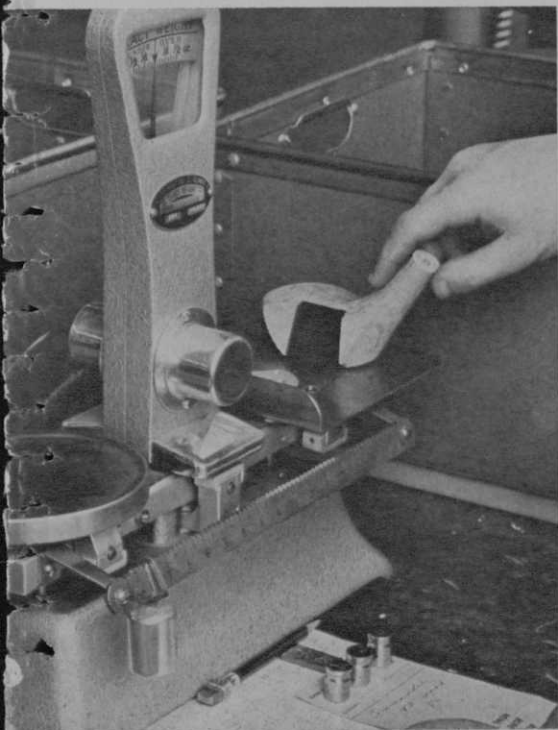
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If there is the slightest variance in the grip size, a club will not feel nor play the same.

Properly Priced

Forty-three parts are assembled in 90 precision operations with quality always being emphasized



Boring of the head for proper face alignment can make or break a club. For the average player, the head should be bored to give a 1 to 1½ degree hook. This is because the high handicap golfer has a tendency to slice.

No chances are taken with the weight of a club. A manufacturer may put it on the scale 10 times during production.



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they haven't enjoyed the construction phase, but nearly all are convinced that the decision to hold out at the same old stand was a wise one. Lake Merced, they add, probably is a better course for the changes that have been made.

Clubs Reasonably Priced

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degree lie and the No. 3 and No. 4 woods 58 degrees.

Boring the head for proper face alignment is an operation that makes or breaks a club. For the average player, the head should be bored so as to have a 1 to 1½ degree hook since most high handicap players have a tendency to slice.

For the professional or low handicap player, the boring should be such as to create a straight or slightly open face since the expert player is generally trying to avoid a hook.

The radius of the face of the club from toe to heel is called the bulge. I believe it should be 11 degrees. The bulge has a

tendency to minimize the spin of a hook or slice stroke. (Note that I say minimize not eliminate.)

Grip Size Important

Grip size and uniformity are a must in a good club. Regardless of how good a set of clubs may be the least variance in the grip size will not give all the same feel and, consequently, all will not play the same.

The flex of the shaft must be absolutely identical in each club in a set. The flexing point of the shaft should be in the same position on each shaft all the way through the set.

Many of the qualities of a good club are hidden. They are there because skill, time and money put them there. If they weren't there the clubs would not be playable.

This is the story the public must be told.

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