United States
Golf Association

USGA

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March 11, 1987

SECOND NOTICE TO MANUFACTURERS REGARDING
GROOVE MEASUREMENT

This is intended to supplement the notice of February 2, 1987 attached, which outlined a proposed method of making the groove measurement.

This notice is designed to (1) clarify that notice, (2) explain in greater detail what the committee member who makes the measurement in the field will be instructed to do, and (3) outline briefly what will happen when a club is submitted to the USGA for laboratory testing.

FIELD TEST

The measuring official will be provided with a detailed instruction sheet. In essence, this will tell him to coat a section of the clubface with ink. This section should cover five grooves. All five grooves are to be marked with the tool provided. (This tool will be designed to mark lines on each edge of the groove between which measurements are to be made.)

The distance between the first and fifth groove will be measured using a specially designed 7X magnifier. This distance will include four grooves and four land areas; dividing this distance by 16 will result in the maximum allowable groove width for any groove in that section of the clubface (assuming that the distance from groove to groove is constant).

The measuring official will be instructed to develop a bound of $\pm$.002 inches around the maximum allowable groove width calculated in the manner described above. The reason for this is that the technique used in the field is only accurate to within $\pm$.002 inches. Once this bound is established, the grooves which have been marked should be measured.

If the groove measured is less than the calculated maximum allowable groove width minus .002 inches, the groove conforms.

If the groove measured is more than the calculated maximum allowable groove width plus .002 inches, the groove does not conform.

If the groove measurement is between these two bounds there is "doubt", and the club should be inspected in the laboratory at USGA headquarters.

USGA

If the calculated maximum allowable groove width is .035 inches or more, then .035 inches ±.002 inches (.033 to .037) should be used as the bounds within which there is "doubt". In this case, if the measured groove width is less than .033 inches the groove conforms. If it is greater than .037 inches, the groove does not conform. If it is between these bounds the club should be sent to the USGA for laboratory measurement.

USGA LABORATORY TEST

This test will be considerably more accurate than the field test, because the groove profile can be traced and expanded as much as 200X. The accuracy increases to approximately ±.0002 inches. In the laboratory the measurement will be made on the tracing. A line will be drawn at 30° to the plane of the face and tangent to each edge of the groove. Measurements will be made, to determine groove width and groove separation, from the point where this line first makes contact with the outer edge of the groove.

REQUEST TO MANUFACTURERS

Manufacturers will be requested to design their face markings so that the measuring official in the field will have no doubt as to the conformity of the club in question. Otherwise, a player may be inconvenienced in that he may not be allowed to use his clubs while awaiting an official measurement from the USGA laboratory.

Please direct any questions with regard to the above to Mr. Frank Thomas, Technical Director, USGA.

An open hearing to discuss the proposed groove measurement procedure is scheduled for Tuesday, at 9:30 P.M., April 28th, 1987, at Golf House. If you intend to participate in this hearing, we would appreciate hearing from you at your earliest convenience so that we can make the appropriate arrangements.

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Notice No. 1
February 2, 1987

NOTICE TO GOLF EQUIPMENT MANUFACTURERS

Pursuant to a February 27, 1986 notice to golf club manufacturers, the USGA staff has proposed a method for groove measurement.

The proposed method is designed to help manufacturers and others make groove measurements and thus determine whether a club conforms to the Rules of Golf governing grooves.

The proposed method is as follows:

"The groove-width measurement shall be made between two points where a plane inclined at 30 degrees to the face of the club is tangent to a radiused edge of the groove.

"To make this measurement in the field, a specially designed tool with an included angle of 120 degrees will be used to scrape off an ink-like substance, thus creating a mark on each side of the groove.

"Because this marked line will have some dimension, the measurement shall be from the inside of one mark to the outside of the other. Using this method, the groove width shall not exceed .033 inches with a measurement tolerance of $\pm$ .002 inches. The distance between adjacent grooves shall not be less than three times the width of a groove, and the minimum distance between grooves shall not be less than .075 inches.

"Under laboratory conditions, the groove measurement will be made with a ContouReader®. This device will trace and expand the groove profile."

Interested parties are invited to submit written comments on the proposed method to the USGA's Technical Director, Golf House, Far Hills, N. J. 07931 by April 16, 1987. On April 28, 1987, at 9:30 a.m., the USGA will conduct an open hearing at Golf House to give all interested persons an opportunity to comment on the proposed method. Thereafter, the USGA Executive Committee will determine whether to adopt the proposed method or some variation thereof.

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