United States Golf Association
Golf House
PO Box 708
Far Hills, NJ 07931

February 24, 2003

Notice To Manufacturers

Proposed Change to the Method of Measurement for Spring-Like Effect

The following proposal is distributed by the USGA for review and comment. ***THIS IS A PROPOSAL.*** *After receiving pertinent comments and considering them, the USGA may alter this proposal.*

In the announcement of August, 2002 regarding driver spring-like effect, the USGA stated that efforts were underway by both the USGA and the R&A to design a new, simpler test method as soon as possible. The USGA and R&A have now jointly developed a new test device and method to measure the spring-like effect of a golf club.

The USGA proposes to change the method of determining conformance to Rule 5, Appendix II limiting the spring-like effect of the clubhead for driving clubs with loft of 15 degrees or less. If adopted, this change would go into effect beginning January 1, 2004.

This new device, called the Pendulum Tester, has significant advantages over the currently used COR test device. These advantages include:

1. The test is non-destructive. It can be performed on a complete club without removing the clubhead from the shaft.
2. The test takes less time to perform than the current USGA test.
3. No golf ball is used in the test.
4. The test equipment is simpler and easier to maintain than the current USGA test.
5. The tester is portable.

A detailed technical description is attached. In brief summary, the Pendulum Tester measures the flexibility or spring-like effect of a driver head by striking the club face at low impact speeds with a defined metal mass suspended on a pendulum. The metal mass is instrumented to measure a time of contact between it and the club face. This time of contact is directly related to the amount of spring-like effect of the clubhead. The greater the time of contact, the greater the spring-like effect. The time measured is called the Characteristic Time (CT) of the clubhead.

The pendulum device measures Characteristic Time in micro seconds. The results of the test correlate very closely with a high degree of reliability to the currently used USGA COR test. The USGA proposes to limit spring-like effect to a CT value of 250 micro seconds, which includes a test tolerance. This correlates directly with a COR reading of 0.830.

The USGA proposes that clubs that previously have been ruled conforming or non-conforming on the COR tester will remain in the same conformance status as determined by the COR measurement. It is also proposed that all clubs received after the official implementation date of the Pendulum Tester will be measured for conformance by the Pendulum Tester.

The USGA COR tester will remain in use at the Far Hills, NJ Test Center to conduct research into new equipment technologies.

The Pendulum Tester, including the analysis method, is patent pending. The USGA proposes to license the design and the software for the device to club manufacturers.

Written comments regarding the proposed change in the method of measurement for spring-like effect should be sent to the USGA, attention Dick Rugge, P.O. Box 708, Far Hills, NJ 07931, Fax 908-234-0138, e-mail: drugge@usga.org. Written comments received later than April 25 will not be considered.