

13 March 2008

To: **ALL MANUFACTURERS**

CHECK TESTING OF DRIVING CLUBS

As you know, there has been a limit on the 'spring effect' of driving clubs at elite level golf since 1 January 2003 and, on 1 January 2008, this limit became applicable to all golfers of all ability and in all forms of play. The R&A's interpretation of 'spring effect' is the measurement of the flexibility of the head, called the 'characteristic time' (CT), and the limit is 239 microseconds. An established tolerance of 18 microseconds is currently allowed.

When a sample of a driver is submitted to The R&A for a ruling, leaving other features aside, the club is ruled to conform if the measurement of CT is 239 microseconds or below. If the sample is measured to be between 240 and 257 microseconds inclusive, the manufacturer is advised that the sample is over the limit for CT, but it is within the tolerance zone. Whilst this means that the sample of the club is ruled to conform, as submitted, the manufacturer is advised to ensure that the club can be mass-produced within the limit.

The R&A has been routinely testing all driver submissions for CT since January 2004 and we have been publishing and maintaining a List of Conforming Driver Heads, accessible via our website (www.randa.org), since October 2005. During this time, it has become clear that many drivers are being designed to be above the limit for CT, but within the tolerance zone. It has also become clear that some of these products are then entering the marketplace measuring in excess of the limit plus tolerance.

Whilst we are confident that these occurrences have been inadvertent, we have to make sure that the potential for this happening in the future is minimised, in order to protect consumers and also the reliability of the Conforming List. We are also of the view that manufacturers should be sure that the original design of a club takes into account both our testing tolerance and their own manufacturing variations. In addition, manufacturers of clubs which appear on the List of Conforming Driver Heads have a responsibility to maintain adequate quality control procedures to ensure ongoing compliance with the Rules, even after the conformance ruling has been made.

In the light of all of the above, The R&A has decided to formally announce its intention to perform check testing of drivers in the marketplace and to publish the method which will be used to assess such drivers for conformance. It should be noted that the Governing Bodies have been conducting a check testing program for golf balls for more than two decades.

The check testing method for drivers can be summarised as follows:

DRIVER CHECK TESTING METHOD

1. The R&A will reserve the right to check test any driver at any time, with samples being obtained in a variety of different ways.
2. The conformance status of a check tested driver will be determined by the sampling plans referenced below. Two different sampling plans will be used (see attached), both of which are published by the International Standards Organisation (ISO).
 - The Phase I sampling plan will be used for all drivers currently available in the marketplace, but especially for those clubs which appear on the List of Conforming Driver Heads.
 - The Phase II sampling plan will be used for drivers submitted to The R&A from 1 January 2010 onwards. Phase II is a more stringent sampling plan.
3. If a club is determined to exceed the terms of the relevant sampling plan, the following action will be taken:
 - a. The manufacturer will be informed that the club has been the subject of a recent check test and that samples have been determined to exceed the limit for spring effect. The manufacturer will be given a reasonable amount of time to review the findings and discuss the matter with The R&A.
 - b. After the manufacturer has had the opportunity to review and discuss the findings, the club will be removed from the List of Conforming Driver Heads and added to the List of Non-Conforming Drivers within a reasonable time, unless the manufacturer provides information which requires additional consideration.
 - c. The manufacturer will be afforded the opportunity to submit a conforming version of the club. This will require some permanent identifying marking that distinguishes this version from the non-conforming version.
 - d. It will be the manufacturer's responsibility to advise its customers of the revised status of the club in the way the manufacturer sees fit.

As intimated above, the decision to formally announce our intention to check test drivers is to protect the accuracy and integrity of the Conforming List, a tool which is used by Professional Tours throughout the world to ensure players are using a conforming driver and by consumers to assist in their purchasing decisions. It is hoped that this announcement will further encourage manufacturers to design their products well within the limits as set forth in the Rules of Golf, so that manufacturing variations and the test tolerance are also taken into consideration.

If you have any questions or comments concerning any of the above or the details of the sampling plan, please do not hesitate to contact me.

Yours sincerely



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SAMPLING PLAN DETAILS

Phase I: ISO 2859-1, Table 10-E-2, Double sampling plan, AQL 10.0

- A. Measure 8 samples. Accept on 1 defect, reject on 3 defects.
- B. If 2 defects are found in the first 8 samples, measure an additional 8 samples.
- C. Accept on 4 total defects (out of 16), reject on 5 total defects.

Phase II: ISO 2859-1, Table 10-E-2, Double sampling plan, AQL 4.0

- A. Measure 8 samples. Accept on 0 defects, reject on 2 defects
- B. If 1 defect is found in the first 8 samples, measure an additional 8 samples.
- C. Accept on 1 total defects (out of 16), reject on 2 total defects

These details are reproduced with the permission of the ISO from their standard **ISO 2859-1:1999, Table 10-E-2 Sampling plans for sample size code letter E**. Further information concerning these sampling plans can be obtained from the website of the International Standards Organization www.iso.org.