

Be True!

We tested knockoff clubs against the real thing

ith drivers costing as much as my first car did, there is a growing market for counterfeit clubs. Knockoffs, which range from reasonable reproductions to outright copies that infringe on trademarks, can cost up to 85 percent less than name-brand originals. Knockoff drivers sell for \$60 to \$100 (versus \$500 for highend genuine models), while knockoff irons go for \$110 to \$440 (compared with \$1,000 or more).

According to Rob Duncanson, a lawyer who represents Cleveland, Cobra, TaylorMade and Titleist, knockoff clubheads account for at least half the clubheads imported into the U.S. Most come from Asia, where the majority of clubheads—real and bogus—are made.

To see how the imitations stack up, GOLF MAGAZINE tested some knockoffs against authentic clubs with a hitting machine at Golf Laboratories in Del Mar, California, an independent facility run by Gene Parente, who has built similar machines for major manufacturers and the USGA.

BUYER BEWARE

It was difficult even to find the clubs we wanted-a sign of the essential unreliability of knockoffs. After searching the Web, browsing golf shops and sifting through bins at swap meets, we bought knockoffs of some popular drivers and irons. We requested specifications

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GEARHEAD

to match those of the name-brand clubs they would be tested against, but most transactions didn't go smoothly.

One driver model was different from the club we ordered. When we called to ask why, a representative said the clubhead was "suddenly discontinued" and offered a refund. Other pirate models arrived with the wrong lofts, with notes saying that our requested loft wasn't available. Only one knockoff driver came with the requested loft. The others measured from a half-degree lower to 1.5 degrees higher. And nearly every knockoff driver we tested had a flat lie angle, which can cause pushes.

One of the 5-irons we ordered by phone never arrived; the company lost its record of the purchase. Some knockoffs came with shafts longer than we ordered, so we had to tweak the specs.

TESTING, TESTING

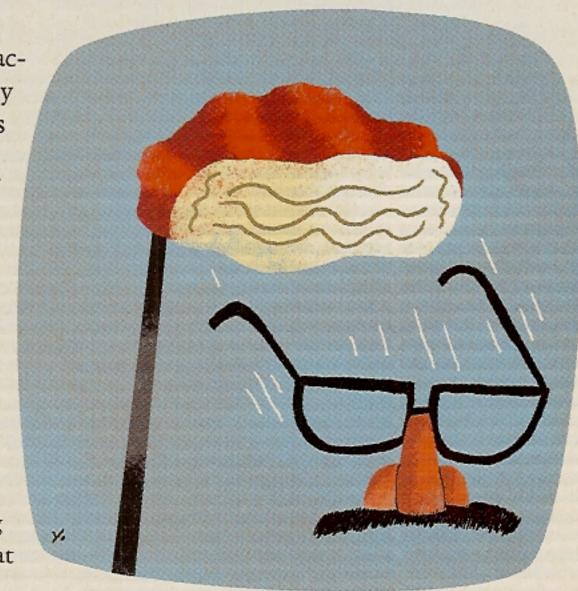
We tested the authentic clubs and the knockoffs under the same conditions.

Knockoff drivers produced a much wider dispersion—at least twice as wide, on average on off-center hits. "Legitimate manufacturers have specific design guidelines to balance clubhead weight and maximize performance across the face," says Todd Beach, TaylorMade's director of product development for metalwoods. "But knockoff makers just copy the aesthetics, so their products may have a misplaced center of gravity." This could explain why the knockoff drivers occasionally produced inexplicable squirters.

Our knockoff drivers also hit the ball much lower, resulting in a shorter carry—up to 30 yards shorter—than the originals. Improper weighting seems to be one cause; another is poor shaft quality. "We pick our shafts to optimize performance," says Barney Adams, chairman of Adams Golf. "The knockoff guys sell the cheapest shafts they can get their hands on. It's not unusual for their shafts to work in conflict with the clubhead rather than in concert with it."

Like the drivers, the pirate 5-irons we tested produced a wide shot dispersion. Ball flight was adventurous, too. Compared with name-brand irons, the knockoffs produced less spin and launched shots lower, causing hard-to-control fliers. "Knockoff makers tend to manipulate their lofts so golfers hit the ball longer. They cast grooves with inferior and inaccurate dimensions, and place a higher center of mass in

the irons, all of which sacrifice control, accuracy and consistency," says Todd Harman, Cleveland Golf's director of product marketing. Ideally, irons feature consistent lofts and a lower center of gravity, giving the player more control and helping him get the ball into the air. Most golfers have trouble hitting long irons; the last thing they need is a 5-iron that plays like a 3-iron.



The knockoff irons occasionally hit the ball longer in our tests. But even that can be a drawback: Major manufacturers point out that many knockoff irons have inconsistent loft, size and shape progressions through the set. These faults can cause inconsistent distance gaps from iron to iron.

We tried contacting several knockoff makers but they would not comment on their clubs' apparent shortcomings. However, distributors stand by the clubs' performance. Mike Giancanelli, president of Discount Golf Clubs and Equipment, which sells knockoffs, says, "We provide the best value and we guarantee it."

Despite this claim, our tests show you get what you pay for.

The Knock on Knockoffs

"Knockoffs may look similar on the surface, but when you look inside them, the number of subtle differences is enormous," says Chris McGinley, vice president of marketing for Titleist. "Think of copying a document on paper-each version is a degradation of the previous one. It's much worse with golf clubs." Knockoffs' many faults include:

- Inferior metal
- Wrong swing weight
- Wrong club weight
- Off-center scoring lines
- Non-standard lie angles
- Unbalanced clubhead weighting
- Closed/open clubfaces
- Misstated wood lofts
- Mismatched shaft and head

- Wrong shaft length
- Mismarked shaft flex
- Improperly trimmed shaft
- Inconsistent distance gapping in iron sets
- Sloppy assembly
- Poor finish and paint job
- Poor feel
- Funny-sounding impact

These shortcomings are not always readily apparent, making knockoffs a high-risk purchase.