

Club Angle Check Mat

Check the loft and lie of your own irons with a level surface and the phone in your pocket.

v2.1 · fitmygolfclubs.com

Your clubs are probably not what the spec sheet says.

Club heads leave the factory with a tolerance. Two irons stamped the same loft can differ by a degree or more, and a club that has been bent, dropped, or hit off enough range mats will drift further. Most golfers never check.

You would not learn guitar on an instrument nobody had tuned. Same idea here. This checks whether your set is roughly where it should be, using the fact that every phone already contains an angle sensor.

WHAT YOU NEED

- This page set, printed single-sided (scale does not matter — nothing here is measured off the page)
- A hard, flat surface you can get level — a table or hard floor, not carpet
- A phone with any angle / level / inclinometer app
- **Recommended:** a small magnetic angle gauge, about \$5 at any hardware store — it beats the phone
- A short spirit level or a phone level app, for the tip check

Read this before you use any number you get

This is a screening check, not a fitting gauge. Treat every reading as rough. A professional loft and lie machine clamps the club in a fixture and reads to a fraction of a degree — that precision comes from the clamp, which this does not have.

Do not bend clubs based on these readings. What this is good at is telling you *which* club looks off, so you know what to hand a fitter. If a club looks clearly out of step with the rest of your set, that is your signal to get it checked on a real machine — not to reach for a bending bar.

Where the readings go. Any number you record can be typed straight into your FitMyGolfClubs bag, replacing the catalog spec, so your bag grade scores your actual clubs instead of what the factory intended. Page 5 shows how.

THE MAT

Three things decide your accuracy: a level surface, a fully grounded sole, and no forward/back tip. This page sets up all three.

1. LEVEL THE SURFACE Phone flat in the box, left. Must read zero both ways.	2. GROUND THE SOLE Heel and toe both touching. Check crouched, at eye level.	3. KILL THE TIP Lay a level across the top of the head. Not tipped forward or back.
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CHECK 1 · LEVEL

Phone flat inside this box, screen up, before you measure anything.

must read 0.0

within 0.2 degrees, both directions

if it does not, the surface is not level — move

SOLE THE CLUB HERE

same spot each time — a repeatability aid; where the club points does not affect the reading

both ends touching

if the toe or heel is in the air, the reading is wrong

HEEL DOWN

SOLE RESTS ALONG THIS LINE

TOE DOWN

CHECK 3 · NO TIP

A soled club can rock forward onto its leading edge or back onto its trailing edge. Either way, loft and lie both shift.

Rest a short level across the top of the head. Settle the club so it sits at its own natural soled position, then read.

This is the step people skip.

NO PRINT-SCALE CHECK NEEDED Your sensor reads gravity, not the page. The mat only holds the club steady and level. Print it any size — a torn-off sheet works as well as a perfect one.

METHOD 1

Measuring lie angle

Lie is the angle between the shaft and the ground when the club is soled. It is the easier of the two, because the shaft is long and straight. Works on irons, wedges, hybrids and woods.

Use the gauge if you have one

A small magnetic angle gauge clamps itself to the shaft and holds still while you read. A phone has to be held there, and the hand that holds it tends to move the club. If you own the gauge, use it for every step below in place of the phone — it is the better tool here. The phone works; it just asks for a steadier hand.

1 Level the surface

Mat on a hard surface. Phone flat in the level box, confirm it reads zero both ways. Kitchen tables are often not level — move if it does not.

2 Sole the club, both ends down

Set the club in the zone with the sole flat — heel and toe both touching. Crouch to eye level to confirm. Do not press down; let the club rest at its own weight.

3 Kill the tip

Rest a short level across the top of the head and settle the club so it is not rocked forward onto the leading edge or back onto the trailing edge. This is the one that actually moves the number.

4 Rest the gauge or phone on the shaft

Sit the gauge, or the long edge of the phone, flat against the shaft just above the hosel where it is straight. **Rest** it — do not press. Pressing rotates a club that is only resting, and the reading follows the club. The angle from horizontal is your lie.

5 Take it three times

Lift the club, set it down, repeat — three times. If the readings spread more than about a degree, your setup is shifting between attempts; slow down on steps 2 and 3. Record the middle value, not the average.

The progression matters more than the number

Irons generally run around the high 50s to mid 60s in degrees, getting more upright as the clubs get shorter. The most useful thing here is not any single value — it is whether your set steps evenly. One club sitting well off its neighbours is far more telling than the whole set reading a touch flat, because a consistent offset is usually your measuring, and a lone outlier is usually the club.

METHOD 2

Measuring loft

Irons and wedges only. Skip your driver, fairways, and hybrids.

An iron face is flat, so a gauge or phone laid against it reads the face plane honestly. Driver, fairway, and hybrid faces are curved in both directions — the tool rocks on the curve and the number is meaningless. Leave those on the catalog spec — many are hosel-adjustable anyway, so the stamped loft is a starting point, not a fixed truth.

1 Set up as for lie

Level the surface, sole the club both ends down, kill the tip with the level across the top. Loft is only meaningful from a properly soled, untipped club, so these are not optional.

2 Rest the gauge or phone on the face

Flat against the clubface. The gauge sits on it; a phone will overhang top and bottom, which is fine as long as nothing else props it. Watch the hosel — if it holds the tool off the face, slide toward the toe. Rest, do not press.

3 Read the angle from vertical

Loft is measured from vertical. If your tool reads from horizontal instead, subtract the reading from ninety.

4 Three readings

Remove, replace, repeat. Take the middle of three. Loft is more sensitive to how the tool sits than lie is, so expect a slightly wider spread — another reason the gauge, which sits on its own, beats the phone here.

What you are looking for

Loft matters most as a set of gaps. If one pair of neighbours is four degrees apart and another pair is eleven, you have a hole in your distances that practice will not fix. Two clubs reading the same loft, or a pair further apart than the rest of the set, is worth a fitter's attention. A whole set reading a degree strong is more likely your measuring than your clubs.

STEP 3

Write it down, then use it

Record the middle of your three readings per club. Leave a row blank rather than guessing — a blank is better than a bad number, because the grade falls back to the catalog spec instead of scoring you against something wrong. Woods and hybrids have no loft box: their curved faces can't be read this way (see Method 2).

Club	Loft measured	Lie measured	Spec says	Looks off? Notes
Driver	<i>n/a</i>			
3 Wood	<i>n/a</i>			
5 Wood	<i>n/a</i>			
Hybrid	<i>n/a</i>			
4 Iron				
5 Iron				
6 Iron				
7 Iron				
8 Iron				
9 Iron				
PW				
GW / AW				
SW				
LW				

PUTTING THE NUMBERS INTO YOUR BAG

- 1 Open your bag grade and tap into the **Loft Gapping** or **Lie Angle** factor.
- 2 Tap **Edit** in the Your Clubs header.
- 3 Adjust each club to the value you measured, then **Save & Regrade** (one credit — the free credits you get at signup cover it).
- 4 Your grade now scores the clubs you actually own. Anything you change is marked as your edit, and a **Reset** returns it to the catalog value whenever you want.

One last time, because it matters

These numbers are an indication, not a specification. If a club looks meaningfully off, take it to someone with a proper machine before anyone bends anything. What this mat is good at is telling you *which* club to ask about.

Grade every club in your bag against eight fitting factors

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