

6.1.8 Common mistakes on the first ball and how to avoid them

Common mistakes on the first ball and how to avoid them

6.1.8

TIP

guide

Even experienced pro shop operators make mistakes on a first-ball drilling — not because they do not know what they are doing, but because first-ball fittings involve more variables, more decisions, and more data entry than a routine re-drill. This page collects the most common mistakes that occur across the Steps 1-7 workflow and explains exactly how to catch each one before it reaches the bowler's ball.

Mistake 1 — Creating a Duplicate Bowler Profile

Skipping the search step and creating a new profile for a bowler who already exists in the system splits their spec sheet history across two records. Future visits pull up only half the picture, and merging duplicates has to be done manually.

- **Always search before creating.** Enter the bowler's first name, last name, and a partial name in the search bar before touching the + New Bowler button.
- Search for common name variations — a bowler registered as "Rob" may come in asking for "Robert."
- If a duplicate is discovered after the fact, note both profile URLs and contact the Spectre team — do not attempt to reconcile records by manually copying spec sheets between profiles.

Mistake 2 — Wrong Span Type Selected

Selecting Full Span when the measurement was taken Cut to Cut — or vice versa — introduces a systematic error into every span value on the spec sheet. The Oval Calculator then works from incorrect inputs, and the finished holes are in the wrong position on the ball surface.

- **Decide your span type before measuring** and write it at the top of any paper notes. The measuring technique and the spec sheet selection must match.
- Make span type part of your shop's standard intake checklist — not a decision made mid-fitting.
- If you are unsure which type a legacy spec sheet used, do not carry the values forward — re-measure the bowler and create a fresh spec sheet with a confirmed span type.

Mistake 3 — Measuring the Wrong Hand

Measuring a right-handed bowler's left hand — or forgetting to confirm dominant hand altogether — is more common than it should be, particularly with ambidextrous bowlers or those who perform other tasks left-handed. The resulting fit will feel wrong from the first throw and the cause will not be immediately obvious.

- **Confirm dominant bowling hand verbally** before picking up the measuring tape. Ask specifically — "which hand do you bowl with?" — rather than assuming.
- Note the dominant hand in the bowler's profile Notes field so it is visible on every future visit without needing to ask again.
- For two-handed bowlers, confirm which hand holds the ball and measure accordingly.

⚠ Mistake 4 — Transposed Finger Measurements

Entering the ring finger hole size in the middle finger field, or swapping joint measurements between fingers, is an easy error in a busy shop — especially when measuring and typing simultaneously. The drilled holes end up the wrong size on the wrong finger.

- **Enter measurements one finger at a time** — complete all fields for the middle finger before moving to the ring finger. Do not jump between them.
- Say each measurement out loud as you enter it: "Middle finger, hole size, 31/32." The verbal confirmation catches transpositions before they are saved.
- During the Step 7 review, check that middle and ring finger values are in plausible relationship to each other — the ring finger is typically narrower than the middle, so a ring finger hole size larger than the middle finger is a flag worth investigating.

⚠ Mistake 5 — Incorrect Pitch Sign (Forward vs. Reverse)

Entering a forward pitch value where reverse was intended — or leaving a sign as positive when it should be negative — produces a hole pitched in the opposite direction to the fitting plan. This is one of the hardest errors to catch visually on a finished ball and one of the most disruptive to a bowler's release.

- **Review pitch signs explicitly during Step 7** — do not just check the number, check the direction. Read each pitch value as "X forward" or "X reverse" rather than just a number.
- If a bowler has existing spec sheets, compare the new pitch values to their history. A sign reversal that contradicts several previous drillings without explanation is almost certainly an error.
- At the press, confirm pitch direction on the machine before drilling — not just on the spec sheet. The physical press setting is the last line of defence.

⚠ Mistake 6 — Ball Name Mismatch Between Spec Sheet and

Arsenal

A minor difference in how the ball is named on the spec sheet versus the Arsenal entry — a missing word, different capitalisation, or an abbreviated model name — breaks the link between the two records. The spec sheet and the Arsenal entry exist as unconnected islands, and the bowler's drilling history becomes fragmented.

- **Copy the ball name from one record to the other** rather than retyping it. Paste from the spec sheet into the Arsenal entry or vice versa.
- Establish a shop-wide naming convention — brand, model, weight, in that order — and apply it consistently to both records.
- During the Step 7 review, open the Arsenal entry side by side with the spec sheet and visually confirm the names match character for character.

Mistake 7 — Oval Calculator Run Before Pitch Values Are Final

Running the Oval Calculator and noting the output, then changing a pitch value afterward, means the oval cut values on the spec sheet no longer reflect the current inputs. The printed spec sheet shows an oval calculated for the old pitch — and the finished hole is drilled to the wrong geometry.

- **Treat the Oval Calculator as the last measurement step**, not an intermediate one. All pitch and span values should be final and confirmed before running it.
- If a pitch value is changed after the Oval Calculator has been run, re-run the calculator immediately. Do not assume the change was small enough not to matter.
- The Step 7 review should always include checking whether the oval values are consistent with the current pitch inputs — if a pitch was adjusted late in the fitting, the ovals are the most likely casualty.

Mistake 8 — Flip V/H Configured Incorrectly for the Press

Drilling the oval on the wrong axis — producing a hole elongated side to side rather than forward and back — is the most visually obvious mistake on this list, but it still makes it through to a finished ball more often than it should. It always traces back to a Flip V/H setting that does not match the press in use.

- **Verify Flip V/H as part of shop setup**, not after the first customer complaint. Run a test hole on a plug or scrap ball when setting up a new device or changing drill presses.
- In multi-driller shops, confirm that each operator's device has Flip V/H configured for their specific press — not inherited from a colleague's device.
- If a completed ball has an oval on the wrong axis, plug the affected hole, correct the Flip V/H setting, and redrill before returning the ball. Do not return a ball with a visibly misoriented oval.

Mistake 9 — Layout Recorded After Drilling

Completing the drilling and then returning to the spec sheet to fill in the layout from memory introduces recall errors — especially in a busy shop where several balls may be drilled in a day. A layout recorded after the fact is also impossible to verify against the physical ball without re-measuring.

- **Record the layout before drilling begins**, as described in Step 5. The spec sheet is a pre-drilling plan, not a post-drilling report.
- If a last-minute layout change is made at the press, update the spec sheet immediately — before drilling the next ball — while the details are still fresh.
- For shops using Arsenal Plus, the 3D layout rendering provides a visual confirmation that the recorded layout matches the physical drilling plan before any cuts are made.

Mistake 10 — Skipping the Pre-Drill Review

The Step 7 review exists precisely because data entry errors are inevitable in a hands-on, fast-moving environment. Skipping the review — or treating it as a formality rather than a genuine check — means errors that could have been caught on screen get caught on the ball instead.

- **The review is not optional.** Build it into every first-ball workflow as a non-negotiable step, regardless of how familiar you are with the bowler or how straightforward the fitting appeared.
- Review the spec sheet on screen first, then again on the printed copy at the press. Two passes catch more than one.
- For new staff members, have a second person review the spec sheet until the driller has completed at least ten first-ball fittings independently. Fresh eyes are the cheapest

quality control available.


Pre-Drill Checklist — Quick Reference

Use this checklist as a final pass before drilling begins. Every item should be confirmed before picking up a drill bit.

Check	What to verify
Bowler profile	Correct bowler, no duplicate profile
Ball name	Matches Arsenal entry exactly
Dominant hand	Confirmed verbally, noted in profile
Span type	Matches measurement method used
Grip type	Reflects fitting intent
Finger measurements	Middle and ring entered in correct fields, sizes plausible
Pitch values	Signs confirmed — forward vs. reverse for every hole
Thumb entry	Round or oval confirmed, pitch values correct
Oval Calculator	Run after all pitch and span values finalised
Flip V/H	Confirmed correct for this press
Layout	Recorded and consistent with drilling plan
Arsenal entry	Ball added, status set to Active

Related Sections

- 6.1.1 — Step 1: Create the bowler profile
- 6.1.2 — Step 2: Create a blank spec sheet for the ball
- 6.1.3 — Step 3: Set grip type and enter finger measurements
- 6.1.4 — Step 4: Enter thumb information (round or oval)
- 6.1.5 — Step 5: Select layout (VLS, 2LS, PAL, or manual)
- 6.1.6 — Step 6: Add ball to the Arsenal section
- 6.1.7 — Step 7: Review, print, or share the spec sheet
- 09.x — Tips, Troubleshooting and Reference: drilling errors and corrections

 **Tip:** Print this checklist and laminate it. Keep one copy at the counter for the fitting stages and one at the drill press for the pre-drill review. A physical checklist that gets ticked off by hand is more reliable than one that exists only on screen — it is harder to skip a step when there is a box

waiting to be checked.

Revision #2

Created 11 May 2026 16:04:54 by Admin

Updated 2 June 2026 16:13:59 by Art