We all love it when we’re in the zone — when the stroke is effortless, instinctive and always on the money. But the zone is usually a temporary residence, and it’s easy for your stroke to get out of whack for any one of a thousand reasons — if not all 1,000 reasons.

Sometimes you have to take your distressed stroke to the practice room and break it down step by step. BD columnist David Alciatore, Ph.D. — known in our online forum as “Dr. Dave” — can help with the diagnosis.

On the following pages, we expound on stroke fundamentals catalogued by the doctor to help you identify the steps you might be missing or stumbling over. At the end is a checklist you can clip out and take to the practice room, with a drill for testing your stroke accuracy.

One word of advice: One stroke won’t fit all. People come in all ages, shapes and sizes, and the most effective stance, grip and practice-stroke routine for your buddy might not be the best for you or your lady friend. The key words are “comfort” and “consistency.” Find a stable, stress-free routine that works, and keep it up on every shot. It’ll be easier to identify problems and make future adjustments if you have a constant regimen from the start.

Find your flaws, straighten them out, ingrain your new routine, and you’ll be back in the zone in no time.

SHOOT STRAIGHT WITH OUR FUNDAMENTALS CHECKLIST
By Dave Alciatore Ph.D., with Mason King
Dave’s Stroke Fundamentals

Is your stroke out of sorts? Can’t find the culprit? Let’s break the process down into separate steps and establish a solid routine.

CUE AND TIP INSPECTION
THIS IS a simple equipment check. Your cue must be straight and unwarped. If you have any doubts, the bar test is always effective — rolling the cue (or just the shaft) on the slate bed. The ideal shape of your tip is between that of a nickel and a dime, depending on preference. The tip must have some texture (i.e., not too smooth), so it can hold some chalk — which must be applied on every shot. Make sure your hands and cue shaft are clean and dry.

Grip on the Cue
THE KEY words are “relaxed” and “light.” A loose grip allows the hand to pivot in the pendulum-stroke motion. Holding the cue in a death-grip inhibits smooth acceleration by tightening your arm, wrist and elbow. And watch out for unconsciously squinching your grip on the forward stroke, especially when you need power.

● THERE’S MUCH debate about where in the hand to cradle the cue — in the fingers, in the palm, or in that sweet spot in between. There’s no single answer. Some hands are big, some are small, some have arthritis. The important thing is to grip lightly.

● PLACE YOUR grip hand on the cue so that your forearm will be perpendicular (i.e., at a 90-degree angle) to the cue when the tip strikes the cue ball. Assuming that you’re using a pendulum stroke, this will ensure that the cue is moving straight forward at impact (not tilting up or down) and that your tip placement on the cue ball is as accurate as possible.

Hand Bridge
THE KEY to an effective bridge is stability. Spread your fingers to plant the bridge hand on the table. WHETHER YOU use an open or closed bridge is a matter of personal preference. I use the open bridge, because I can sight the cue better, and it’s easy to form a stable “V” between the thumb and forefinger. Some people prefer the looped-forefinger closed bridge, which provides multiple points of contact for guiding the cue (but can create too much friction if your hand and shaft are sweaty or dirty).

● THERE’S SOME debate on bridge length — the distance between the bridge and cue ball. A shorter bridge (4 to 6 inches) may allow more accurate tip placement, and diminish the effects of a back hand that wanders left or right. A longer bridge (8 to 12 inches) allows you to accelerate your stroke more smoothly and build power. Six to 8 inches is good advice for most players and shots.

Stance
SIGHT THE aiming line for the shot prior to taking your stance, establish that line with your cue stick, and then step into that aiming line when assuming your stance and positioning your cue. I DON’T think there is one correct position for your feet. It varies from player to player, depending on comfort level. What matters is to be comfortable, well-balanced and stable, as long as the stick can come forward on the aiming line. And use a consistent stance from shot to shot. POSITION YOUR head low enough to accurately read the aiming line. I like my head to be as low as possible, like snooker players. But your head and torso positions will depend on what’s comfortable for you.
**INSTRUCTION SPECIAL: STROKE TUNEUP**

**AIMING AND ALIGNMENT**

For shots that don’t require left or right English, your contact point should be on the vertical centerline of the cue ball. In the pool course I teach, it’s shocking how many people think they’re hitting the centerline but are way off. To help with this, assume a “set and aim” position, with your focus on the cue ball and the cue tip just short of the desired cue-ball contact point. Pause here. Your forearm should be perpendicular (i.e., at a 90-degree angle) to the cue. Now you can double-check your aiming line, making sure that your stroking arm, cue and head (or, specifically, the dominant aiming eye or chin) are aligned with the aiming line and object ball. The dominant eye is a huge can of worms. Some people prefer their dominant eye over the cue, and others like the cue under the chin. Some don’t have a dominant eye. (Check the November 2007 BD for Tony Robles’s advice on cue position.) If you can align your tip with the aiming line, I don’t think it matters where your head is. But, however you decide to set up, do it consistently.

**STROKE PREPARATION**

Begin a series of practice strokes. On every shot, you want the use the same number of practice strokes with the same tempo. You’re establishing a routine that you can rely on in more stressful moments. You’re also making sure the stroking arm is free from body interference. There’s some debate on where to rest your gaze. You can move your focus between the cue ball and object ball during the practice strokes (e.g., watch the object ball during the back stroke and cue ball during the forward stroke). Just be sure to watch the cue ball during the forward stroke, so you don’t accidentally hit it. Whatever you choose, do it consistently. At the end of your last forward practice stroke, pause again in the set position. Re-verify your aiming line and tip placement. Take a slow and smooth backswing and pause at the end before starting your forward swing. Whatever works for you is fine.

**STROKE EXECUTION**

This is the most important point on the list: Transition smoothly from your pause to your forward swing. Many intermediate players have difficulty with accuracy because they rush or jerk their cue sticks forward, which throws them off-line. Assuming you’re using the pendulum-style stroke, make sure your elbow stays up. (Many elbow-droppers dispute this point, but most people will have better accuracy and consistency if they don’t drop their elbows.) As you’re accelerating through the stroke, be careful that your bridge, head and body stay fixed. A frequent sin, even with good players, is moving the body up on the shot. Allow the cue tip to pass through the original cue ball position to the natural end of the stroke. Then freeze in your follow-through position until the balls stop moving (unless you need to get out of the way).
1. CENTERLINE STROKE DRILL
This exercise will test your aim, cue-tip placement accuracy, and stroke.

A. Use a medium-speed, above-center hit to send the striped ball up table and back. Align the stripe with the shot direction before shooting.
B. Observe any wobble in the stripe, indicating an off-center hit.
C. Stay down in a “freeze” position after the stroke and observe how close the ball returns to the cue tip. A close return indicates good aim and a good stroke.
D. Execute the shot 10 times, noting how many attempts produce little wobble and return to the tip.
E. Repeat A-D with center-ball and below-center tip positions to see which works best for you.

2. STROKE FUNDAMENTALS — “BEST PRACTICES”
Break down and address all the elements of your stroke to find strengths and weaknesses.

<table>
<thead>
<tr>
<th>CATEGORY</th>
<th>BEST PRACTICES</th>
<th>COMMENTS/OBSERVATIONS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cue and Tip</td>
<td>• Straight, unwarped cue</td>
<td></td>
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<tr>
<td>Inspection</td>
<td>• Comfortable length and weight (commonly 19 oz.)</td>
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<tr>
<td></td>
<td>• Ferrule tight and uncracked</td>
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<tr>
<td></td>
<td>• Well-shaped tip, between dime and nickle shape</td>
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<tr>
<td></td>
<td>• Tip holds chalk well (not too smooth)</td>
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</tr>
<tr>
<td></td>
<td>• Hand and cue shaft clean and dry</td>
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<tr>
<td></td>
<td>• Tip chalked and checked before every shot</td>
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<tr>
<td>Grip</td>
<td>• Cue held with a relaxed and light cradle</td>
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<tr>
<td></td>
<td>• Wrist aligned with forearm (i.e., not unnecessarily cocked)</td>
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<tr>
<td></td>
<td>• Cue positioned in grip so that the forearm will be perpendicular to the cue (i.e., 90-degree angle) at cue-ball impact</td>
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<tr>
<td>Hand Bridge</td>
<td>• Solid foundation on table or rail, with the fingers spread for a wide contact area</td>
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<td></td>
<td>• Stable and tight guide for the cue, whether open or closed</td>
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<td></td>
<td>• Comfortable distance from cue ball, typically 4 to 12 inches depending on the requirements of the shot</td>
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</tr>
<tr>
<td>Stance</td>
<td>• Sight the aiming line for the shot prior to taking stance, and then step into the line when assuming stance</td>
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<tr>
<td></td>
<td>• Consistent feet placement from shot to shot (for example, with the rear foot on the aiming line)</td>
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<td></td>
<td>• Settle into position with weight well balanced</td>
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<td></td>
<td>• Position head low enough over the cue to accurately read the aiming line, but still at a comfortable height</td>
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<tr>
<td></td>
<td>• Make sure stance is comfortable and stable</td>
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(Continued on next page)
### STROKE FUNDAMENTALS (CONTINUED)

<table>
<thead>
<tr>
<th>CATEGORY</th>
<th>BEST PRACTICES</th>
<th>COMMENTS/OBSERVATIONS</th>
</tr>
</thead>
</table>
| **Aim and Alignment**   | • Assume a distinct “set and aim” position, with tip close to cue ball and eyes focused on cue ball  
                           • At set position, with tip close to cue ball, forearm should be perpendicular (i.e., 90-degree angle) to cue  
                           • Make sure that tip will strike cue ball on the vertical centerline on shots that don’t require left of right English  
                           • Make sure that stroking arm, cue and head (or, specifically, the dominant aiming eye or chin) are aligned with the aiming line (i.e., the same vertical plane)  
                           • Hold cue to be as level as possible (i.e., not elevated)                                                                                                                                               |                       |
| **Stroke Preparation**  | • Complete a series of straight warmup strokes, making sure to have a consistent routine on every shot with the same tempo and number of strokes  
                           • Make sure that the stroking arm is free and not encumbered by the body  
                           • Pause in the set position at the end of the last warmup stroke and prior to backswing  
                           • Switch gaze from cue ball to target point as desired, but always employing a consistent routine (e.g., cue ball to target point)  
                           • Take a slow and smooth final backswing  
                           • Employ a distinct pause at end of backswing, careful not to jerk cue  
                           • Focus on your target before the final forward swing                                                                                                                                               |                       |
| **Stroke Execution**    | • Transition smoothly from back-swing to forward-swing (i.e., no jerk, rapid acceleration, or other body movement)  
                           • Keep elbow stationary for pendulum effect  
                           • Accelerate cue smoothly  
                           • Forearm should be perpendicular to cue at cue-ball contact  
                           • Make sure that the grip, bridge, head and the rest of the body stay relaxed but stationary through the shot  
                           • Allow cue tip to pass through the original cue-ball position to the natural end of the stroke  
                           • Freeze in the follow-through position (watch out for head movement as you attempt to see shot results)                                                                                          |                       |

### 3. STROKE ROUTINE SUMMARY (AKA, “SWPPGAAFDD”)

Here’s an easier-to-digest summary of the suggested stroke, with an epic acronym. If you miss, remember to “diagnose.”

<table>
<thead>
<tr>
<th>Stance</th>
<th>Set and Aim</th>
<th>Warm-up Strokes</th>
<th>Pause and Set</th>
<th>Pull the cue back smoothly</th>
<th>Pause at end of back-swing</th>
<th>Gaze at object ball</th>
<th>Accelerate forward smoothly</th>
<th>Follow through</th>
<th>Freeze</th>
<th>Diagnose</th>
</tr>
</thead>
</table>

Modeled by Chris McDaniel, promotional coordinator at Colorado Cue Club in Denver