

See Photos Below

Key Components for each stroke are listed below, including the most common errors for beginners. Whether practicing them yourself or teaching beginners, deal with each point separately. Instructors should try to exaggerate these keys when modeling, (i.e., rotate your torso in an exaggerated fashion to demonstrate it more clearly). Our goal is not to create “stroke clones” but to instill certain principles that will help students use the most effective technique for their body type.

Forward Stroke

1. Torso rotation, starting with a good “windup” and catch, reaching forward to toes and planting next to boat.
2. Maintain power box (elbows bent less than 90 degrees) with hands remaining at shoulder height and “in plane,” not swooping down toward deck.
3. Short stroke (in at feet out at hips), pushing with top hand.
4. *Relatively* high shaft angle.

Common Problems: Late catch by knee, but stroke is too long; top hand swoops toward deck and blade scoops water; arm paddling with little torso rotation.

Draw Strokes

1. Keep paddle vertical w/ both hands over water
2. Face your work (rotate torso)
3. Anchor top hand for standard draw; use torso rotation for sculling draw
4. Control w/ on-water hand
5. Keep blade fully submerged.

Common Problems: Shaft not vertical; upper hand “pumps” back and forth instead of holding steady.

Sweep Stroke

1. Torso rotation (windup), follow blade with eyes.
2. Full, wide 180-degree sweep: Blade in at feet just below water, reaching out and back all the way to stern.
3. Maintain power box, pushing with top hand.
4. Horizontal shaft angle for maximum extension.

Common Problems: Too short stroke (not full 180 degrees); high shaft angle and blade too close to kayak with little extension.

Back Stroke

1. Rotate back and catch next to stern with flat shaft angle, turning head to look where you’re going.
2. Unwind torso to power the stroke.

Common Problems: Too short stroke, not looking back or using torso.

Braces

Low

1. Horizontal shaft angle
2. Elbows up over shaft and body in C shape.
3. Maintain reference grip
3. Use back face to create “depth charge” followed immediately by...
4. C-to-C “hip snap” and feathered blade recovery

Common Problems: Lack of coordination and timing between blade slap and hip snap; elbows not kept up over blade.

High

1. Horizontal shaft angle
2. Elbows up over shaft and body in C shape.
3. Maintain reference grip
4. Use face to slap water followed immediately by...
5. C-to-C “hip snap” and feathered blade recovery

Common Problems: Lack of coordination and timing between blade slap and hip snap; raising offside hand so shaft not kept horizontal.

Sculling Brace

1. From high brace position, power face down
2. Horizontal shaft angle
3. Blade at surface, slight climbing blade angle
4. Control w/ on-water hand and slow, steady strokes.
5. C-to-C edging and torso rotation.

Common Problems: Raising offside hand so shaft not kept horizontal; powered with arms instead of torso; poor blade angle with rushed, splashing sculling to try to make up for it (remember: it’s a waltz, not the Twist).

Low Brace Turn

1. Establish hull speed!
2. Initiate turn w/ outside edge & sweep.
3. Transition quickly to inside edge, planting the back of blade flat behind you a foot or so from stern and “ride the glide” several seconds (do not jam forward until recovery).
4. Recover with hip snap

Common Problems: not initiating with edge and sweep; killing momentum by jamming paddle too soon.

Bow Rudder/Side Slip

1. Establish hull speed!
2. For bow rudder only, initiate turn w/ outside edge & sweep; keep hull flat for side slip.
3. Plant blade well forward for bow rudder; at hip for side slip
4. Rotate wrist slightly to open leading edge of power face, keeping shaft vertical, and allow time for blade to “catch.”
5. Transition to forward stroke as hull speed decreases.

Common Problems: Opening power face too much to create a braking force; not keeping paddle vertical.

FORWARD



1.) Effective Windup:

Torso rotated well forward, arm reaching for early catch by foot.

←
**“Power”
Forward
Stroke**

vs.

→
**Poorer
Forward
Stroke**



Late Catch by Knee:

No windup to set up effective torso rotation.



2.) Power Phase:

Rotates and maintains power box, keeping top hand high for efficient blade angle.



Poorer Phase:

Sir Swoops-a-lot, arm paddling with little rotation and a vicious “swoop” leading to an inefficient scooping of water below...



3.) Recovery at Hip:

Stroke ends at hip, lifting blade vertically without scooping water.



Late Recovery and Scoop:

Ends stroke well behind and scooping water like a paddlewheel riverboat. Note water draining off blade.

DRAWS



Draw Stroke:
Vertical shaft with both hands out over water, torso rotated toward stroke and blade fully submerged.



Bra'w Stroke:
Hey, brah, the diagonal shaft angle makes it hard to say whether this is a poor example of a high brace or a poor example of a draw stroke. Neither brace nor draw, it's the Bra'w stroke.

SWEEPS



Sweep Stroke 1
Early Catch next to bow with good windup and torso rotation.



Sweep Stroke 2
Offside hand low "sweeping" deck with horizontal shaft angle and blade submerged for maximum extension and leverage.



Sweep Stroke 3
Finishes stroke, maintaining power box and rotating torso the full 180° all the way to stern.



Sloppy Sweep:
Offside hand held high, power box squashed, blade close to boat and not submerged. Little extension, leverage or power.

BACK STROKE



Power Back Stroke:
Fully rotated to stern, looking back to see where going and reaching back to plant a flat paddle for full extension

BRACES



High Brace 1: J Lean...

Paddle held horizontal w/ blade face down, body in C shape with head on shoulder.



Low Brace 1: J Lean...

Elbows start up over paddle for more power. The rest of the low brace sequence is essentially the same as the high brace except the back of the blade is used.



High Brace 2: Slap...

Slap water with paddle remaining as horizontal as possible for more support; offside hand low.



Bell Buoy Brace:
Less-effective, with diving, non-horizontal shaft and no C shape, so the brace relies on arms instead of body.



High Brace 3: Snap...

C-to-C hip snap, bringing boat back under you.



High (or low) Brace 4: Feathered Recovery

Blade slices out to paddling position for both braces, ready for another brace; head remains on shoulder to emphasize full C-to-C motion.

BASIC MANEUVERS



Low-Brace Turn

Ride ... the ... glide ... on a flat blade before pushing forward. Note edging down to the skirt. (As w/ all turns, initiate w/ an edge and sweep on the opposite side.)



Bow Rudder (and Side Slip)

Shaft vertical, reaching for toes for maximum turning leverage (or back off hip for no turn and side slip).

ROGER'S WARM UPS AND MANEUVERING DRILLS

Develop warm-up routines and practice regularly to “teach your muscles” to maneuver your kayak with precision, grace and style! This is what top slalom racers do to refine their paddling skills.

Paddling Patterns:

Practice making S patterns, circles, figure 8s, and stair steps using a variety of stroke combinations, e.g.:

Stroke Combinations:

*Remember: initiate all turns with edge and sweep and maintain your edge throughout the turn.

1.) Forward left, sweep right with boat edging; repeat to make S turns, sweep circles, 8s, and precision “stair step” turns. Remember to leave boat on edge (edge control), to keep your sweep strokes long and low, and keep your forward strokes short and high. Switch sides.

2.) Forward left, sweep right, bow draw left and feather back into forward stroke left, etc. repeat as necessary and change sides.

3.) 3-stroke bow draw S turns or side slips: forward right-left-right, bow draw or side slip left...glide... and feather into forward, left-right-left, bow draw right...glide..., etc.

4.) Tail wagging using sweeps and edging: sweep and edge left, sweep and edge right.

5.) Tail wagging using bow draws: sweep and edge right, bow draw left and glide...into a sweep and edge left, bow draw right, glide...; work your edges and use offside lean with your bow draws!

6.) 2-stroke quick turn using low-brace turn: sweep and edge right to initiate turn, low-brace turn left, edging left to “ride the glide,” edge back right to sweep right and finish turn precisely at 90 degrees and moving forward.

7.) 2-stroke turn around: low brace turn left as above but ride the glide as far as possible and turn the low brace turn into a full reverse sweep all the way to the bow; edge and sweep right to finish the 180 (or as far as possible: alternate forward and reverse sweeps as necessary).

8) Spin wheels: sprint forward, low-brace turn to spin backwards; sprint backwards and high-brace turn to spin back forward

9.) Cross-bow to low-brace “hook” turn (to left): sweep and edge right, cross bow with right blade reaching across to left side, glide... into low-brace turn on left, continuing glide and spin.

9a.) Initiate turn with standard bow draw on left, into cross bow left, into the low-brace turn.

10.) Cross-bow to sweep turn (to left): sweep and edge right, cross bow with right blade reaching across to left side, glide on right blade, then draw toward bow, up and over bow and into a sweep on the right to continue spin to left.

10a.) Initiate turn with standard bow draw on left, into cross bow left, into the sweep turn.

11.) Double cross bow draw: sweep and edge left, bow draw glide right, feather into forward stroke right, into cross bow draw on right side (using left blade), into double cross bow using right blade again; over the shoulder recovery?

12.) One-sided paddling: forward right, back rudder right (using back of blade), feather into stern draw rudder (using face of blade), feather into side slip, into bow draw, into forward stroke.

13.) Backwards drills: backwards side slips, draw strokes, S-turns, circles, and 8s.

14.) Draw drills: sea cave draws (standard and sculling draws to stern or bow); cross bow standard and sculling draws; windmill draw.

15.) One-handed drills: many of the draws, sideslips and braces can be practiced with only one hand in order to increase blade sensitivity.