



# FUNCTIONAL MOVEMENT ASSESSMENT



## FUNCTIONAL MOVEMENT ASSESSMENT For Master Rowers

Our bodies naturally undergo changes in coordination, balance, muscle strength, and joint range of motion as we climb up the ranks of age category racing.

For masters rowers and scullers these developments can have a direct impact on your stroke. Movement limitations affect your technical ability, your performance, may cause you to fatigue quicker, or sustain an injury.

Moving freely with smooth coordinated motions will help you row better technically, use your energy more efficiently, and enjoy your time on the water even more.

These **10 screening exercises** will help you identify key movements or qualities that you may need to give attention to in order to improve your stroke.

The exercises will expose movements that are restricted and need further attention on land to help you perform better in the boat. Improvement has no age limit and with some targeted attention you can keep your blade work sharp.

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[www.fastermastersrowing.com](http://www.fastermastersrowing.com)

|     |                         |   |
|-----|-------------------------|---|
| 1.  | ANKLES                  | 3 |
| 2.  | HAMSTRINGS              | 3 |
| 3.  | PUSH UPS                | 4 |
| 4.  | OVERHEAD SQUAT          | 4 |
| 5.  | THORACIC SPINE ROTATION | 5 |
| 6.  | ACTIVE NECK ROTATION    | 5 |
| 7.  | SINGLE LEG BALANCE      | 6 |
| 8.  | ONE LEG AIRPLANE ROW    | 6 |
| 9.  | ISOLATED LUMBRICALS     | 7 |
| 10. | GLIDING HOOK            | 7 |



## 1. Ankles

Restricted ankle mobility may present as:

1. Under-compression
2. Collapsed position at the entry
3. Poor drive suspension

### Movement test:

Kneel a fist length away from a wall

Bring your knee forward as far as you can without lifting your heel.

Try to touch the wall.

If you cannot, start working on your ankle mobility with this goal in mind.



## 2. Hamstrings

Tight hamstrings may present as:

1. Lack of forward body angle
2. The butt tucks under the hips as one reaches the top of the slide
3. Too much reaching through the shoulders

### Movement test:

Perform a leg raise.

Lie on your back, place a long strap across your forefoot and gently hold one end of it in each hand.

Actively lift your leg straight up and see if you can keep your knee straight.

The heel of your vertical leg should be able to pass the knee cap of the leg on the floor.

If your knee bends you should address your hamstring flexibility.



### 3. Push Ups

A weak Push Up may present as:

1. Poor drive connection
2. The butt shooting early
3. The shoulders lift and swing too early

#### Movement test:

Perform a Push-up without letting the hips drop.

Lie on your stomach with your hands beside your shoulders.

Raise your body off the floor by straightening your elbows, keeping your chin tucked in and your body straight as a plank.

Bend your elbows and lower yourself back down to the floor.

Repeat 3 times.



### 4. Overhead Squat

An overhead squat will demonstrate whether you can hip hinge, keep your torso from falling forward, and keep your hands behind your toes when raised overhead.

Inability to perform an overhead squat may present as:

1. Collapsing at the entry position
2. Too much flexion through the spine
3. Lack of pivot to set body angle

#### Movement test:

Start with a stick in your hands, your arms extended at shoulder height and your hands wider than the shoulders.

Your feet should be at shoulder width.

Squat down and raise the stick overhead at the same time.

Lower the stick as you squat up.

Keep the spine in neutral and the heels on the ground.



## 5. Thoracic Spine Rotation

Limited thoracic spine rotation may present as:

1. Rounded shoulders and upper back
2. Over-reaching.
3. Steering problems, difficult to look over shoulder

### Movement test:

Sit on a chair with your back in neutral position (slightly arched) and your chin tucked in.

Hold a stick with your hands at shoulder level.

Turn your upper body to one side, doing the movement from the middle back.

Return to the initial position and repeat on the other side.

Note any differences or restrictions.



## 6. Active Neck Rotation

Limited neck ROM may present as:

1. Steering problems, hard to look over shoulders
2. Tension in upper back and shoulders
3. Difficult to watch your blade during drills

### Movement test:

Position yourself in a tall sitting or semi-reclined position.

Tuck your chin in and turn your head to one side for the prescribed number of repetitions.

Repeat on the other side.



## 7. Single Leg Balance

Poor balance may present as:

1. Hard to judge the set of the boat
2. Difficulty staying centered on the seat
3. Often leaning in the boat

Test your balance:

Stand on one leg with one arm overhead and the other by your side.

Alternate the position of your arms while keeping your balance.

The faster you do the movement the harder the exercise will be.



## 8. One Leg Airplane Row

Coordination deficits may present as:

1. Incorrect sequencing on the recovery/drive
2. Difficulty with feather/squaring motions
3. Timing inconsistencies with bladework and power application

This exercise incorporates balance and coordination:

Stand with your feet hip width apart and hold a weight in one hand.

Bend forward on one foot (opposite to weight) to the airplane position and pull the weight towards you by bending at the elbow, keeping the supporting knee slightly bent and stable, the back in neutral position and your shoulders back.

Slowly return to the initial position and repeat 5 times.



## 9. Isolated Lumbricals

Limited Range of Motion may present as:

1. Difficulty feathering and squaring in the fingers
2. Difficulty maintaining proper hold of the handle
3. Inability to keep wrist flat

Finger range of motion:

Bend your fingers at the big knuckles (MP joints flexed) with the last two joints straight (PIP and DIP joints extended).

Relax your fingers.

Repeat 5 times.



## 10. Gliding Hook

Limited Range of Motion :

1. Difficulty feathering and squaring in the fingers
2. Difficulty maintaining proper hold of the handle
3. Inability to keep wrist flat

Finger range of motion:

Start with your hand and fingers straight and in line with your forearm.

Without moving your wrist and your first phalanx, flex the two last knuckles of your fingers and straighten your hand and fingers back to the starting position then repeat following guidelines.

