

Contents

| | |
|-----------------------|---|
| 1. Core Tests..... | 2 |
| 2. Warm-up..... | 8 |
| 3. Core Routines..... | 8 |
| 4. Flexibility..... | 9 |

Note: click the desired section above and you'll be transferred to the corresponding page

1. Core Tests

Prone (face down) extension

Rationale

(McGill, 2002 & Konrad et al, 2001)

- Tests the capacity of the spine extensors to hold spine alignment against load which is posture specific.
- Significantly related to low back pain for those with low scores to relative average adults.

Assessment Set Up

Start Position

- Lie face down (prone) with feet together and Anterior front) Superior Iliac Spine (ASIS or top of the pelvic bones) on edge of box
- Partner sits across lower legs below the knee to support rower (tester watches from the side)
- Use a mat for comfort if necessary
- Fold arms across the chest to maintain erect posture
- Start the clock once arms are across the chest
- Neck in neutral position (nose pointing to floor)
- The trunk is parallel to the floor

Range of Movement

- None

Assessment Rules

- Shoulders remain in line with hips
- Neutral to slightly extended back position (not hyperextension)

Gross Movement Deviations

- Significant drop of shoulders below hips
- Significant hyperextension of the back

Identifying the ASIS



Testing Position

Hip & shoulder alignment



Common Faults

Loss of hip & shoulder alignment



Excessive spinal extension




Notes

- Maintain correct alignment throughout.
- If after coaching the rower falls into a poor position, a single warning will be given.
- The test will continue if returned to the correct position.
- If unable to return to the correct position or falling into a poor position a second time, the test will be terminated.

Lateral (Left/Right) Trunk Hold

Rationale (GB Rowing, Courtesy of RFUW)

- Tests the ability to hold spine alignment against lateral load which is functionally specific.
- Readily repeatable test exercises where all trunk musculature involved.

| | |
|---|--|
| <p>NOTE: When the rower is lying on their left hip, the assessment is testing the right lateral trunk and vice versa</p> <p>Assessment Set Up</p> | Start Position |
| | <ul style="list-style-type: none">• Lie sideways on a box with body fully extended, ASIS (top of the pelvic bones) on the edge of box• Place top leg slightly behind bottom• Partner sits across lower legs below the knee to support rower (tester watches from side)• Fold arms across the chest to maintain neutral posture• Start the clock once arms are across the chest• Neck in neutral position• The trunk is parallel to floor |
| | Range of Movement |
| | <ul style="list-style-type: none">• None |
| | Assessment Rules |
| | <ul style="list-style-type: none">• Top hip stays above bottom hip• Top shoulder stays above bottom shoulder• Maintain 'square' trunk position with shoulders in line with hips• Shoulders remain at same height as hips |
| Gross Movement Deviations | |
| <ul style="list-style-type: none">• Significant drop in shoulder height below the hips• Significant increase in shoulder height above the hips• Rotation of the trunk | |
| Identifying the ASIS | |
|  | |

Testing Position

Hip & shoulder alignment



Shoulders drop below hip height



Shoulders higher than hips



Common Faults

Torso rotation



Double Leg Hold

(GB Rowing)

Rationale

- Tests the ability to hold lumbar spine and pelvis in place against load which is functionally specific.
- One of the highest level EMG levels for Rectus Abdominus shown in this exercise.

Assessment Set Up

Start Position

- Lie on back (supine), arms out to the side, palms up
- Start with one leg straight; bend other leg until the heel of the foot meets the knee crease of the opposite leg
- Bend second leg to meet the first
- Establish rower's low back position. Do this by allowing full tilt both ways and letting the rower choose a comfortable mid-point
- Tester places hand under back with 4th finger on PSIS (Posterior [back] superior iliac spine) and 2/3 fingers just to the side of spine
- Tester places other hand on top of resting thigh
- Straighten both legs along the angle of the resting thigh

Range of Movement

- None

Assessment Rules

- Low back remains in contact with tester's hand
- Knees remain (almost) straight throughout the test
- Thighs remains in contact with tester's hand

Gross Movement Deviations

- Significant loss of contact between spine and finger ends test (excessive spinal extension/hyperextension)
- Significant loss of contact of thigh with tester's hand
- Significant bend in knees

I. Bring heel of foot to opposite knee crease



Assessment Set Up
(cont.)

2. Hand position on back – 4th finger on PSIS



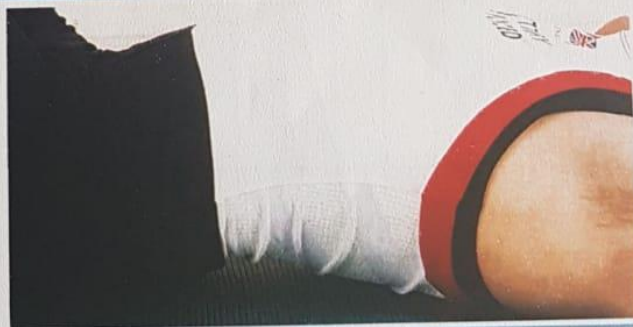
Testing Position

Mark start position with hand on rower's leg



Common Faults

Excessive spinal hyperextension



Loss of thigh contact with assessor's hand



2. Warm-up

Dynamic warm-up routine by Selin. To be done before every erg/weights/outing:

<https://www.youtube.com/watch?v=-Ooy8foPVxw&feature=youtu.be>

3. Core Routines

I have 3 routines (Basic/Advanced/ Super advanced). I have links for the first two but working on the link for the 3rd one.

Basic and Advanced has **5 sets** and Super Advanced has **3 sets**. Each set has 5 different exercises.

You will make your 30 min routines by choosing the correct set for your level. Which level to chose is listed below. I will run through these exercises each week for 5-10 mins so it will make more sense and you all know how to do it correctly

30 minutes Basic Core

<https://docs.google.com/document/d/1TGxWXILB7Lt4vSpA4uPx7rAAJlJgzeNarQ6QKW6NTQo/edit?usp=sharing>

30 minutes Advanced Core

<http://bit.ly/15xV249>

How to make your core routine:

Prone hold, If your time was

Less than 1.30: Set 1- Basic, Set 4- Basic

Between 1.20-2.30: Set 1 Advanced, Set 3 Advanced

More than 2.30: Set 1 Super Advanced, Set 1 Advanced

Lateral Hold (L/R)

Less than 1.30: Set 3- Basic, Set 2- Advanced

Between 1.20-2.30: Set 2 Advanced, Set 4 Advanced

More than 2.30: Set 2 Super Advanced, Set 3 Super Advanced

Double Leg hold

Everybody will be using the set 5 (Basic and Advanced set 5 is identical)

If below 2.30- Do the exercises in supine

If above 2.30- Do the exercises in sitting as seen on the photos

In total everybody will have 5 sets to complete but different levels according to their strength.

30 min programme: Each exercises is 45 sec with 15 sec rest, 1 min rest in between the sets

This should be done at least once a week or ideally twice. Can be done as a crew pre- outing. It will certainly wake everyone's cores up for the session!

8 min programme: 4 sets (not including the 5th set), Each exercise is 25 sec with no rest in between the exercises and the sets.

Needs to be done twice a week. It should be integrated in to your warm up routine pre- weights or ergs

4. Flexibility

All below is what is required for rowing (NOT FOR NORMAL PEOPLE!). Most of us can be in poor category and not even notice any problems with our day to day lives. If we want to however attain good postures for rowing (along with good core stability) we need all the below joint ranges.

Flexibility:

| | Hip Flexion (angle) | Hamstring Length (Pop Angle) | Calf Flexibility (distance from the wall) | Quad Stretch (angle) | Shoulder Int (R)-Ext (L) (distance) | Shoulder Int (L)-Ext (R) (distance) | Shoulder Flexion (angle) |
|---------|---------------------|------------------------------|---|----------------------|-------------------------------------|-------------------------------------|--------------------------|
| Good | > 130 | 0-10 | <13cm | >135 | zero to overlap | zero to overlap | 180 |
| Average | 120-130 | 10-20 | 11-13cm | 120-135 | 2-3 cm | 2-3cm | 170-180 |
| Poor | <120 | <20 | <11cm | <120 | <2-3cm | <2-3cm | <170 |

How to improve flexibility:

1- Pre exercise: ensure you mobilise your hips/ knees/ankles and shoulders pre outing/weights and ergs. These will need to be dynamic exercises and not passive stretches. We use most of these muscles for rowing and passively stretching them will relax the muscles we are about to use.

Dynamic warm up routine

<https://youtu.be/-Ooy8foPVxw>

2- Post exercise: Passively stretch the muscles.

If you are tight (poor): Hold the stretch for 60 sec, re-position (if you can) then hold it for another 60 sec. You should feel the stretch but never pain!. If it is painful, then you are overdoing, doing it with a poor technique or there is an existing injury

If you have average range: Hold the stretch for 30 seconds, re-position then hold it for another 30 sec

If you have good range: hold the stretch for 15 seconds, re-position then hold it for another **15sec**

3- Myofacial release: It is important to relax the fascia which covers the muscles like a cling film and that can also get quite tight. Use a foam roll to roll all muscle groups pre and post outing/erg/weights.

Ideally you should all have a foam roller that use take with you to training. We only have 2 good one and 2 soft ones in the gym. Not sure how many you have access for post water sessions.

I have been told Amazon have some good deals or pop it on your Xmas list.