

Starts Key Points



What Do We Analyse Through A Start

- Reaction time from block
- Time in flight to entry
- Entry point in metres
- Transfer to stroke
- Break (underwater) in metres/time
- Overall time to 15metres

Examples



- **Daniel Gyurta 200 B/S Olympic Gold 2012**

Reaction Block 0.68

Break (S) 05.30

Break (M) 12.90

15Mts time 06.52

- **Rebecca Soni 200 B/S Olympic Gold 2012**

Reaction Block 0.70

Break (S) 05.42

Break (M) 11.47

15Mts time 7.90

Considerations - Track Start

- BALANCE – better
- WEIGHT DISTRIBUTION – variable – front/middle/rear
- TENSION – medium to high
- HIPS – Easy to elevate
- REACTION – Multiple force grip
- TIME TO STREAMLINE- Quicker

Basic Principles

- TEACH GOOD BALANCE ON THE BLOCK
- BUILD CONFIDENCE TO DIVE AS IF JUMPING
- INGRAIN GOOD STREAMLINE PRINCIPLES
- STABILITY – feet around shoulder width apart/toes pointing forwards
- POOR STANCE – Knees/toes facing outwards – Back leg knee moves
- EXERCISE PROGRESSION – basic squat/lunges/weighted/
gymnastic progression – practise block/benches/small base
Skipping/progressive jumps/bounding exercises
- FLEXIBILITY - Hamstrings/Gluts very important

Starting Block Footplate



- Where should we position the footplate?
- Depends on swimmers height
- Do we want weight forward or backwards after the starting signal
- Position the front foot first
- Back foot – heel slightly off the plate resting on the ball of the foot
- Feet placed about shoulder width apart

Factors that effect getting off the block quickly



- 1. starting position/mechanics
- 2. Body dimensions
- 3. Strength
- 4. Rate of force (Jumping/plyometric exercise competence)
- 5. Average Reaction time men is 0.69
Average Reaction time women is 0.73, very slight difference 0.04 –
Average 0.70

Checklist of Main Points Track Starts



- Ready Stance – Hips high or low/Shoulders directly over edge of block/Vision down
- Reaction Time – Leg drive into wedge/Short sharp pull of hands/Do hips move forward first
- Drive – are hips higher than shoulders/Is the swimmer looking diagonally forwards

Checklist of Main Points
Track Start



- Leaving the block – does the back leg drive to the hip line or higher/ are shoulders hips now in line/vision back down to surface
- Mid Flight – Lead leg in line with hips/shoulders / legs meet quickly/arms streamlined
- Late Flight/Entry – body full streamlined by hand entry/ legs hold position as upper torso submerges.

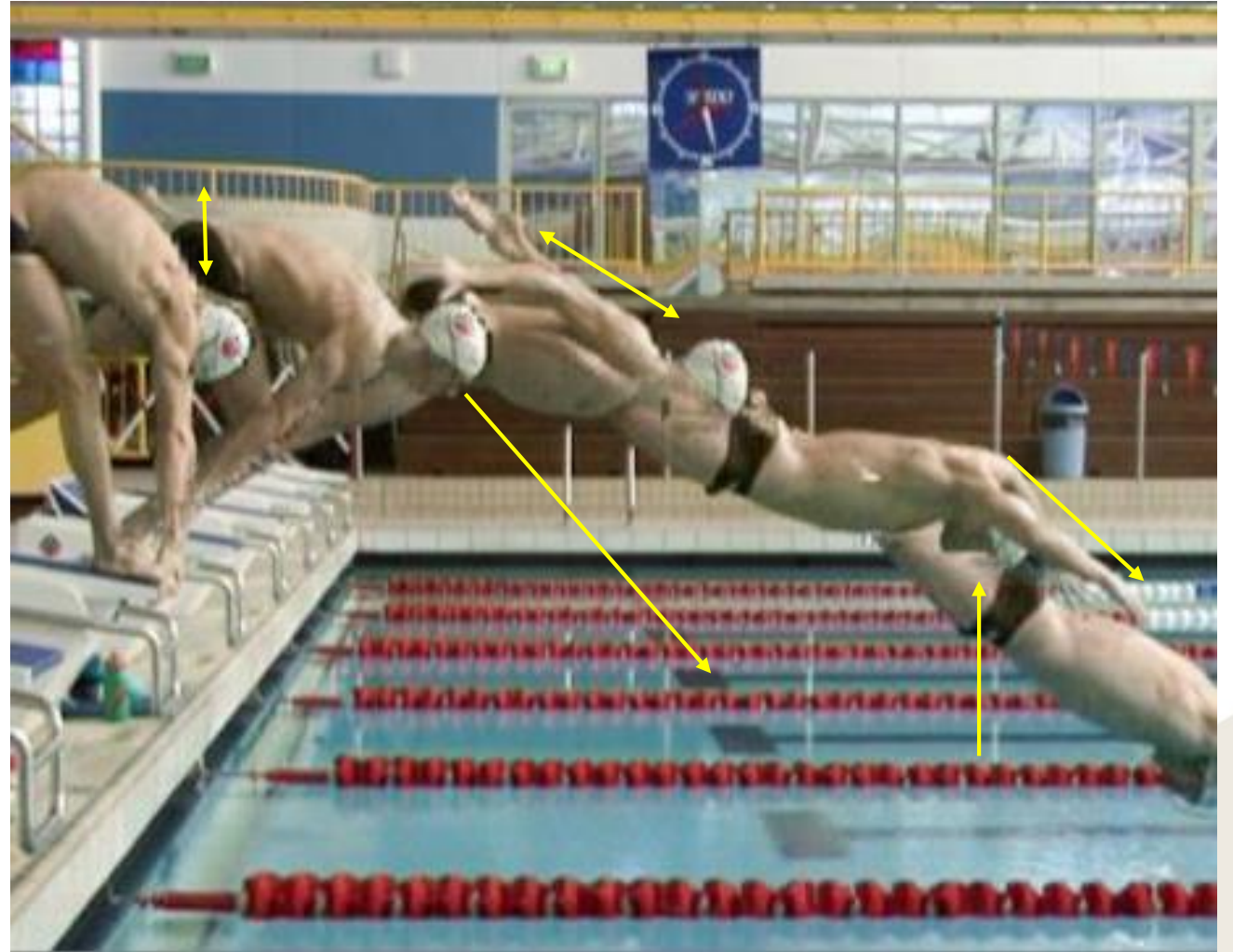
Dive Starts - Stance

- Vision – Looking at water surface
- High Hips
- Front Leg more extended
- Back leg more flexed (90-d)
- Grip – Fingers thumb
- Arms – Mostly extended



Drive – Take Off

- Pull Up with force
- Back leg drives
- Hips move higher shoulders move forwards
- Hips higher than shoulders
- Vision forwards
- Drive off ball of toes
- Legs extend explosively
- Arms travel forward at speed
- Vision back down as feet leave block

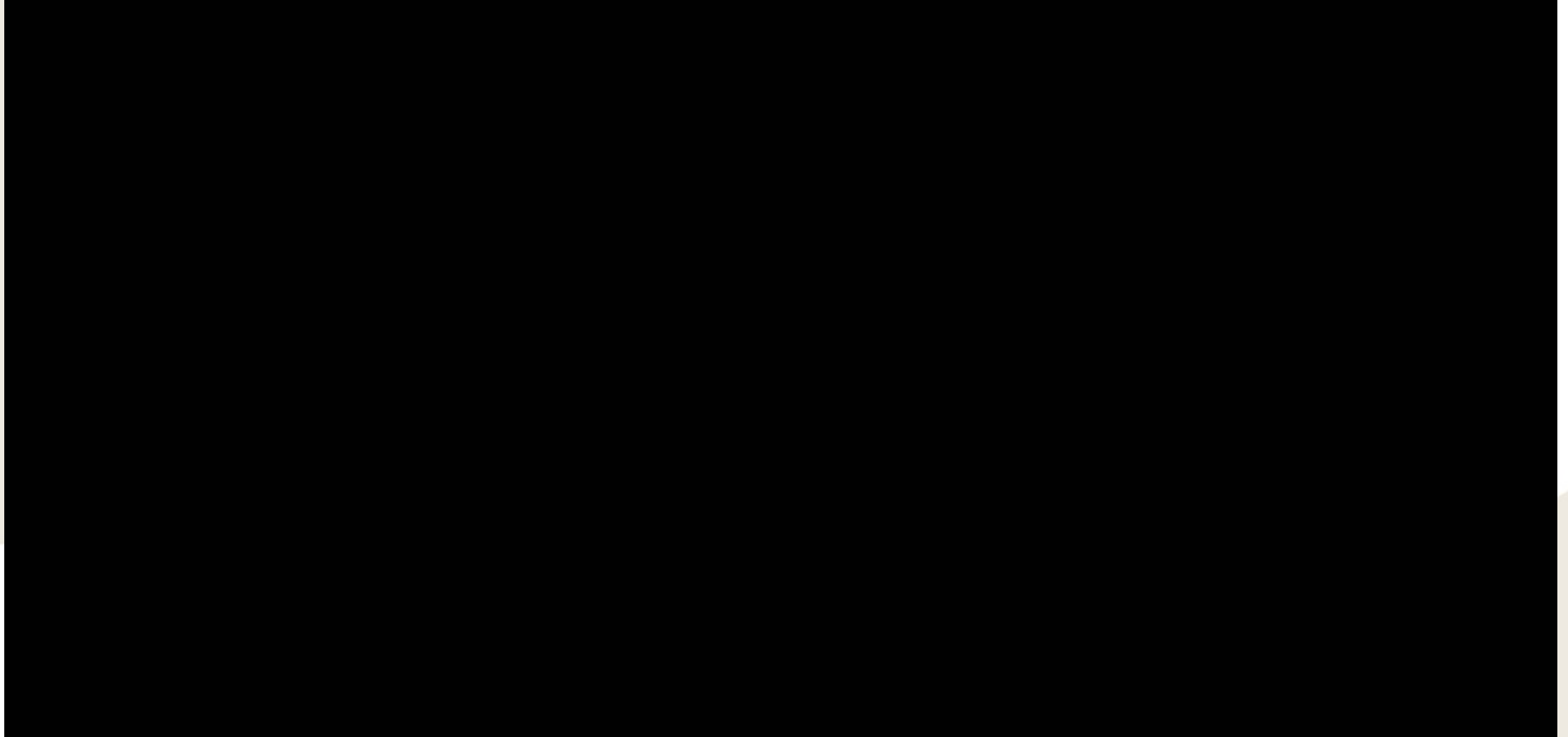


Flight

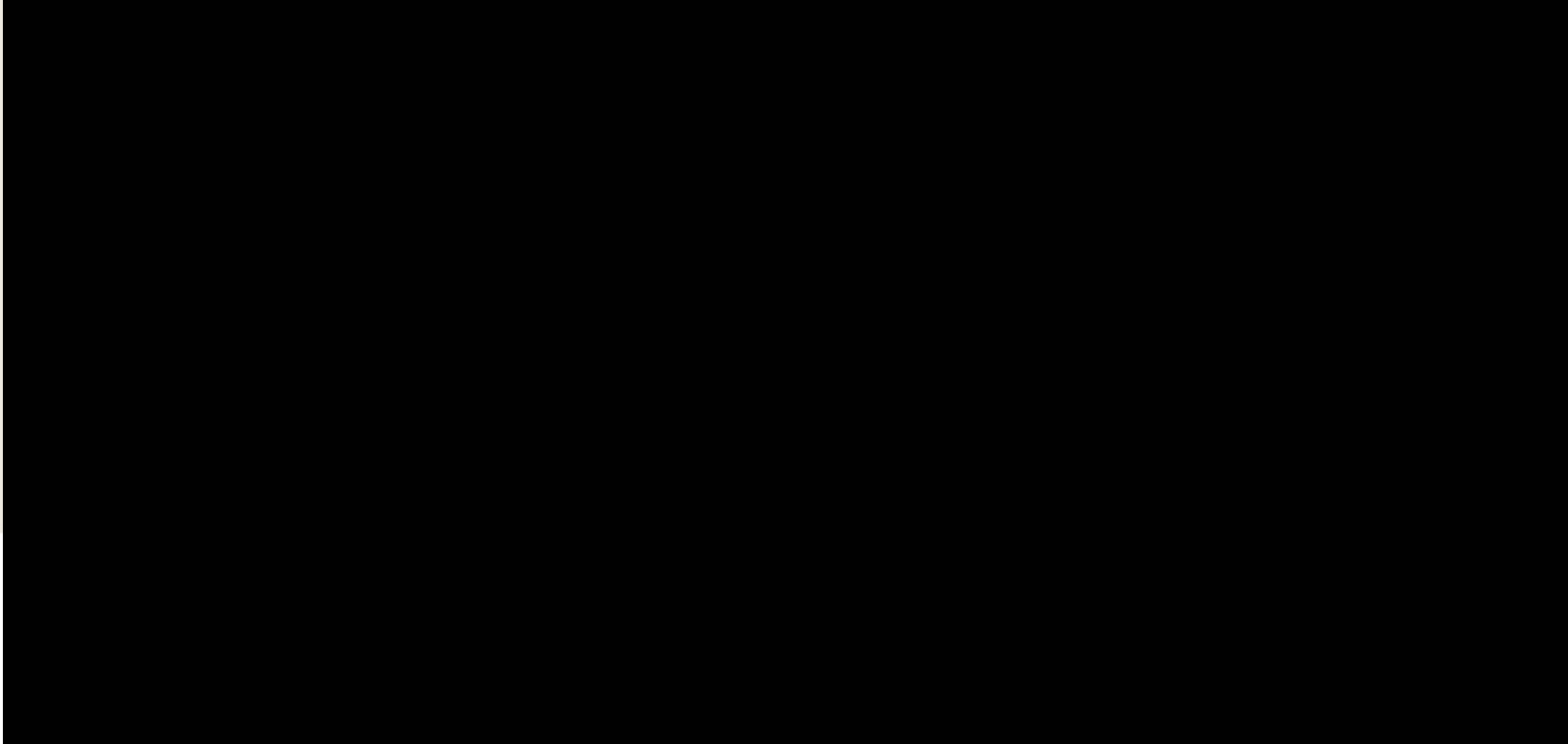
- The torso should reach extension mid flight
- The front leg should travel towards the back leg
- Arms must be streamlined before they enter the water
- Head must dip between arms to set up the entry line
- Body line should be set before hands pierce the water
- Slight pike helps transition to horizontal in the water



Track Start (Senior)

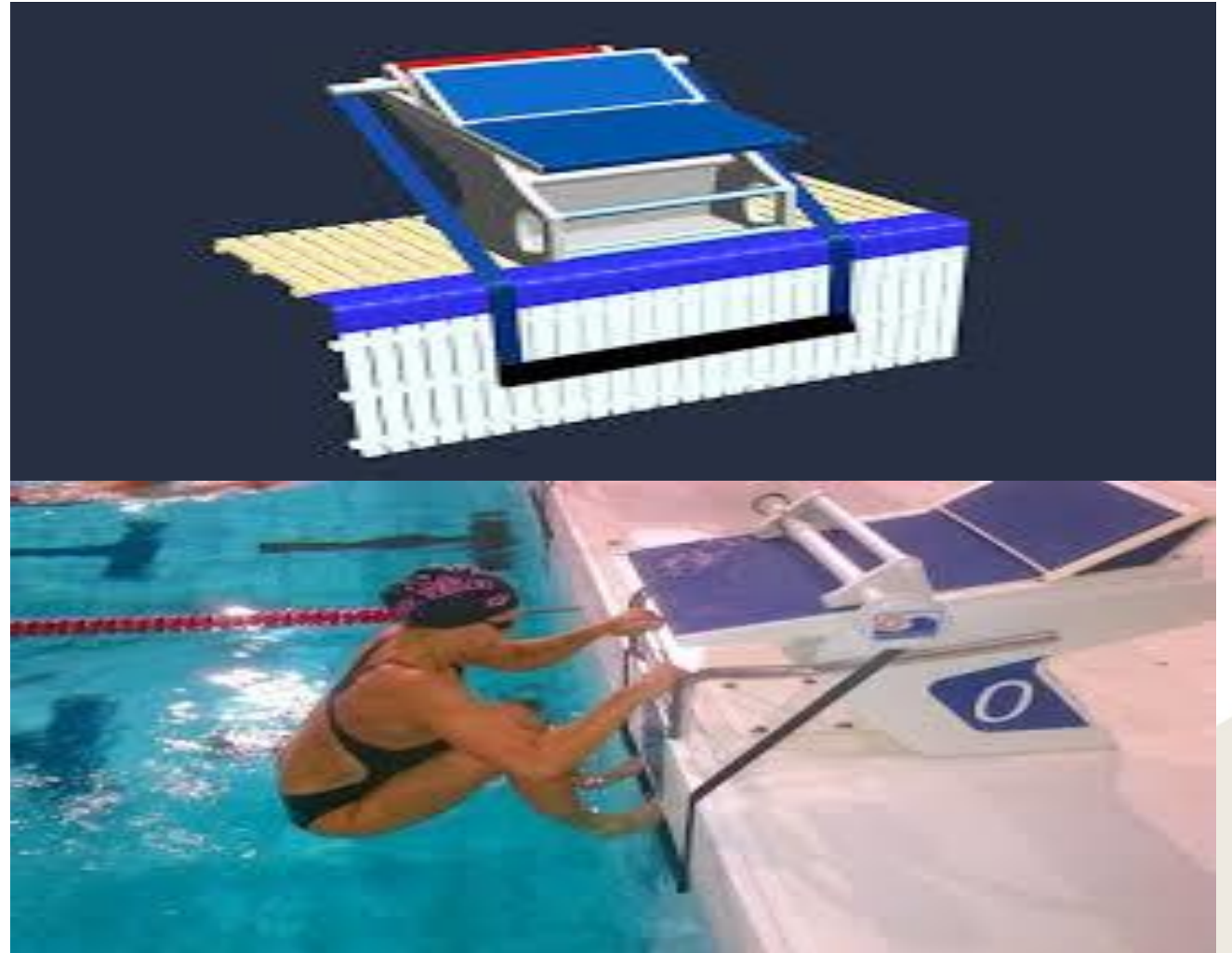


Track Start (Age Group)



Backstroke Wedge

- Eliminates slipping down the wall
- On the 'pull up' weight is on the balls of your feet, you can rest the weight here
- Body placement – Forces the feet to stay in place giving better weight distribution
- Because the body is more stable in this position there is greater 'push force' during the start phase



Checklist of Main Points Back Start



- Stance – **Strong Pull position**
spine – neck hold straight line.
- Take Off – **Hips elevate/ Head shoulders directly back/ Head shoulders elevate and back/ Vision Backwards**

Checklist Of Main Points Back Starts



- Drive – Hips thrust upwards/ arms fast backwards/ arms – Legs reach full extension together/ Body clear of water/ Vision backwards
- Flight – Arms pierce water/ Back arched/ Legs – Feet clear of surface/toes pointed/ Head squeezed by Biceps
- Entry – hole created by hands/forearms/ Sequence is Hands-elbows-Shoulders-Hips-feet/ Flick toes to draw body to streamline

Back Start - Stance

- Strong pull position
- Toes above water surface (wedge)
- Hips elevated above water surface
- Gap between hips and ankles
- Spine and neck hold a straight line



Take Off - Drive

- Legs into pads
- Hips elevate
- Head and shoulders directly back
- Then head and shoulders elevate and back
- Chin high/vision backwards
- Arms travelling at speed backwards



Flight

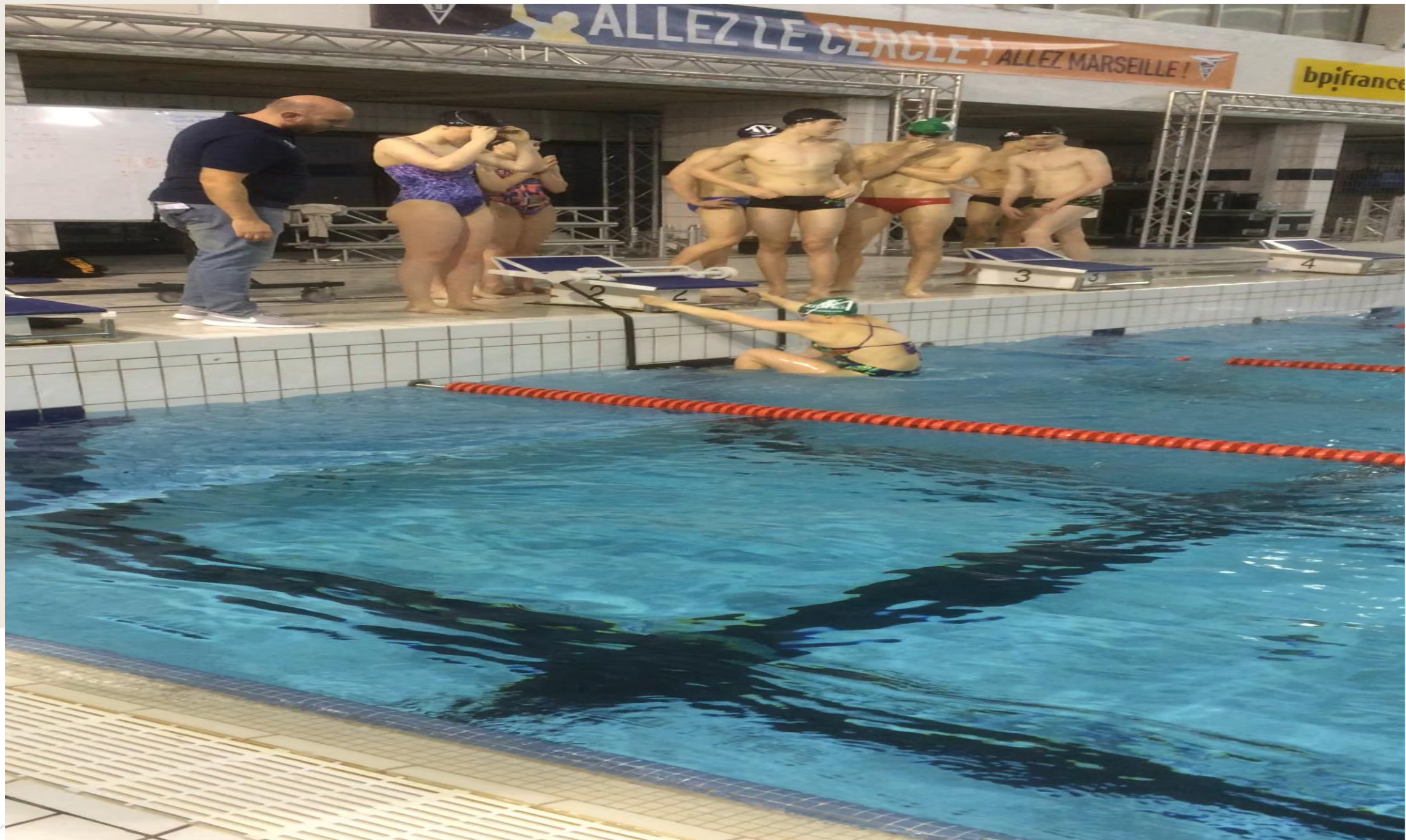
- Legs drive to extension
- Hips thrust upwards
- Arms fast backwards
- Vision directly backwards
- Arms reach full extension as legs do
- When fully streamlined should see all body clear of water
- Vision remains backwards



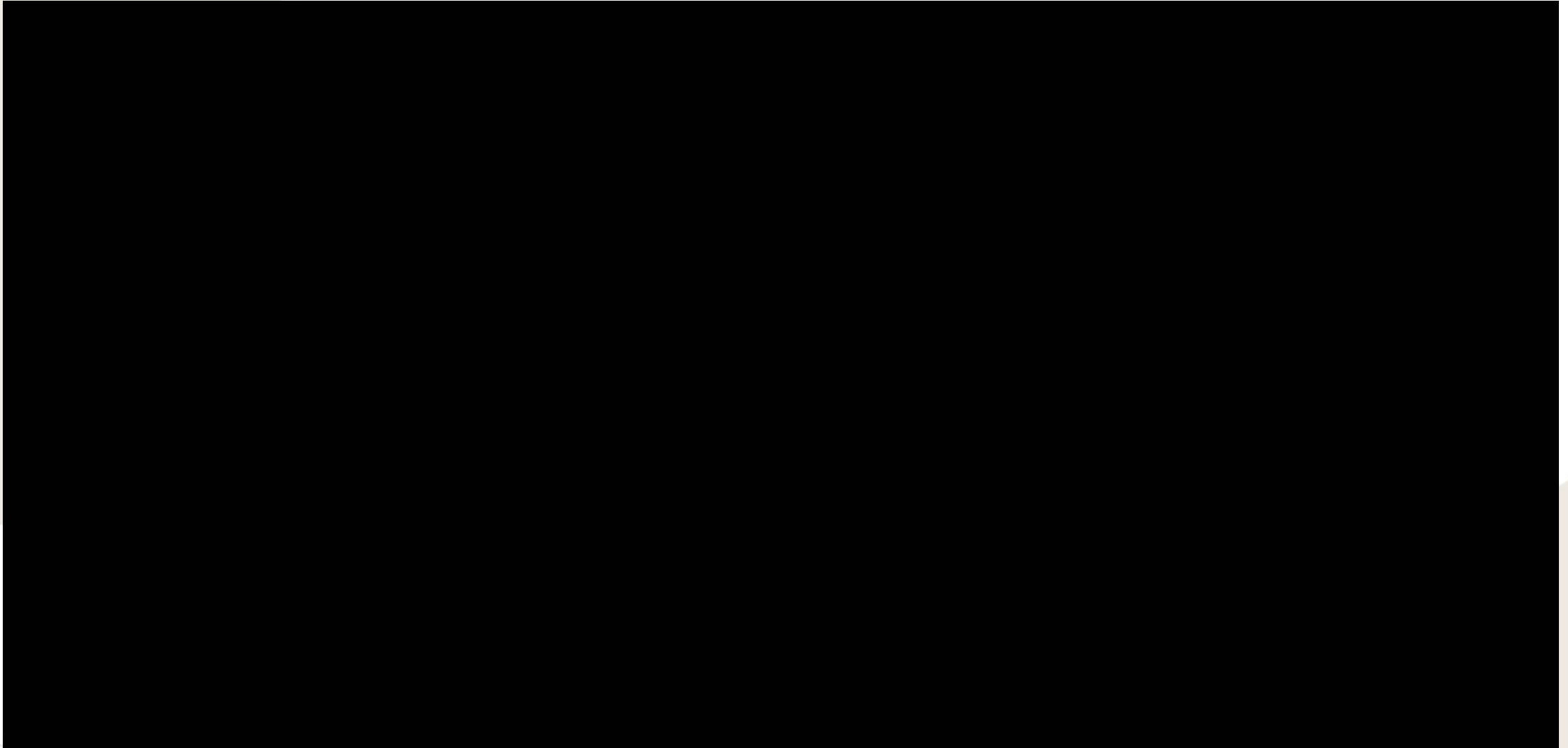
Entry

- Arms pierce the water with:
- Back arched
- Hips highest point of body
- Legs and feet entirely clear of the surface
- Toes pointed
- Head squeezed by biceps
- Entry hole created by hands and forearms
- In sequence- hands, elbows, shoulders, hips, feet.
- Flicking the toes helps draw the body into streamline to find quick horizontal plane underwater





Backstroke Start (Senior)



Backstroke Start (Age Group)

