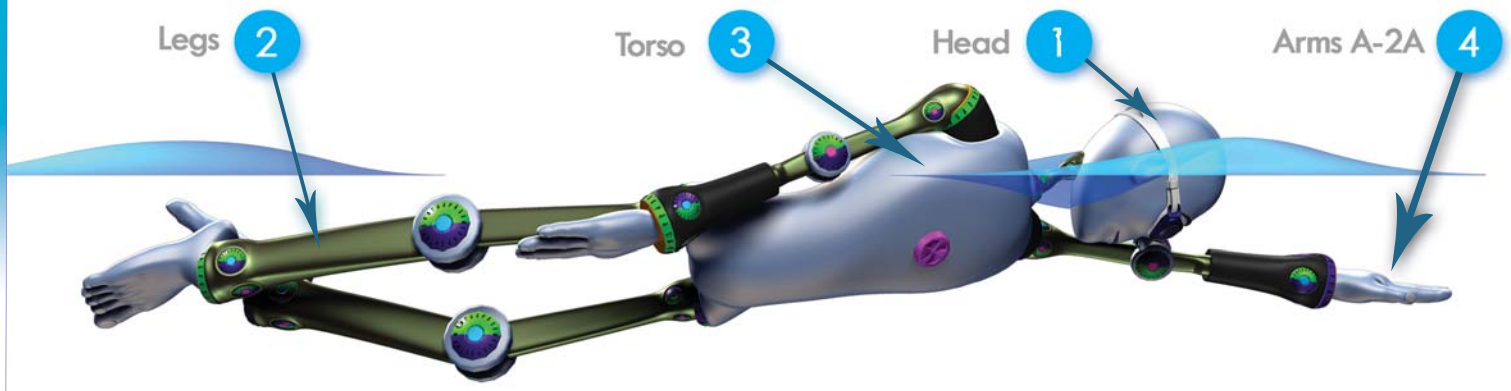
The Core of the Stroke

Defining the Core

Fluid Mechanics considers the "Core of the Stroke" to be one of the more important aspects of swimming technique. The core is frequently understated in regard to its contribution to performance and energy efficiency in the water.



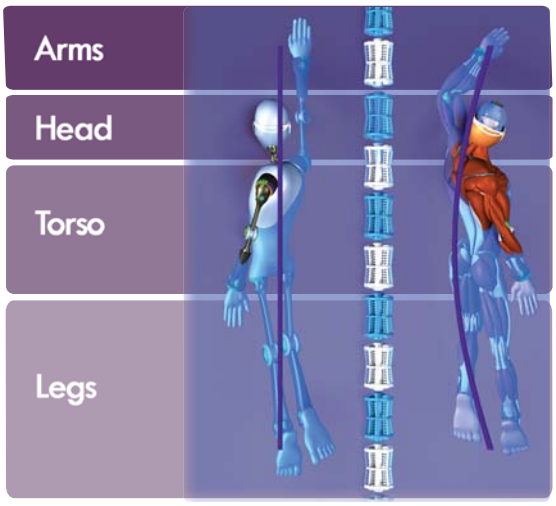
The core is made up of a combination of the head, legs, torso, and the arms in a particular position referred to as A-2A or the glide. It is the center of operations and can be compared to the frame of a car or the foundation of a house.

When employed effectively, the core fortifies stability in the water, creates a platform from which an athlete can generate powerful propulsive motions, and allows the energy being applied to be directly transferred to forward movement of the body. All aspects of performance are affected by the core.

Stabilizing the Core

The foundation of the core is stabilized by alignment of the head, back and hips.

With a solid core a swimmer is able to transfer a vast amount of the energy being output directly to forward movement (rather than in alternate directions).



Core Energy Absorption

With an unstable core much of the energy is absorbed by the flexion of a joint that is out of alignment and therefore cannot be converted into forward movement.