Proposed Design
by group II.

Front

Back

Handles

Right linkage

Fly wheel to keep connection

Path that foot follows

Frame

Left linkage

Free floating pedal

Plastic guard to protect against injury links.

Barry Pollock
* Individual Idea

* This mechanism is designed to closely follow the actual running motion. The bottom part of the machine is a solid piece with the track cut out of it. The petals would connect onto this farbar and follow the track. I have not decided how the base will be stabilized as of yet.
The idea is similar to an elliptical. The difference is with the foot position. The foot position is connected to a half joint, so when your weight is not directly on specific foot the foot not weigh down will rise. This rise will simulate the running motion more.
Leg Linkage Idea

the path of a foot in natural running motion

belt holds you in place so your hip is a ground point

treat the leg as two links

you can add resistance easily

Links A and B are adjustable with a certain range to allow the machine to be customized to the individual user. The customer would simply measure their leg from hip to knee and knee to heel, and look in a provided chart for their "personal" stride settings. With 5 bar simulators, these tabulated values would not be hard to obtain. The "personal fit" of the machine could be a marketing tool in which the end user is

Simplified... if hip belt and tabulation is too complex