Plate tectonics, the theory that the surface of the earth consists of a series of very large structural slabs of rock that are mobile and ride on the surface of the mantle, and that these plates have moved through geologic time so that the surface of the earth has changed dramatically through geologic time, has revolutionized almost every field of geology since its introduction and wide acceptance in the 1970’s. While the theory is interesting and provides explanations for a wide variety of phenomena in geology, it is also problematic for a theory of the earth that involves only a small part of the billions of years that are normative for conventional geology. The actual measured rates of movement of the plates today are in centimeters per year. At this rate the movements visualized for the plates over time would require many millions of years to complete. How can a scientist who believes the Biblical account of origins accommodate these findings? In 1994, John Baumgartner, a geophysicist employed at Los Alamos Proving Grounds, proposed a theory that the plates could move at a much faster rate, once the movement had become established, a rate that could be accommodated in short time, and even within the time framework of a global catastrophe such as the flood of Noah. We will discuss plate tectonics and its implications and introduce Baumgartner’s model and the evidence that supports it.