We consider the oldest elementary move conjecture by Nakanishi called 4-move conjecture. We extend known results concerning reducibility of knots by 4-moves. The modification of the conjecture to 2-component homotopically trivial links is a question proposed by Kawauchi. We show that Kawauchi’s question has a positive answer for all 2-component links up to 10 crossings. We discuss possible new invariants of links that are preserved by 4-moves, their limitations. (Received September 18, 2007)