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Bass defined an exotic Nil-summand of the algebraic K-theory of a polynomial extension. Later, Waldhausen extended the definition to tensor algebras and defined an exotic Nil-summand of the algebraic K-theory of an injective amalgam of groups. Our Nil-Nil theorem states, under a certain finiteness condition, that there is a natural isomorphism from the amalgam Nil to a tensor Nil. This is joint work with J.F. Davis and A.A. Ranicki. (Received January 19, 2008)