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We show, via use of the Weyl group, that every Kac-Moody algebra of indefinite type contains a subalgebra with a Dynkin diagram having two adjacent vertices whose edge labels multiply to a number greater than or equal to five. Some immediate corollaries are that every Kac-Moody algebra of indefinite type contains a subalgebra of strictly hyperbolic type, and a free Lie algebra of rank two. (Received March 03, 2006)