Let $K$ be a commutative ring, $R$ a $K$-algebra and $T_n(R)$ the algebra of upper triangular matrices. To a graph $\Gamma$ satisfying certain conditions, G. P. Barker has associated a subalgebra of $T_n(R)$ denoted $T_n(\Gamma, R)$. In this note the author considers automorphisms of Barker algebras $T_n(\Gamma, R)$ in the case when $R$ is nonassociative. For a nonassociative algebra $R$ of characteristic not 2, let $N(R) = \{a: (a, x, y) = (x, a, y) = (x, y, a) = 0\}$ for all $x, y \in R$ and $(a, b, c) = (ab)c - a(bc)$. Moreover, a $J$-automorphism of $R$ is an automorphism of $R$ equipped with the Jordan product.

It is proved that a $J$-automorphism $\psi$ of a Barker algebra $A = T_n(\Gamma, R)$ satisfying $\psi(e_{ii}) = e_{ii}$ and $\psi(e_{ij}) \in N(A)$ is the composite of an automorphism induced from an automorphism of $R$ and an inner automorphism based on conjugation by an invertible matrix in $N(A)$.

Finally, derivations of Barker algebras are considered.

{For the entire collection see MR1338148 (96a:17001)}

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