A baric algebra $A$ over a field $F$, $\text{ch} F \neq 2$, is a (nonassociative) commutative algebra with a nonzero homomorphism $\omega: A \to F$ (weight homomorphism) that is called a weight function. $A$ is called a train algebra if there are elements $\gamma_1, \gamma_2, \ldots, \gamma_{n-1} \in F$ such that the equation
\[ x^r + \gamma_1 \omega(x)x^{r-1} + \cdots + \gamma_{r-1} \omega(x)^{r-1}x = 0 \]
holds for every $x \in A$.

This paper studies train algebras of rank 4 ($r = 4$). Mainly all results are obtained for baric algebras having an idempotent element of weight one and for the train equation $x^4 = \omega(x)^3 x$. 

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