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Neha Makhijani* (nehamakhijani@gmail.com), , India, and **Rajendra K Sharma**. *The unit group of $\mathbb{F}_{q^k}(C_n \rtimes_r C_q)$.*

Let q be a prime, \mathbb{F}_{q^k} be a finite field with q^k elements and $C_n \rtimes_r C_q$ be a group with presentation $\langle a, b \mid a^n, b^q, b^{-1}ab = a^r \rangle$, where $(n, rq) = 1$ and q is the multiplicative order of r modulo n . Using the theory developed by Ferraz [Simple components of the center of $FG/J(FG)$, Comm. Algebra **36**(2008) 3191–3199], we investigate the Wedderburn decomposition of the group algebra $\mathbb{F}_{q^k}(C_n \rtimes_r C_q)$ modulo its Jacobson radical. As a consequence, the structure of the unit group of $\mathbb{F}_{q^k}(C_n \rtimes_r C_q)$ is obtained when $r \not\equiv 1 \pmod{d}$, for any divisor d of n , $d > 1$. (Received August 19, 2014)