CORRIGENDUM TO “ON THE DIOPHANTINE EQUATION $X^2 + 7^\alpha \cdot 11^\beta = Y^N$” [MISKOLC MATH. NOTES, VOL. 13 (2012) NO. 2, PP. 515-527.]

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The author regrets some technical mistakes in the proof of Lemma 3 specifically: In page 524, between the lines 9 and 11 statement that “So $\pm 11^\beta \equiv 1 \pmod{8}$, showing that the sign on the left hand side is positive and $\beta_1$ is odd, or the sign on the left hand side is negative and $\beta_1$ is even.” must be deleted.

It should be written as “So $\pm 11^\beta \equiv 1 \pmod{8}$, showing that the sign on the left hand side is positive and $\beta_1$ is even.”

In page 524, between the lines 12 and 16 the statement that “Assume first that $\beta_1 = 11 \beta_0 + 1$ be odd. We get

\[ 11V^2 = 5U^4 - 70U^2 + 49, \]

where $(U, V) = (u/v, 11^{\beta_0}/v^2)$ is a $7$-integral point on the above elliptic curve. We get that the only such points on the above curve are $(U, V) = (\pm 7, \pm 28)$. This does not lead to solutions of our original equation.” must be deleted.

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