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Beals, Gaveau and Greiner (1996) find the fundamental solution to a 2-Laplace-type equation in a class of sub-Riemannian spaces. This solution is related to the well-known fundamental solution to the p-Laplace equation in Grushin-type spaces (Bieske-Gong, 2006) and the Heisenberg group (Capogna, Danielli, Garofalo, 1997). We extend the 2-Laplace-type equation to a p-Laplace-type equation. We show that the obvious generalization does not have desired properties, but rather, our generalization preserves some natural properties. (Received January 18, 2012)