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## Recommissioning and upgrades to the FNAL muon g-2 magnets

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The recently recommissioned Fermilab muon g-2 experiment is aiming to determine the anomalous magnetic moment of the muon to 140 ppb. To achieve this level of precision, the magnetic field seen by the muon must be known at a fraction of a ppm level, which puts limits on the required magnetic field uniformity. This paper provides an overview of the g-2 magnet systems; the inflector magnet, the main ring magnet, and the 200 active compensation coils. After mechanical adjustments and shimming were performed on the magnet pole tips, the remaining integrated field errors were measured using NMR probes. These remaining higher order multipoles are reduced using the compensation coils. Three charcoal panels were also removed from the cryogenic vacuum system to prevent magnet quench due to pressure spikes. Installation and testing of the inflector magnet, as well as work toward a new inflector, will also be discussed.

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