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This document is a record of a review of calculations and witnessing of the test of the Boss Frog rollbar for MGB. The calculations were reviewed prior to, and the test was witnessed on December 29, 2005.

The calculations for the test were based on curb weight of subject vehicle of 2700 lbs. plus 330 lbs. per the SCCA/FIA standard. The force applied was the resultant of the simultaneous load requirement of 7.5 g vertical, 5.5 g front and 1.5 g side load. The calculated resultant force is a 9.4 g equivalent at approximately 12 degrees from centerline of vehicle and approximately 37 degrees from vertical. Load was applied by pulling with a 4" cylinder with a 1½" rod, requiring 2690 PSI hydraulic pressure to generate the force required. The calculations reviewed are correct based on the information provided. Maximum rollbar deformation allowed is 2" per the standard.

The test setup met the intent of the calculations based on the observed measurements. The rollbar to be tested was attached to a reinforced steel test stand with rollbar mounting points duplicating the mounting points in the vehicle the rollbar is designed to fit. The hydraulic force was applied to the cylinder from an electrically driven power unit until the required pressure was attained. A pressure gauge was utilized to determine when the required force was met at 2690 PSI.

The results of the test were that the maximum observed deformation of any part of the rollbar was approximately 7/8" along the top of the driver hoop while under load. The rollbar returned to within 9/16" of its original position upon the release of hydraulic pressure.

Based on review of Appendix J, Article 253, Sub-article 8 of the FIA standard provided, it appears that the Boss Frog Double Maxx rollbar meets or exceeds the design verification and testing requirements of the standard for a vehicle of the weight provided. Only these stated calculations, test conditions and results are herein verified.



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