

/// Race Louvers

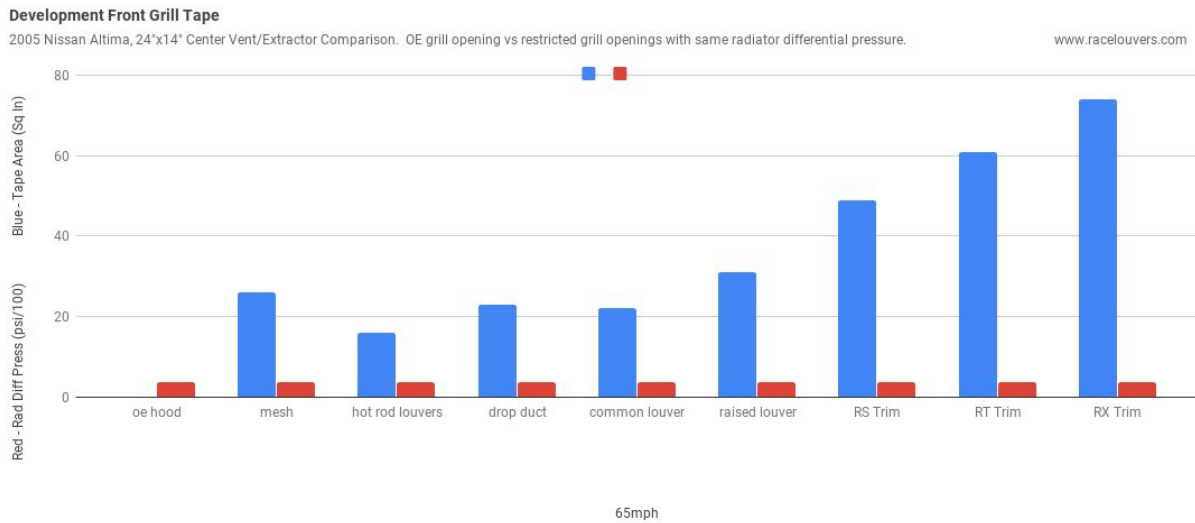
Professional R&D - Wind Tunnel Tested - Track Proven

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Grill Blockers for Maximum Front Downforce

Welcome again to Race Louvers. Recently we had some questions on the effects of restricting the front grill opening, specifically can other vents as well as our RS and RT louvers create more front downforce from a smaller front grill opening. The short answer is yes but to an extent. While at the wind tunnel we ran many tests including the RX Race Louver with and without nose tape but unfortunately did not have the time to test every possible configuration, specifically nose tape on each vent style. [Video here](#). So recently we prepared our development car and retested every vent and louver we tested in the wind tunnel adding a certain amount of nose tape to each so to maintain the same differential pressure across the radiator.



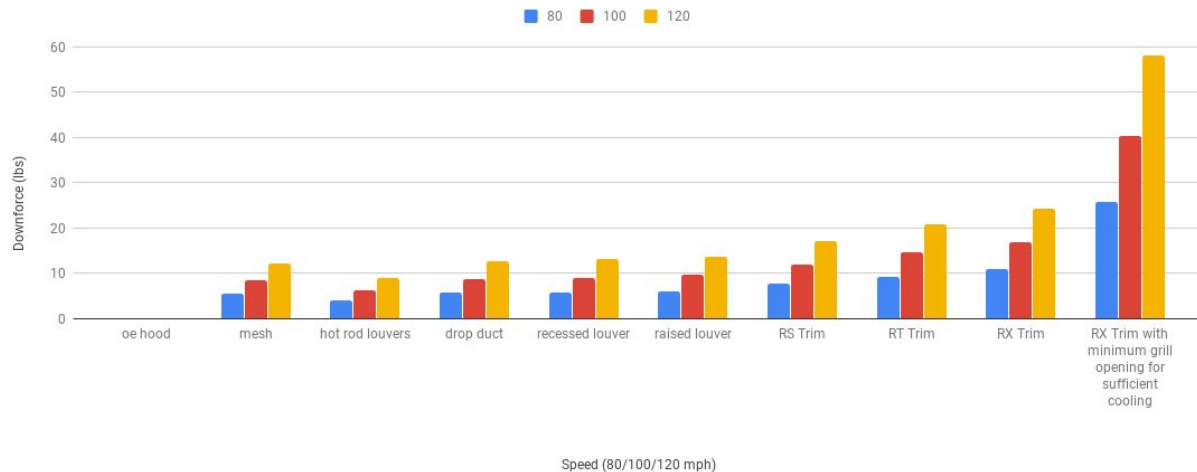
The chart above shows that in fact some nose tape can be added to most every vent style, all three Race Louvers gave the ability to add significantly more nose tape while providing the same cooling ability, 322% more front grill restriction than the competition.

The chart below was data we gathered previously at the wind tunnel. Looking at the last two tests it compares a RX Race Louver with an OE grill opening to one with maximum amount of grill tape but enough to keep the car cool. The gain in front downforce is significant.

Wind Tunnel Front Downforce

2004 Audi A4, 24"x14" Center Vent/Extractor Comparison. OE Grill Opening.

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To summarize, restricting the front grill opening can net some gains in front downforce, big gains in the case of Race Louvers. Wind tunnel data also shows that restricting the front grill opening can significantly reduce drag as well. As mentioned before Race Louvers can be used for maximum cooling with a OE grill opening or maximum front downforce with a restricted front grill or anywhere in the middle. Race Louvers Grill Blockers or nose tape are easy ways to establish a setup right for your car and can easily be changed as needed. One last thing to consider is this was a single center vent being tested, running a combination of Race Louvers such as a center vent coupled with a pair of side vents could have twice the gains, we'll be testing this during our next visit to the wind tunnel.