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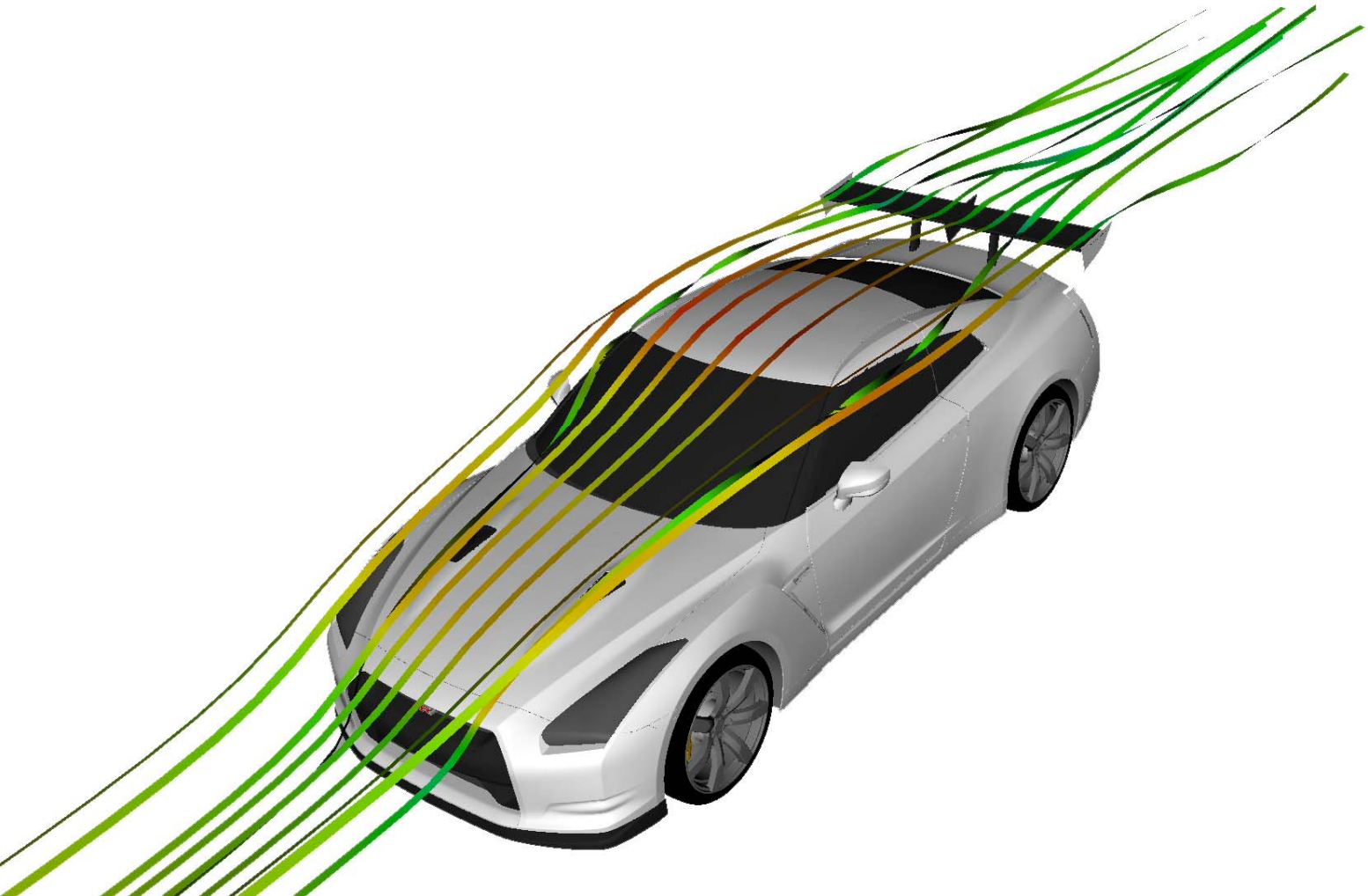
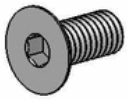
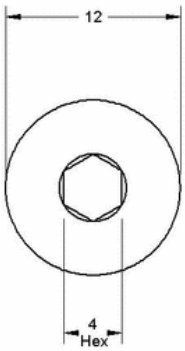
R2.STATIC R35 GT-R Install Guide
OE Fit

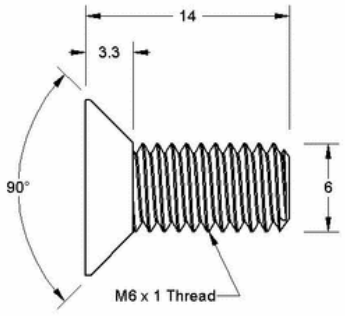


Mounting Hardware for OE Fit Uprights

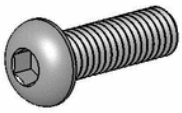
Flathead M6

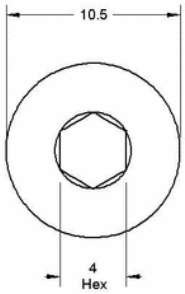


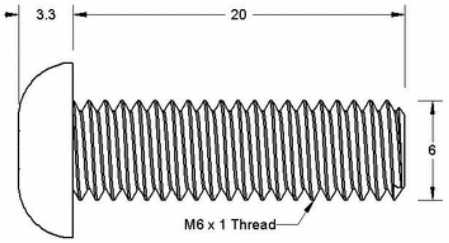




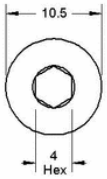
M6 x 20

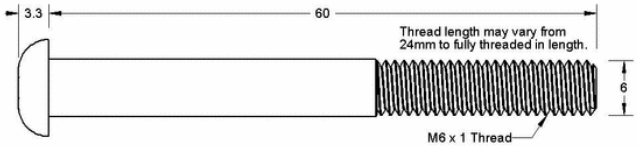




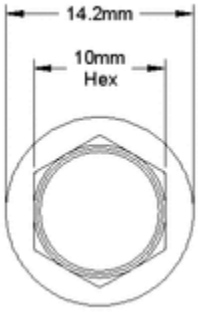


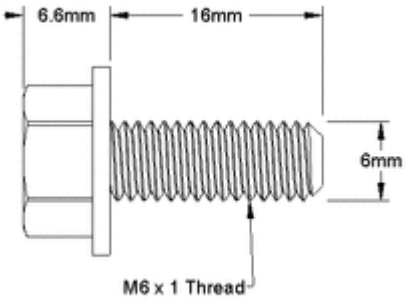
M6 x 60





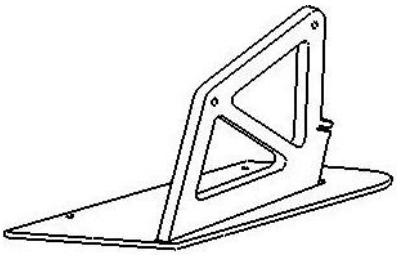
M6 x 16MM Hex Bolt

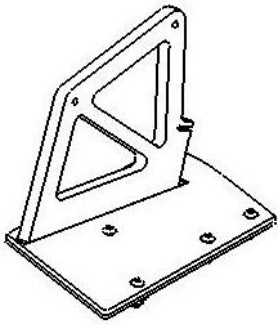




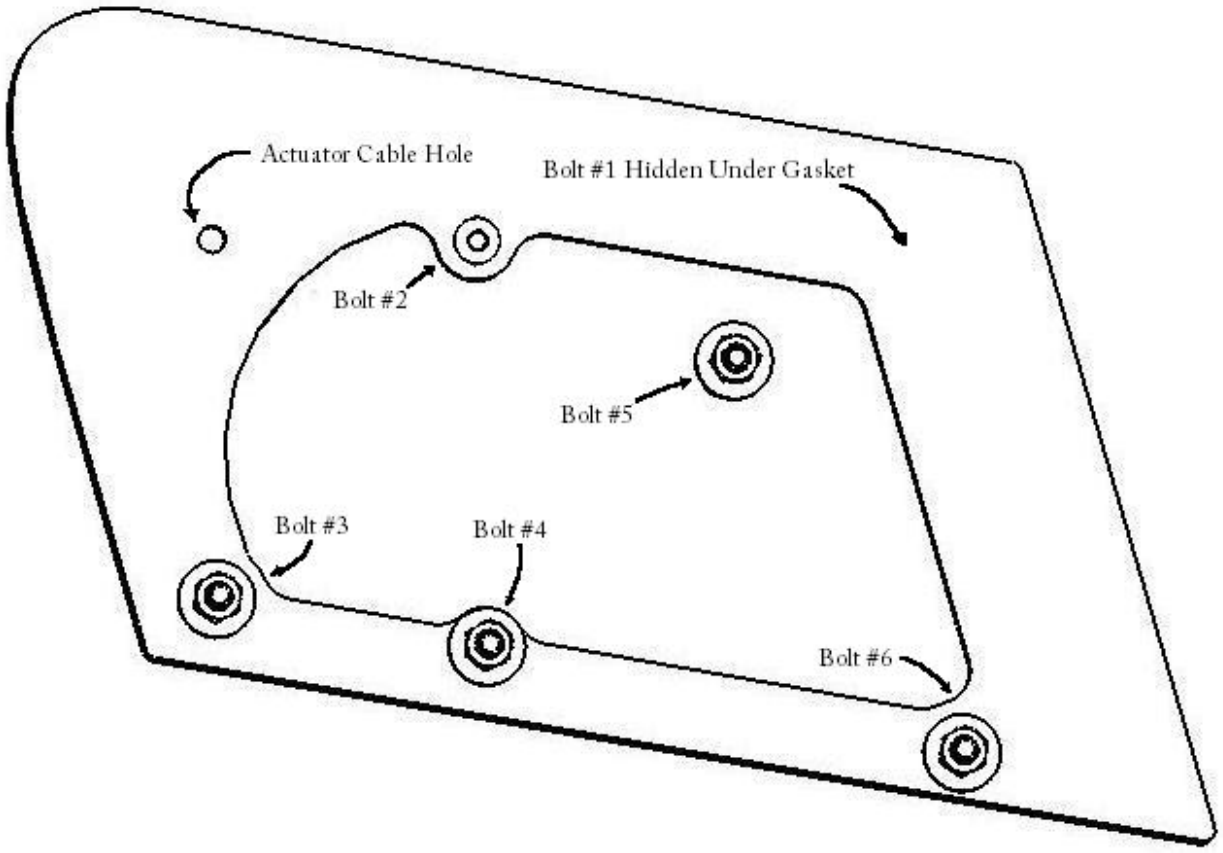
1. Removing the Factory Wing (IMPORTANT)

A wire harness passes from the trunk to the spoiler. Inside this harness the power cable makes a long loop. If you cut it off flush, to remove the brake light, the trunk latch will not work. Cutting it half way will keep the power loop intact and prevent you from having to solder any wires. Put heat shrink or electrical tape on the cut end. **Test the trunk latch functionality before closing the lid.**





OE Mounting Plates and Uprights



Top View of the passenger side gasket.

Passenger Side Deck lid.

2. Trunk Mounting

Use the supplied black vinyl disk to cover up the Actuator Cable Hole (shown in the gasket view above) left on the deck lid when the stock wing was removed. Cover the hole on each side. These will get removed if the wing is upgraded to a Dynamic Wing.

Bolt each upright to the trunk adapter plates using the M6 Flathead screw, Bolt #1 (McMaster number 91294A237). *Note that this screw does not pass through the gasket.*

Place the gaskets for each side on top of the trunk as shown above.

Bolt 2

From the bottom side of the trunk lid, screw Bolt #2 (M6 x 16mm Flange Hex Head Screw, McM 98093A436) into the upright. *Note: The bolt passes through an existing hole in the top skin of the deck lid, through the gasket, through the foot, and screws into the upright. No washer is used. The bolt head is on the under side of the deck lid.*

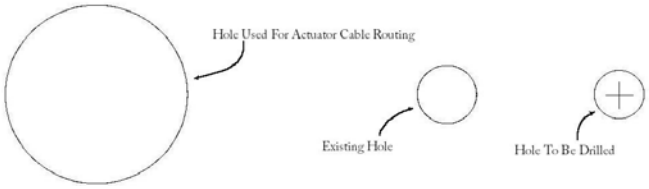
Bolts 3 and 4

From the top of the trunk lid, bolts #3 and #4 (M6 x 1 x 20 MM long, McM 92095A240) pass through the foot, the gasket, and existing holes in the deck lid. The bolts can be secured using the included washers and nyloc nuts, or, for a more finished look, the stock nuts that held the stock wing on can be used. *Note, the bolt head is in the top of the mounting foot / plate.*

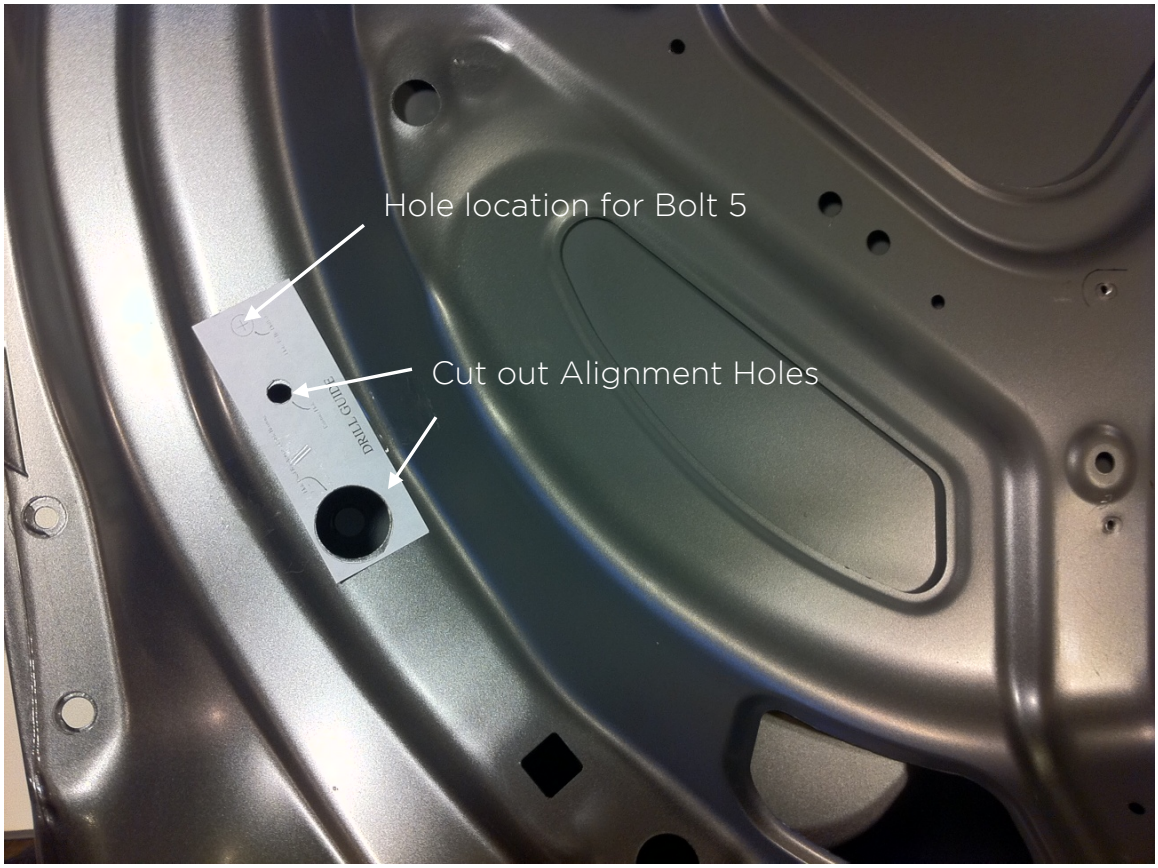
Bolt 5

Bolt 5 holds the front end of the plates securely on the deck lid. A ¼" hole should be drilled through the deck lid top skin using the foot as a drill guide for Bolt #5. Only drill through the top skin of the deck lid. The bottom hole will be drilled from below, using the provided template. This ensures accurate alignment.

The ¼" hole through the deck lid bottom skin should be drilled from the bottom side using the drill guide in the image below. Cut out the image, which prints to scale, and use it as a drill guide. The head of Bolt #5 (M6 x 1 x 60 MM long, Mcmaster number 92095A254) will sit on top of the mounting foot / plate. The nut sits on the bottom side of the trunk lid. The bolts can be secured using the included washers and nyloc nuts, or one of the stock nuts that held the stock wing in place.



DRILL GUIDE



Bolt 6

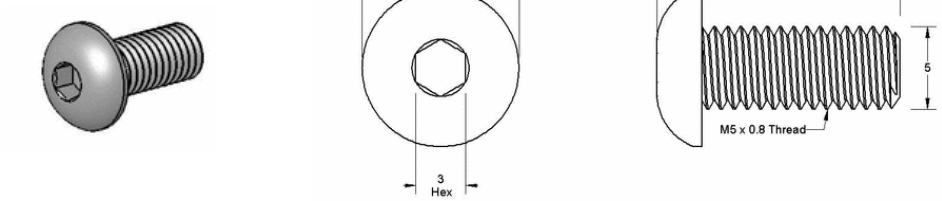
Bolt #6 (M6 x 1 x 20 MM long, Mcmaster number 92095A240) passes through the foot, the gasket, and a drilled hole in the deck lid. This hole can be drilled using the foot as a guide. The bolts can be secured using the included washers and nyloc nuts, or the stock nuts that held the stock wing on can be used.

Center Hole from OE Wing

The OE GT-R wing has color matched vinyl discs that cover the bolt holes between the top and bottom wing parts. Use one of these dots to cover the center hole left in the deck lid after removing the stock wing.

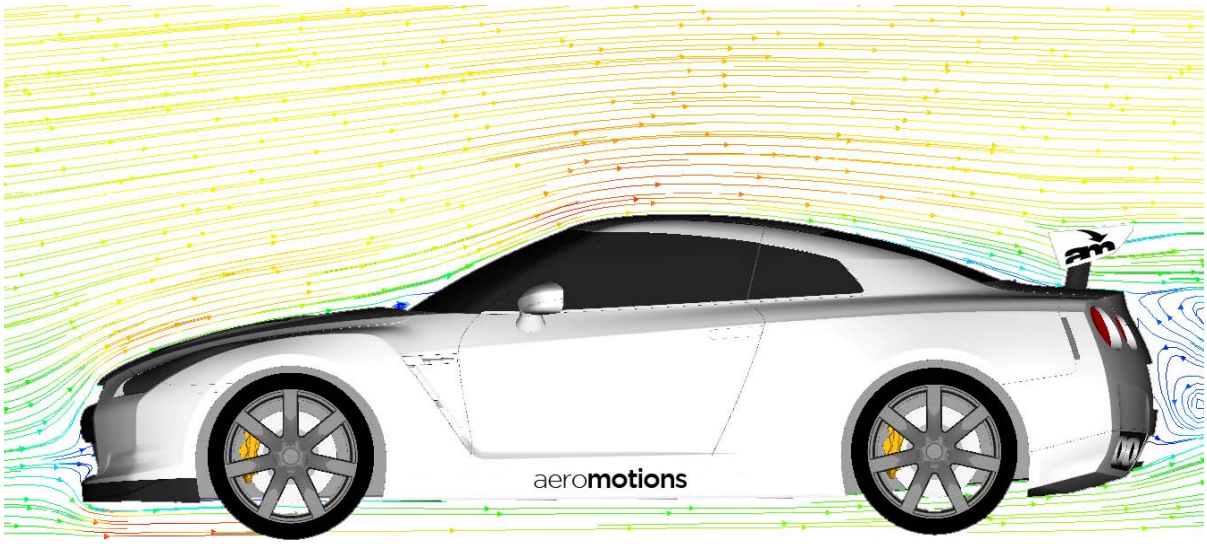
Mounting Hardware for End Plates

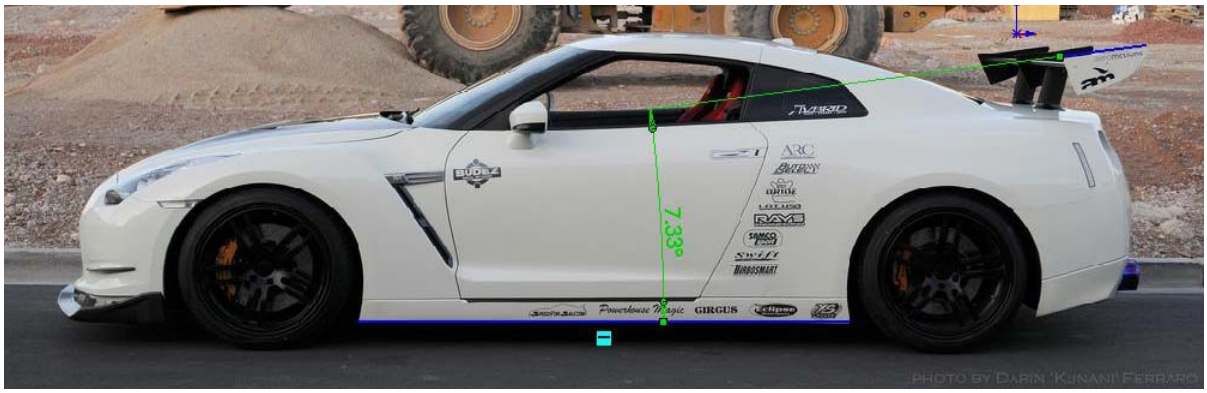
M5 x 12



3. Tuned for your GT-R

The Computational Fluid Dynamic (CFD) model of the GTR, shown below, will let you see how the air flows around the GT-R. It's worth noting that the air follows the rear window of the car, approaching the wing at a downward angle. This "apparent angle of attack" means the wing is actually operating at a higher angle of attack than you would measure with a level (which assumes the air is coming straight on). This is why your wing has a maximum stall angle of 7.4 degrees when mounted on the GTR (instead of the 14.2 degrees of the wing by itself).



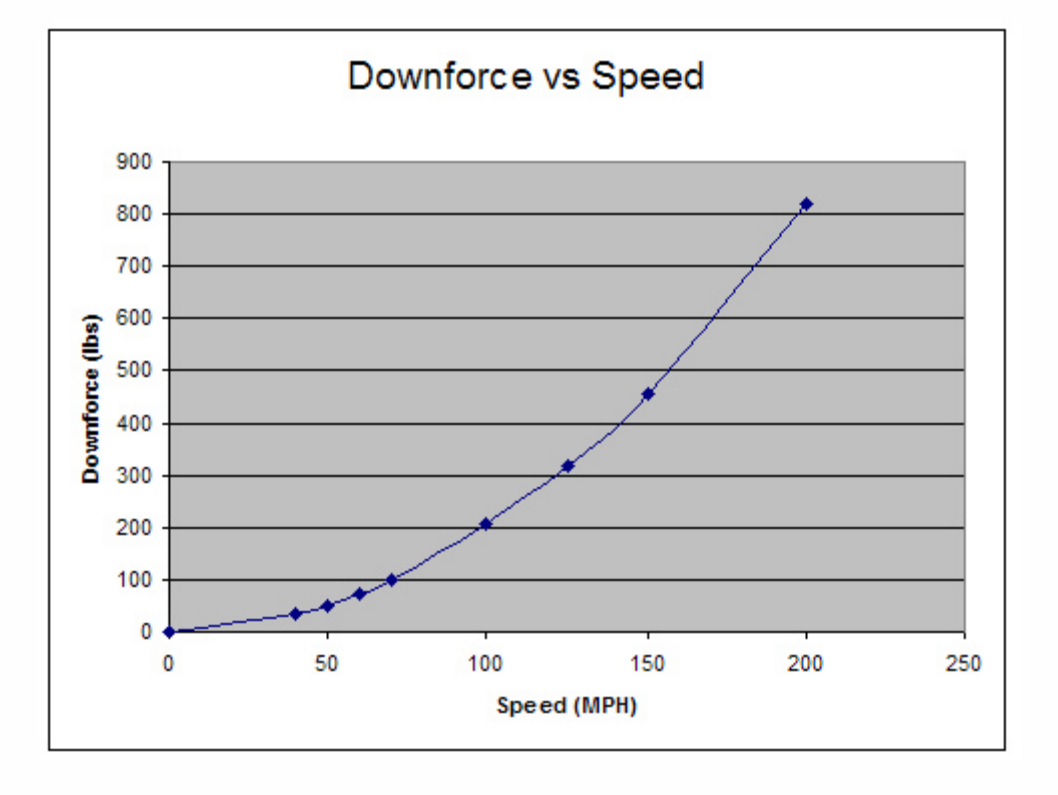


Tuning Cornering Angle

This graph gives the maximum downforce as a function of speed for the Nissan GT-R at 7.4 degrees

The cornering angle should be adjusted based on the front aero on your GT-R. The Aeromotions wing features a high performance airfoil. With an Aeromotions wing, small wing angles produce much more downforce than standard wings at the same angle. When tuning on a new car, the goal is to get the rear aero (wing, diffuser, etc) to balance the front aero (splitter, canards, etc). As a rule of thumb, a 30-60mm front splitter should start with 2-3 degrees of wing angle, and increase 1 degree at a time.

As the below graph shows, the effect of the wing will increase with the square of speed. Low speed handling is dominated by tires and suspension, high speed handling is dominated by aero. The crossover point is somewhat unique to each car and setup.



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PROFESSIONAL INSTALLATION IS HIGHLY RECOMMENDED and products are understood by consumer to be OFF-ROAD USE ONLY upon purchase. RACING IS INHERENTLY DANGEROUS. The consumer assumes responsibility and all liability associated with operating an Aeromotions wing upon purchase. CHECK ALL EQUIPMENT before racing. Car setup is unique. The consumer is responsible for ensuring the correct setup, tuning, and working of the Dynamic Wing with their vehicle setup.