## CorkSport Cold Air Intake.

When you set out to make a cold air intake (CAI) you look at a few things. First you of course want to make more power over stock so we look at a free flowing intake. The factory intake overall on the Mazdaspeed 3 is chalked full of poor bends and choking points. As we found with our Stage II short ram intake, just by changing the filter section you get a large increase in horsepower when coupled with the turbo inlet pipe that runs between the intake section and the turbo, the increase

is even more. During initial testing we saw a 10-12% increase in power and torque just with the full StageIII Cold Air intake system. Nothing else was changed on the car except the intake. Combined with other modifications this could be even more.

The next thing you look at is how the cold air can benefit the car. The Cold Air Intake sucks are from the fender liner instead of the hot engine bay. While testing we saw differences of up to 50



degrees Fahrenheit here in the northwest. This could be higher in other parts of the country that hit much higher temperatures. The temperature difference is because a SRI intake sucks in air from the engine bay. While driving the engine bay is not much warmer than outside but while you sit the engine bay becomes very warm. Moving the intake to the fender liner pulls air that is not in the engine bay so the air is much cooler. The advantage of the SRI intake is that the path to the turbo is greatly decreased and there is almost no chance of sucking up water during high water seasons seen in parts of the country. We came up with a system that is convertible and upgradable so you can have your cake and eat it too. By purchasing the StageIII Cold Air Intake you can convert to our StageII Short ram quickly and easily by removing a pipe and moving the filter location.



The last thing you want to look at is how you can be different and better than the competition. We purchased a popular competitors Cold Air intake to head to head test the intake against ours and against there claims of 33hp. First off the popular competitors is a one piece unit so it can not be changed to a short ram for high rain and cold weather months. The Corksport is fully interchangeable by just moving the filter and taking

out the cold pipe of the intake. We then put them to the test on the dyno. The above graph shows the results. The red line is the StageIII Corksport Cold Air Intake. This replaces the entire intake system with newer more efficient pipes. The Green line is the dyno of the Corksport Cold Air Intake without turbo inlet pipe. Notice the peak power is almost the same but there is massive increase in mid range power and torque with the optional turbo inlet pipe. The Pink line is the popular competitors Cold Air Intake. If you look at the horsepower and torque compared to the Corksport intake you notice the lines stay together for awhile before diverging slightly in the mid range and top end. Both intakes show improvements over stock but the CorkSport Intake shows slightly more mid range and upper rpm power and torque. The Corksport StageIII Intake that comes with optional turbo inlet pipe shows the most gains overall being at some points 7% more efficient than the popular competitors. The turbo inlet pipe is also not offered by the competition making the upgrade to the full system a perfect choice for those that want the most efficient system posible. At no point could we duplicate the +33hp gain or roughly 15% improvement claimed by this competitor.