

cast iron vs steel headers

Posted by norman#99 - 11 Mar 2013 07:49

After my third visit to the muffler shop because of the rear donuts breaking, they decided it would be a good idea to weld the rear muffler to the frame, in short road trip from Sedona to Phoenix, one of the headers is now broken. Lesson learned, the system is designed to move with the motor.

My car is low on torque and I have heard that the cast iron increases torque, weight isn't a problem for me and if I can pick up at least 2lbs of torque that should be more important than the 10 or so pounds in weight gain.

Has anybody dyno'd using both headers for a good comparison?

Thanks,

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Re: cast iron vs steel headers

Posted by Sterling Doc - 11 Mar 2013 08:34

Nope, looks like you are the test case, Norm!

If you can, do a direct before and after comparison on the same day.

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Re: cast iron vs steel headers

Posted by norman#99 - 11 Mar 2013 18:49

Would be difficult for me to change headers at the dyno, but I just had it dyno'd twice over the past few months, so I have pretty accurate numbers to compare it to, I hope to be back at the dyno in Phoenix Friday and will let you know after our race this weekend at Firebird Main.

The weight difference between steel and cast iron:

The two steel pieces are 5 pounds and 4 pounds total 9 pounds

The two cast iron are 11 pounds and 8 pounds total 19 pounds

Thanks

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Re: cast iron vs steel headers

Posted by norman#99 - 15 Mar 2013 19:23

The results are in,

With steel headers and fine tuning, I had 139/136

With cast iron headers just installed, first run 134/129 third run with no adjustments
.....136/133

So, on a different day about one month later, with no adjustments made, the car is down 3hp and 3lbs of torque, but, they are 10 pounds heavier, if that is an advantage for any reason. With some adjusting on the ECU, I am back to the cap, but with the extra weight and possibly no more cracking header issues.

Steve Marlow was at the dyno just before my car went on and he is 138/138 with a 1983 motor. My car has 88 pistons and the over lay of our dyno runs are just about identical.

For sale, one slightly used pair of cast iron headers:)

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Re: cast iron vs steel headers

Posted by AgRacer - 15 Mar 2013 19:37

What does a normal dyno graph look like for these motors? I did a baseline back in January and both my tq/hp curves shallow out at 3000 then steepen back up at around 3750 and peak at 4500 before continuing on to max power. The dyno was done at almost perfect conditions (

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Re: cast iron vs steel headers

Posted by Sterling Doc - 16 Mar 2013 05:03

Norm, thanks for the data - interesting, as always. If you got back to the cap with tuning to the cast iron headers, you decided against them due to weight? Or why. Were power curves similar in the end? The first run or two will always be lower if the car is not fully up to temperature.

Good to see some more data that early cars/motors can get to the cap with some tuning!

Keep the dyno data coming, guys!

I'll post up some representative dynos later.

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