

HONDATA®

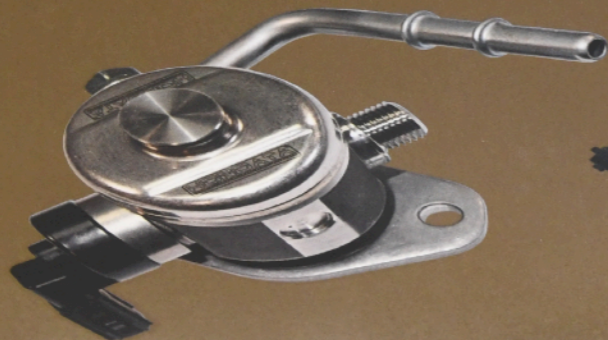
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HONDATA
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Engine Computer Tuning Solutions
for Honda and Acura

DIRECT INJECTION FUEL SYSTEM UPGRADE

- High pressure direct injection pump
- Low pressure high flow in tank pump
- High flow fuel injectors



www.hondadata.com
For race use only



Low Pressure fuel pump

Low Pressure fuel line

High Pressure fuel pump

High Pressure fuel line

High Flow fuel injectors

Fuel pump software

Calibrations

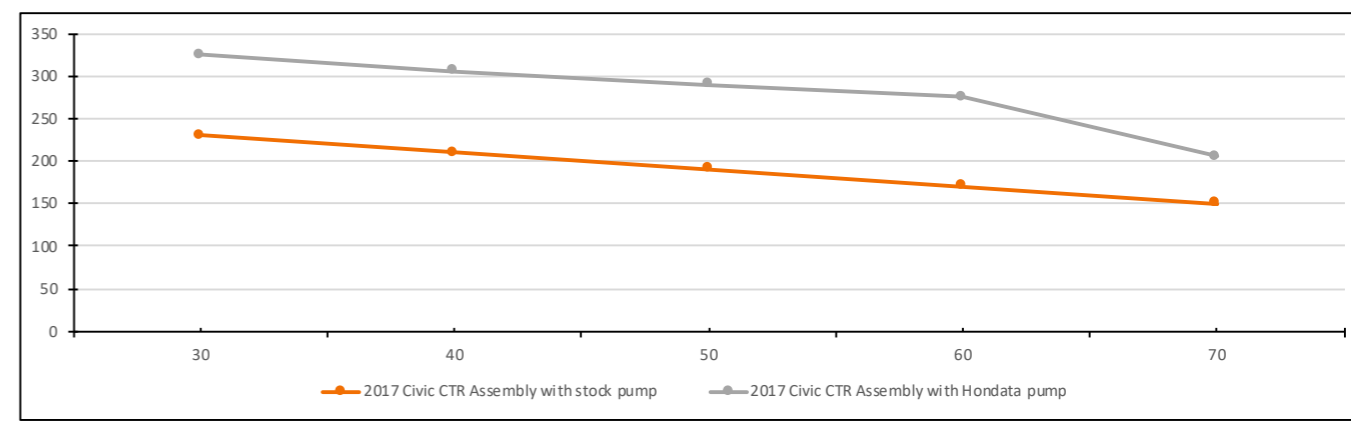
- The components that make up the fuel system
- All items are needed

Low pressure fuel pump

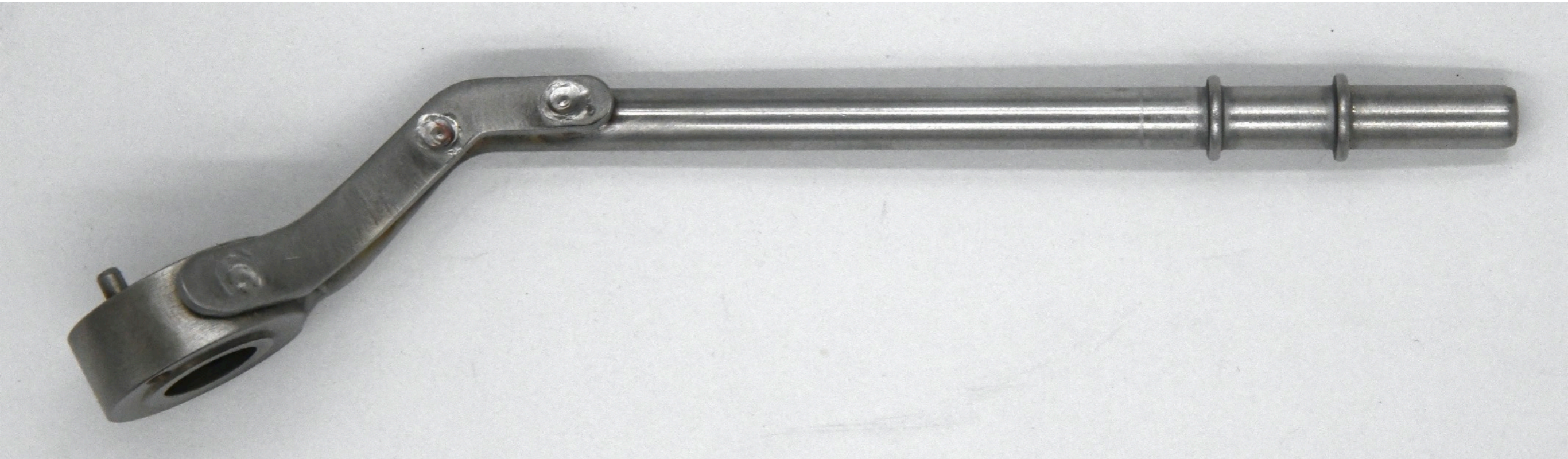


- Hondata LP pump flow tested in the fuel cage
- 37% more flow than stock at 70 psi

Pump	In tank flow l/h @ 4.1 bar (70 psi)	Current (amps)
Stock	150	8.0
Hondata	205	13.2

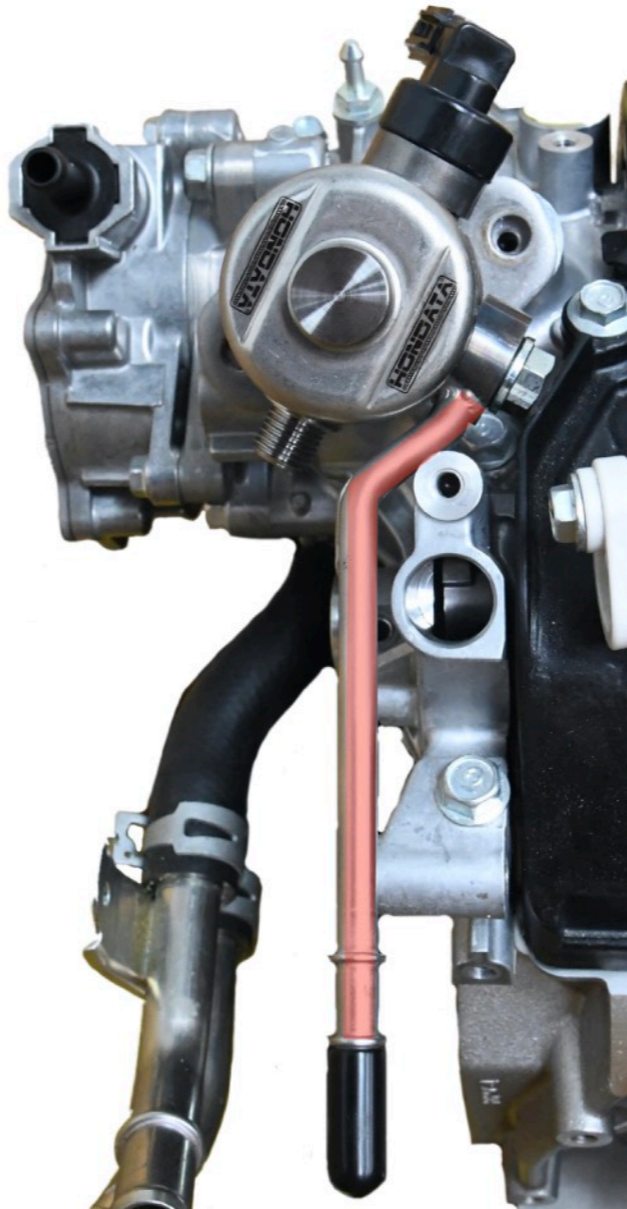


Hondata Low pressure fuel line



- Stainless steel
- Tested at multiple HP levels for optimal flow
- Easily connects with the stock low pressure fuel line
- Double bead for OEM security fitment

Hondata Low pressure fuel line



- Custom fabricated and mandril bent; made in the USA
- Designed to fit the tight confines of the engine bay
- Tested at multiple HP levels for optimal flow

Fuel injectors



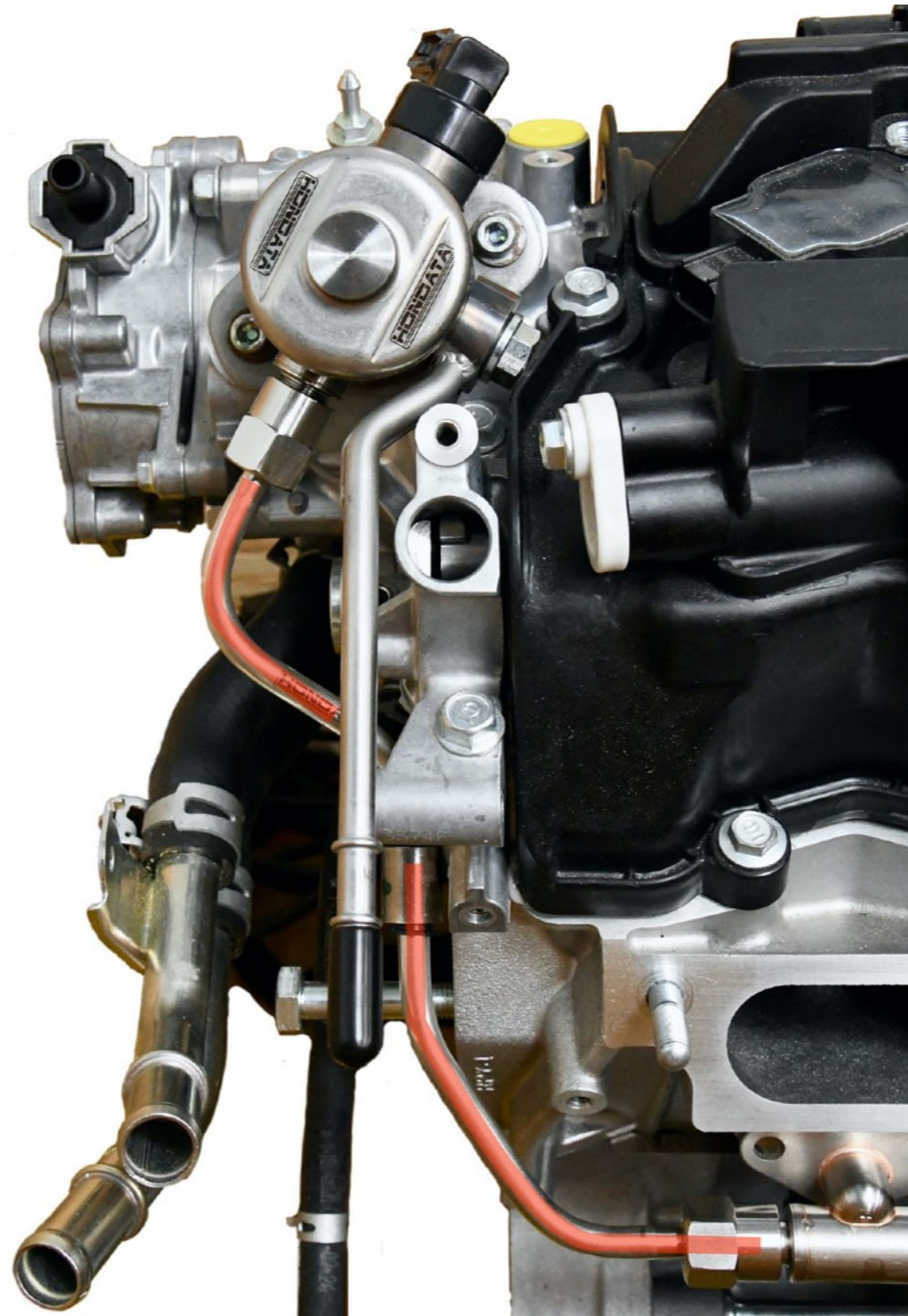
- 20% flow over stock
- Duty cycle $> 35 - 40\%$ can cause misfire
- High flow injectors reduce the injection and spark overlap which will eliminate misfire

Hondata high pressure fuel line



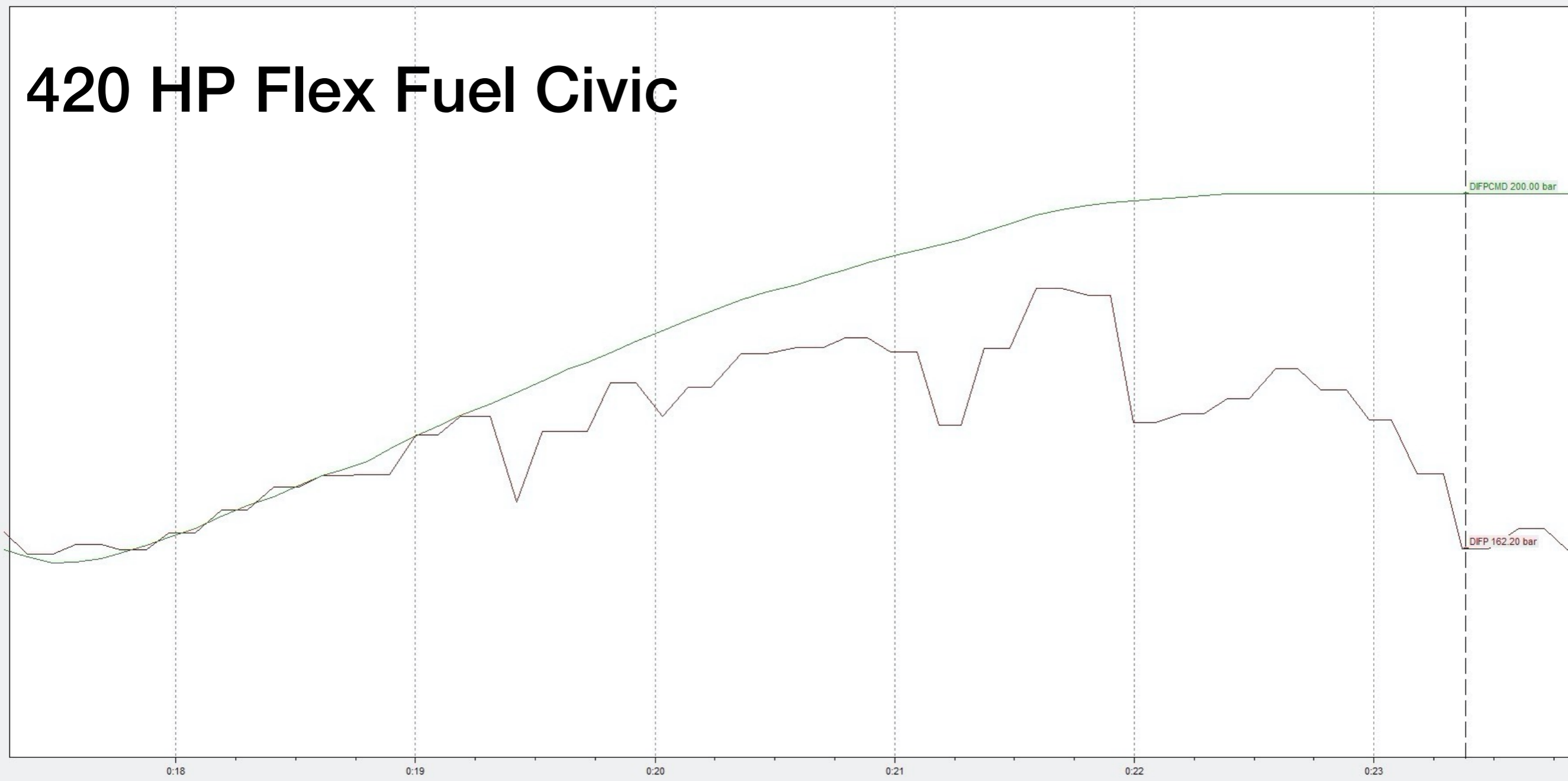
- Custom fabricated and mandril bent. Made in the USA
- Tested at multiple HP levels for optimal flow
- Stock high pressure fuel line restricts flow over 400 hp

Hondata High pressure fuel line



Stock high pressure fuel line

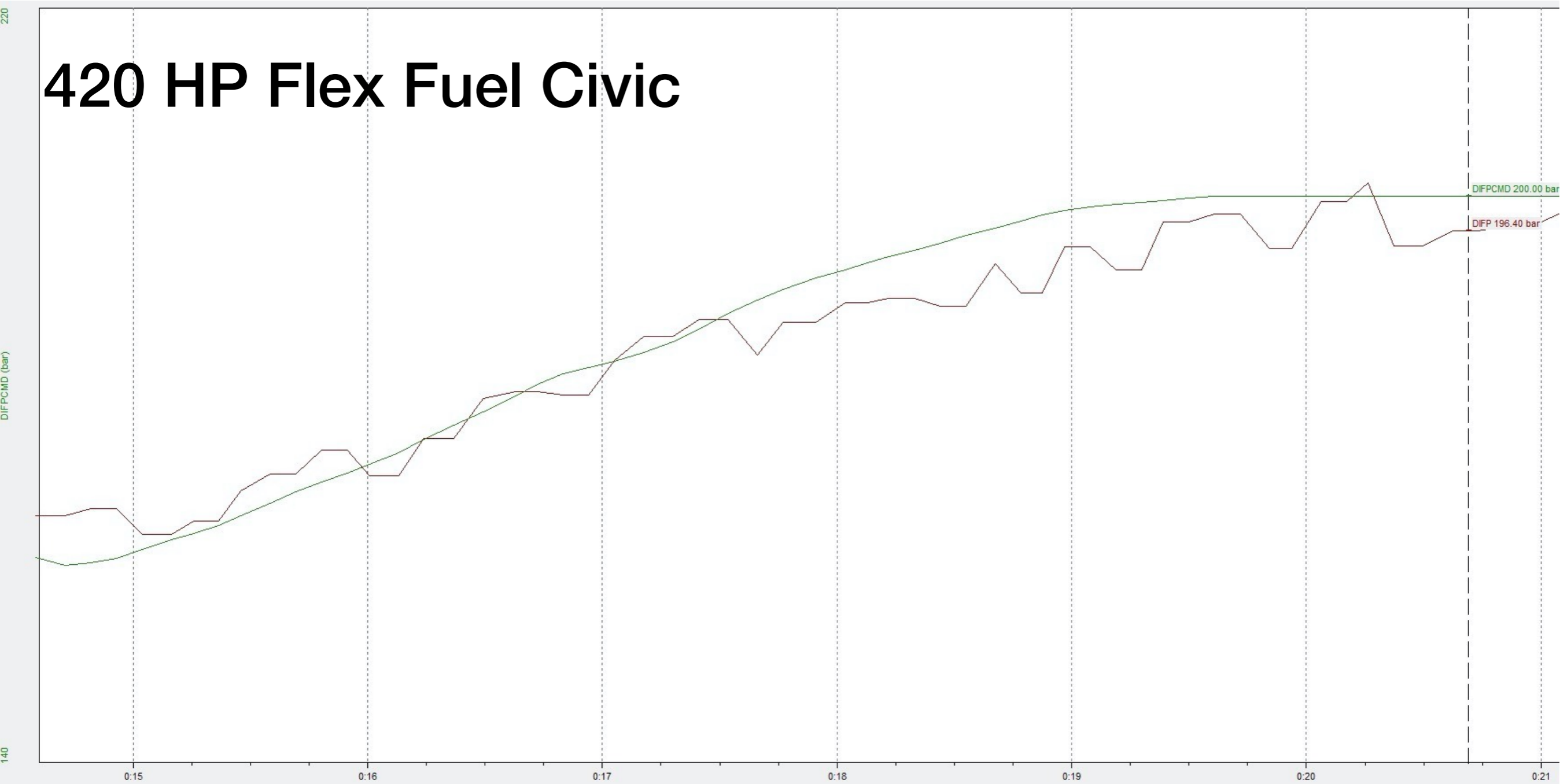
420 HP Flex Fuel Civic



- 420 HP Flex Fuel Civic
- Top line DI Fuel pressure command
- Bottom line DI Fuel pressure
- 23% fuel pressure drop
- Fuel volume and pressure cannot be delivered
- Low fuel pressure error code

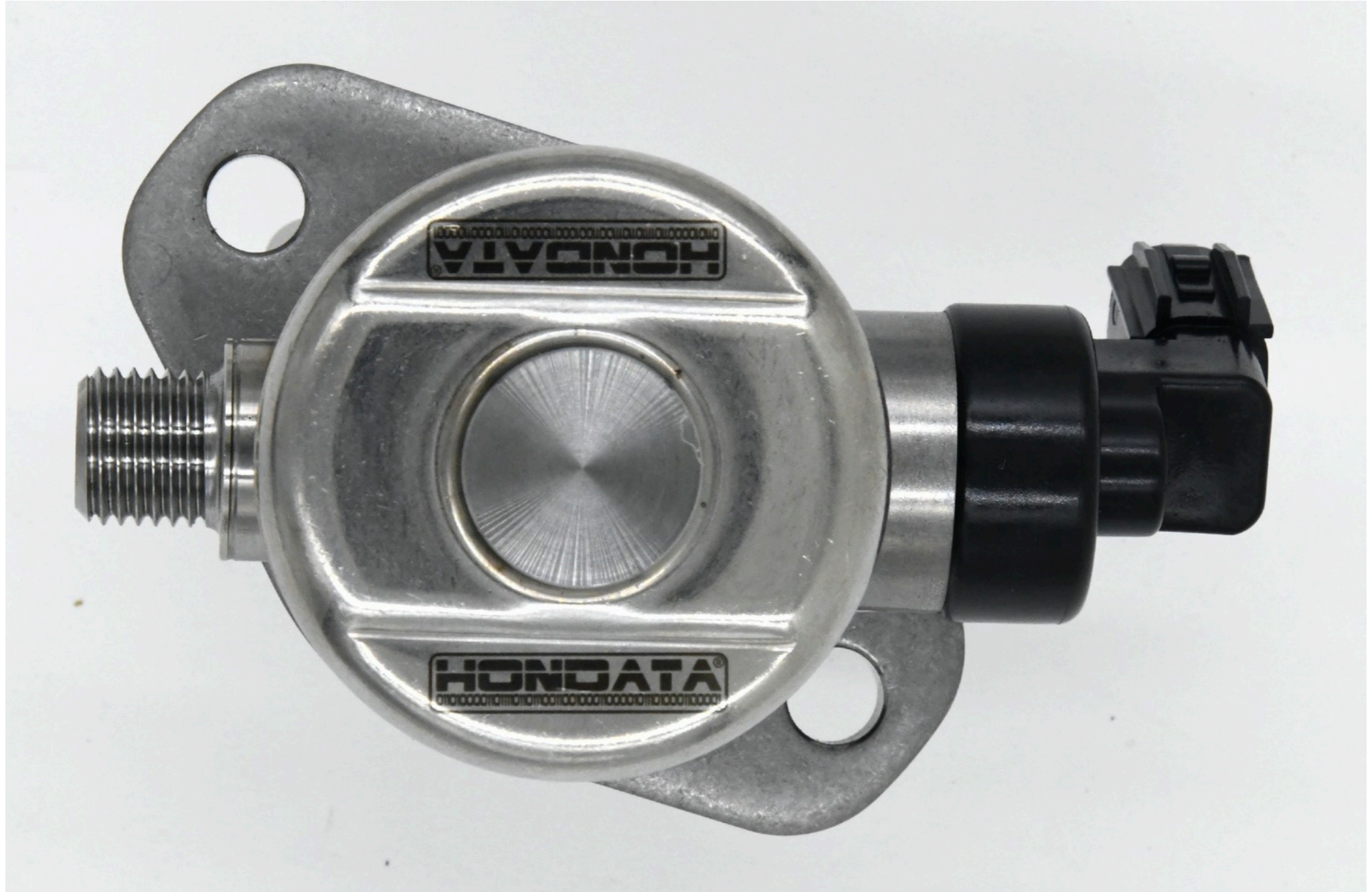
Hondata high pressure fuel line

420 HP Flex Fuel Civic



- Only change Hondata High pressure fuel line
- Custom fabricated
- DI Fuel pressure is maintained to within 2%
- DI Fuel pressure is maintained at 500 hp.

High pressure fuel pump



- Direct bolt-in
- 24% flow improvement
- Includes wiring adapter

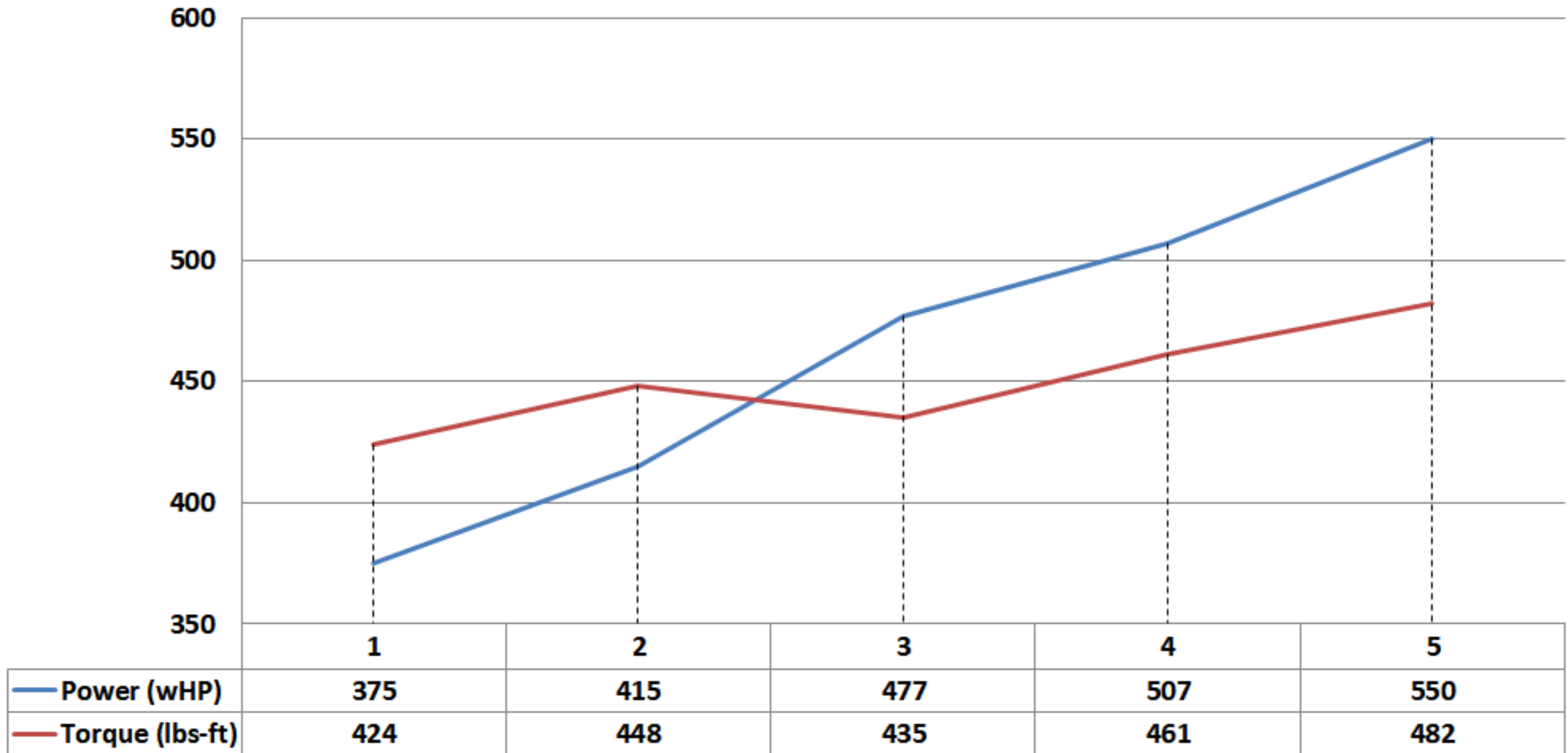
Dyno Testing (stock engines)

- Some calibrations included in FlashPro Manager
- 374 hp 448 tq on 91 octane for 18 months
- 425 hp 470 tq on E50 for 18 months
- 477 hp 430 tq Full Race E40
- 500 hp 460 tq Full Race Race Q16
- 550 hp 480 tq Full Race Race Q16

Thoroughly tested

Dyno Testing (stock engines)

Hondata Fuel System Upgrade Dyno Results



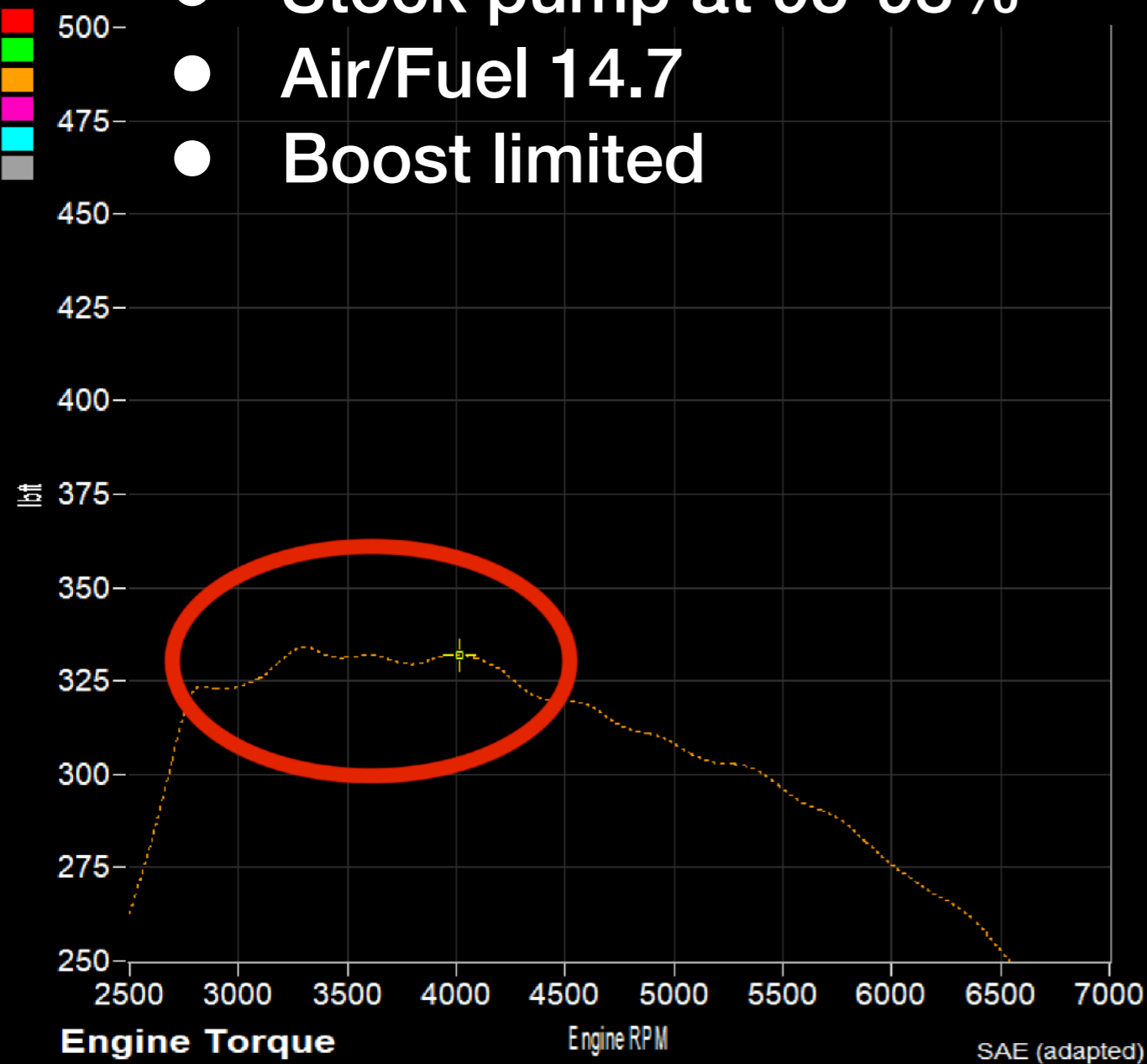
1. FBO + 91/93 gas + fuel system
2. FBO + E46 + fuel system
3. FBO + E40 + turbo upgrade + fuel system

4. FBO + race gas + turbo upgrade + fuel system
5. FBO + race gas + turbo upgrade + fuel system (track tune)

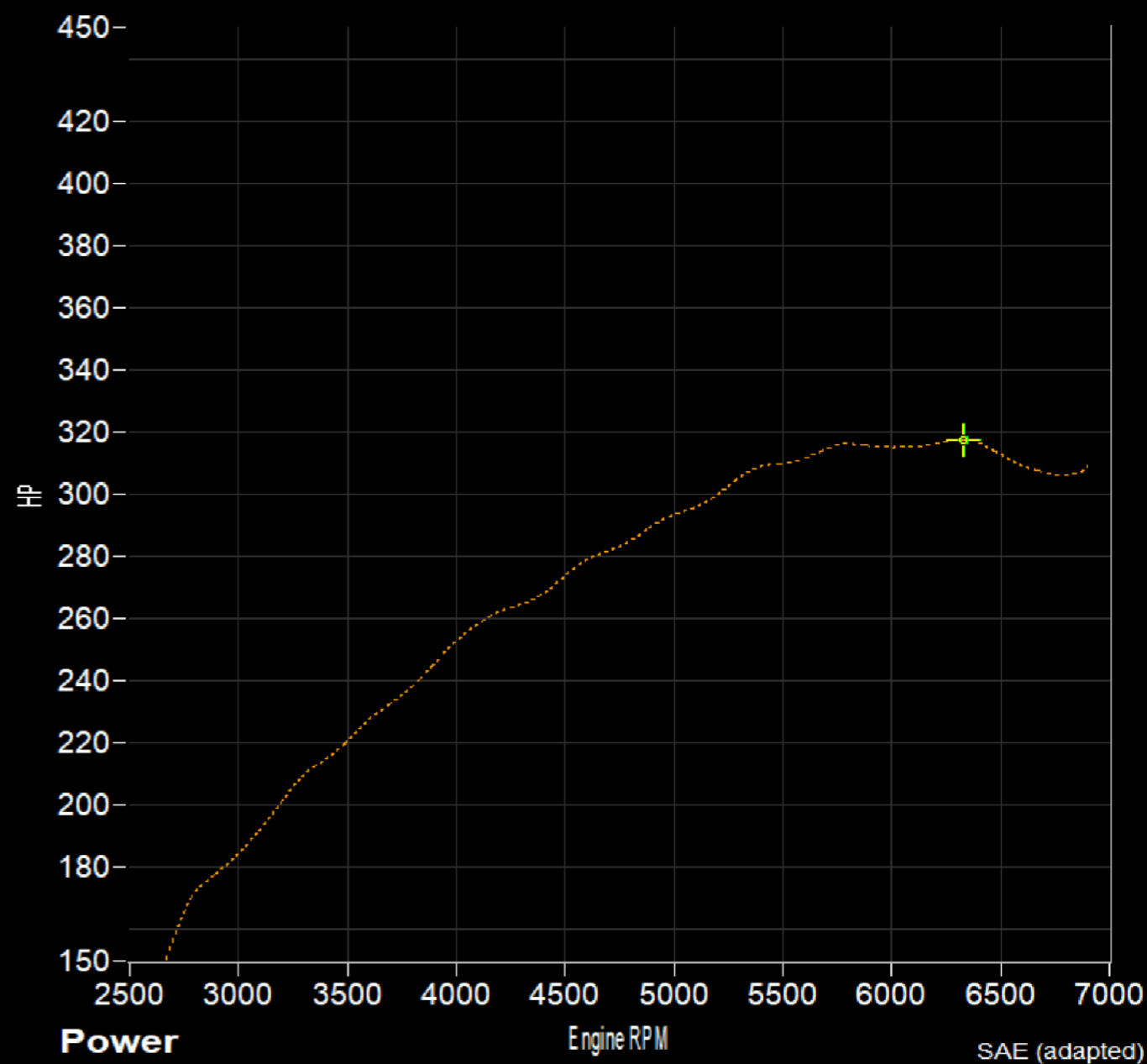
FK8 stock 317 hp 332 tq

In this area:

- Stock pump at 95-98%
- Air/Fuel 14.7
- Boost limited

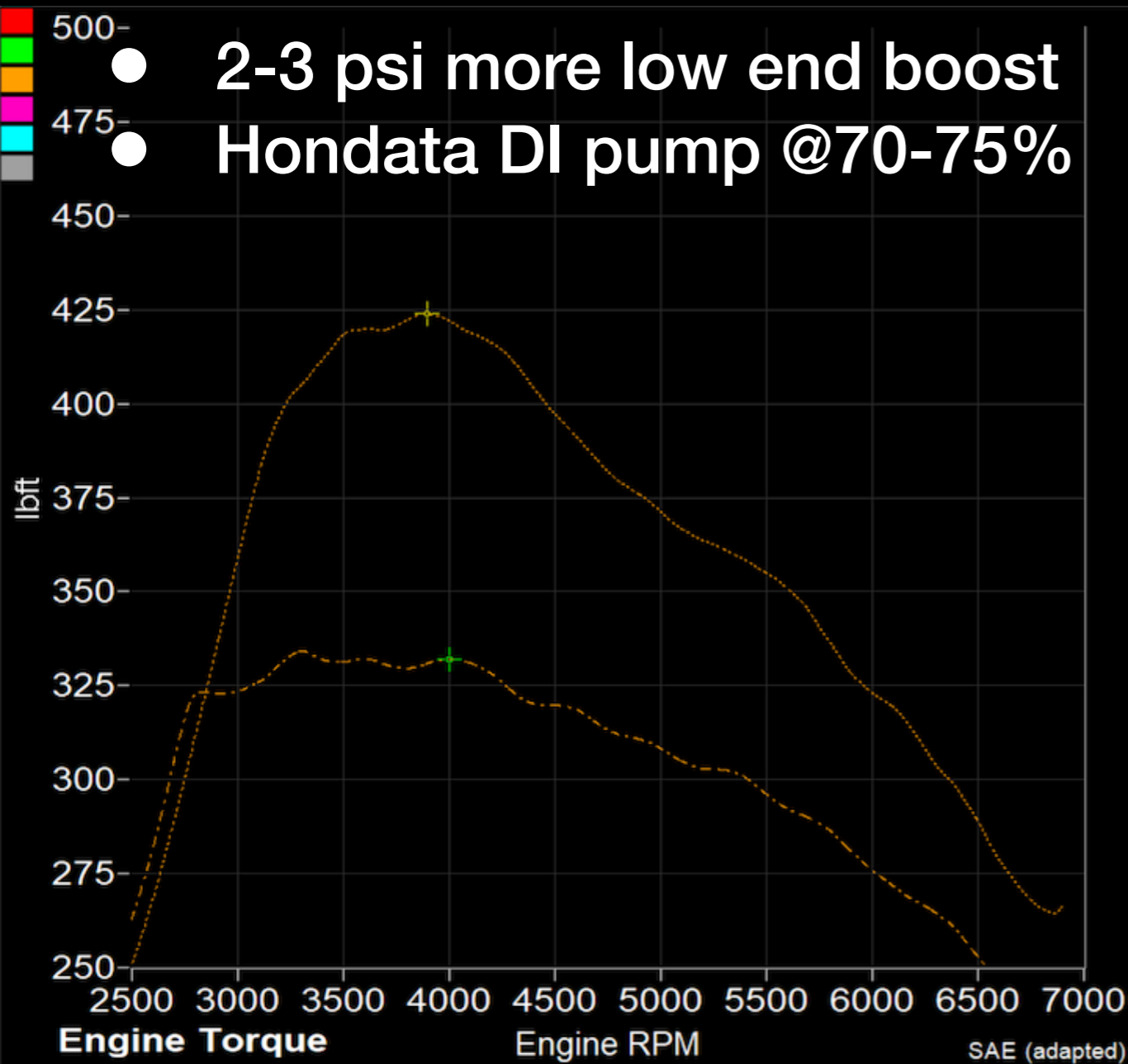


332.01	67.2	4018	ratio 4.625:1
lbft	mph	rpm	tcf 1.000
332.01	67.2	4018	delta 0.00

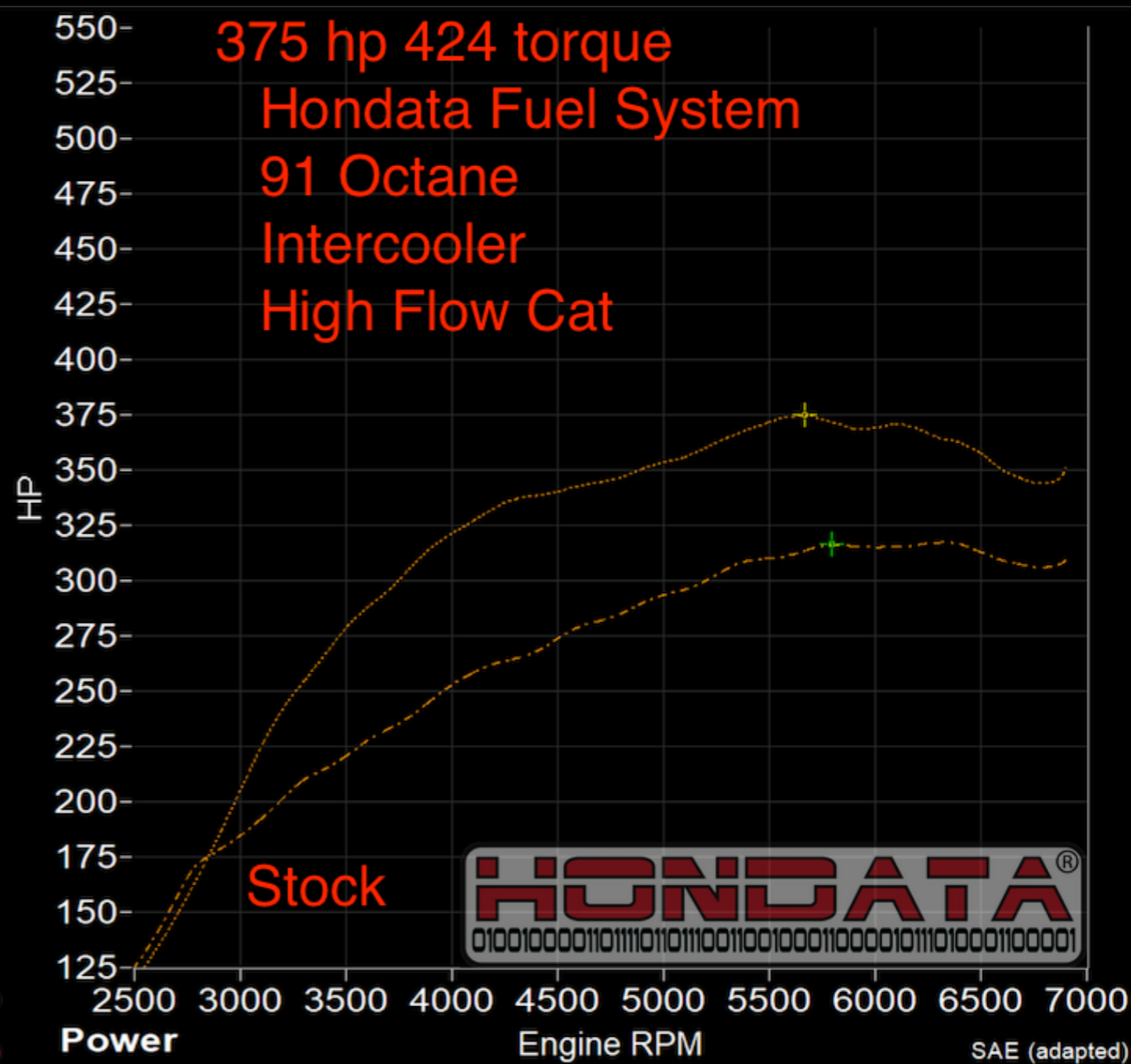


317.33	105.9	6330	ratio 4.625:1
HP	mph	rpm	tcf 1.000
317.33	106.0	6337	delta 0.00

91 Octane 375 hp 424 tq

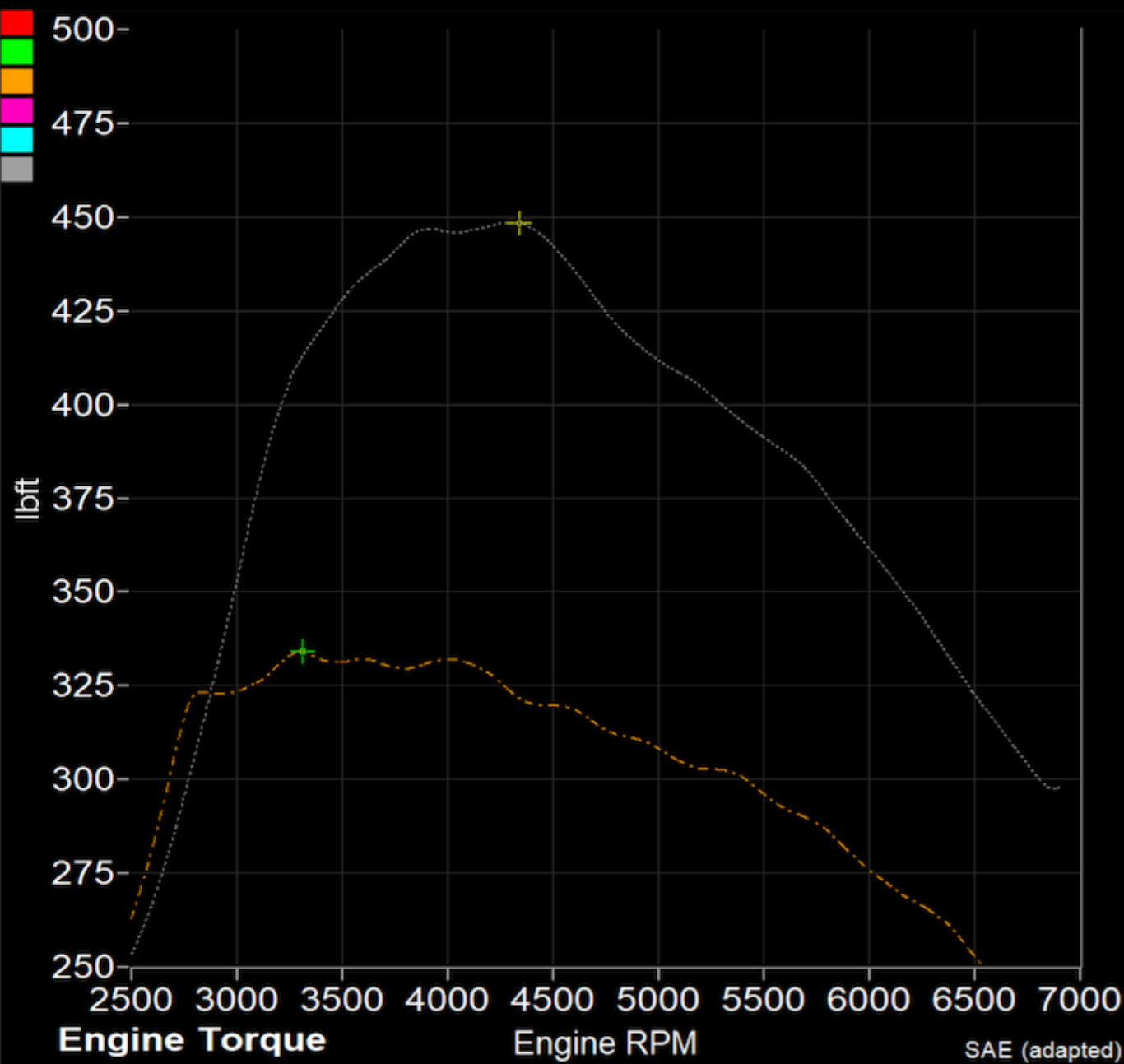


423.95	80.5	3897	ratio 3.746:1
lbft	mph	rpm	tcf 1.000
332.04	66.9	4002	delta 91.91

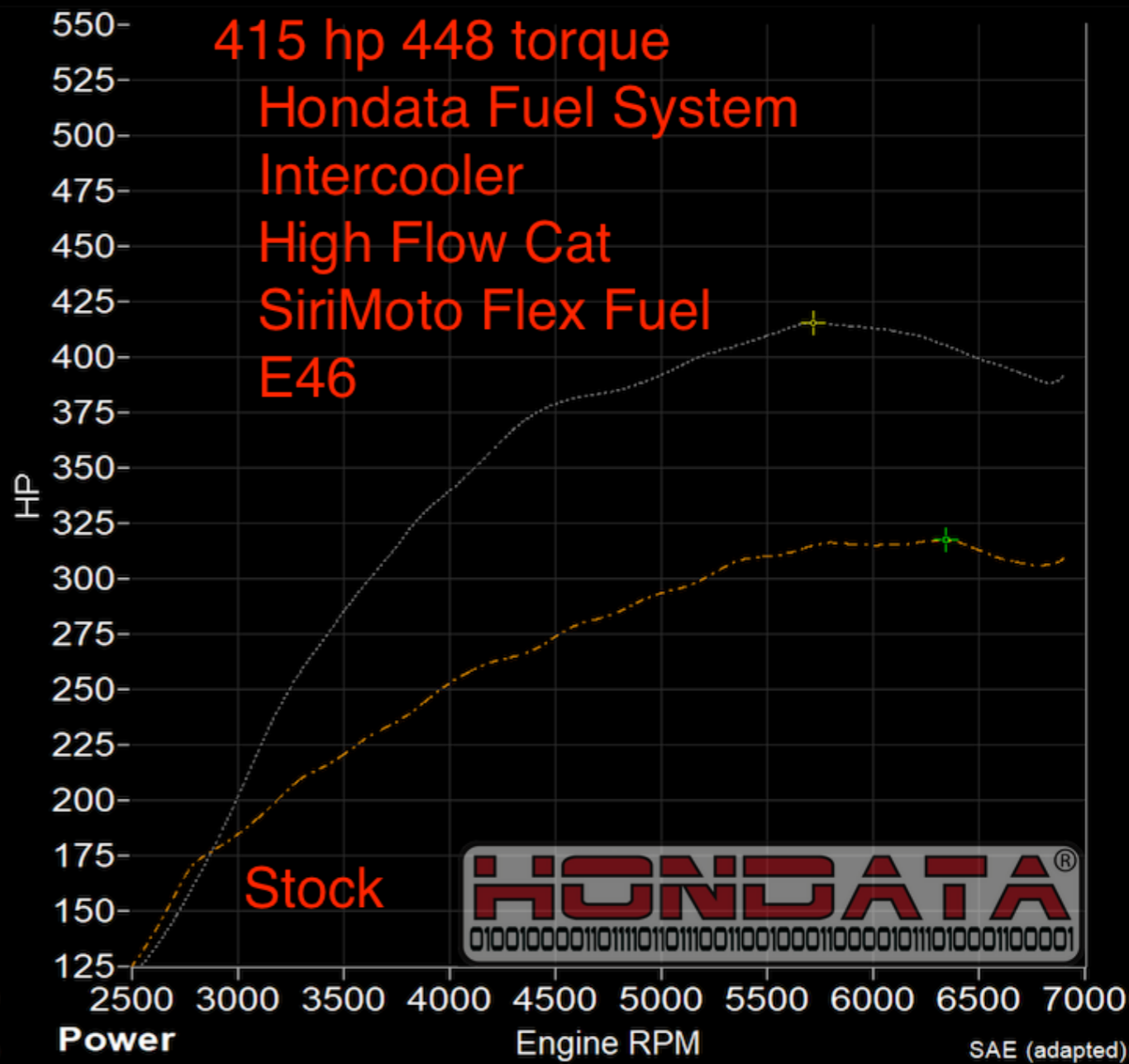


374.74	117.1	5669	ratio 3.746:1
HP	mph	rpm	tcf 1.000
316.24	97.0	5797	delta 58.50

Flex Fuel E46 415 hp 448 tq



448.30 89.6 4340 ratio 3.746:1
lbft mph rpm tcf 1.000
334.13 55.4 3310 delta 114.17



415.48 118.1 5719 ratio 3.746:1
HP mph rpm tcf 1.000
317.34 106.1 6343 delta 98.14

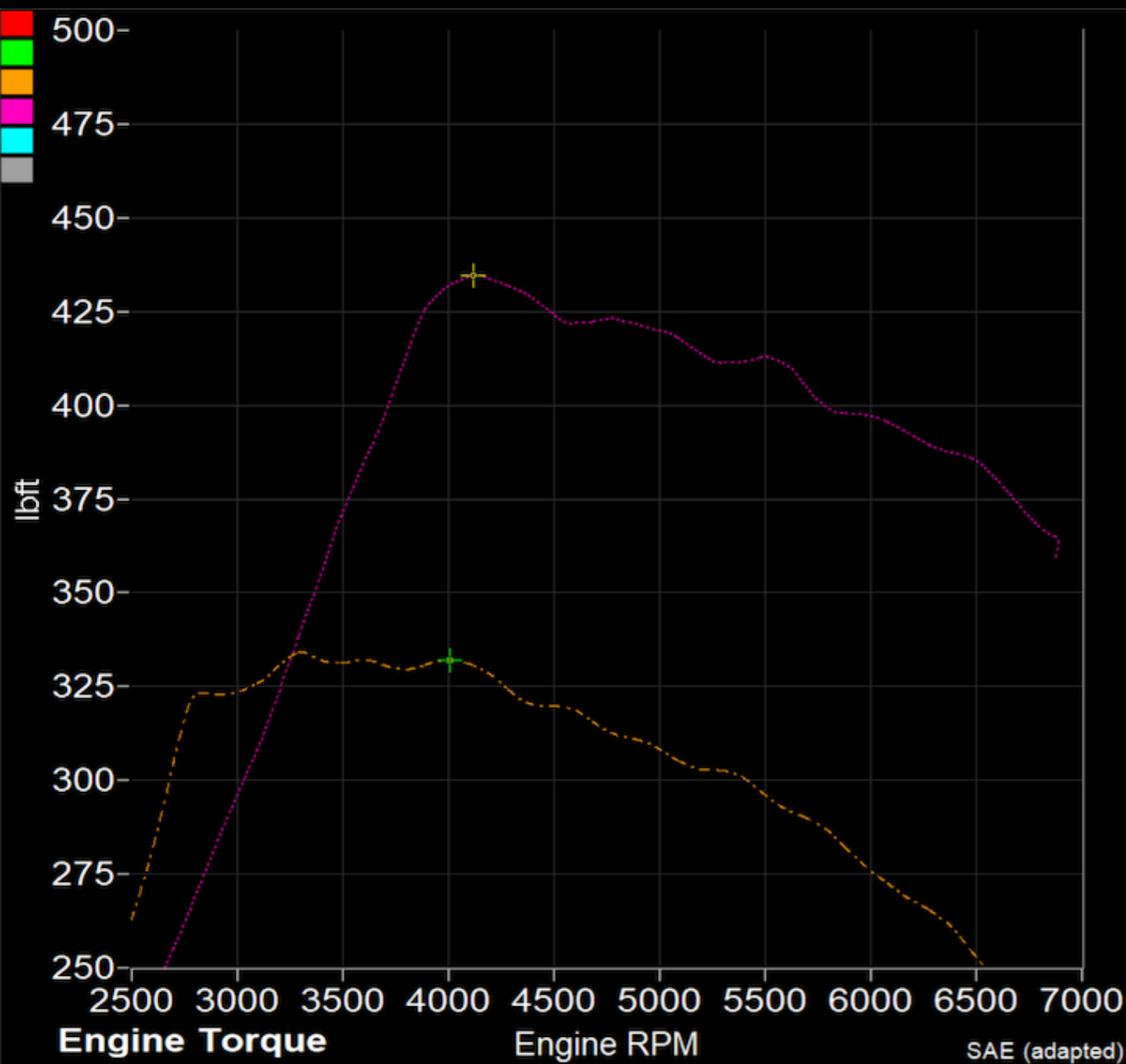
Can I run full E85 with this system?

- Yes, but the power does not change from E50-E85
- E40-E50 puts less load on the fuel system
- Subscribe to our Youtube channel for the upcoming Flex fuel tuning video

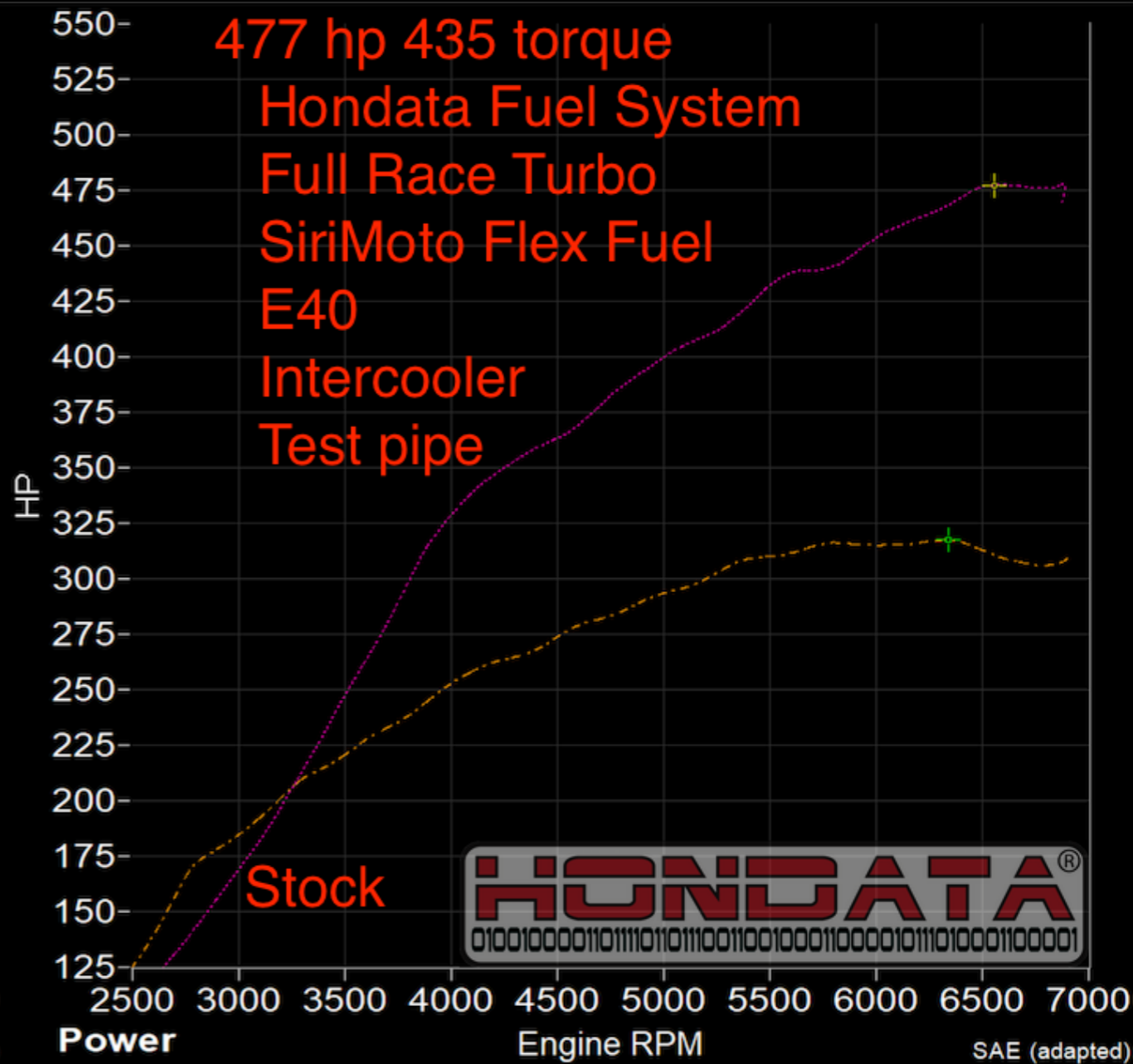
Can you remember 2 numbers?

- 3 and 4
- 3 gallons E85, 4 gallons pump = E40
- 4 gallons E85, 3 gallons pump = E50

Full-Race Turbo - 477 hp 434 tq

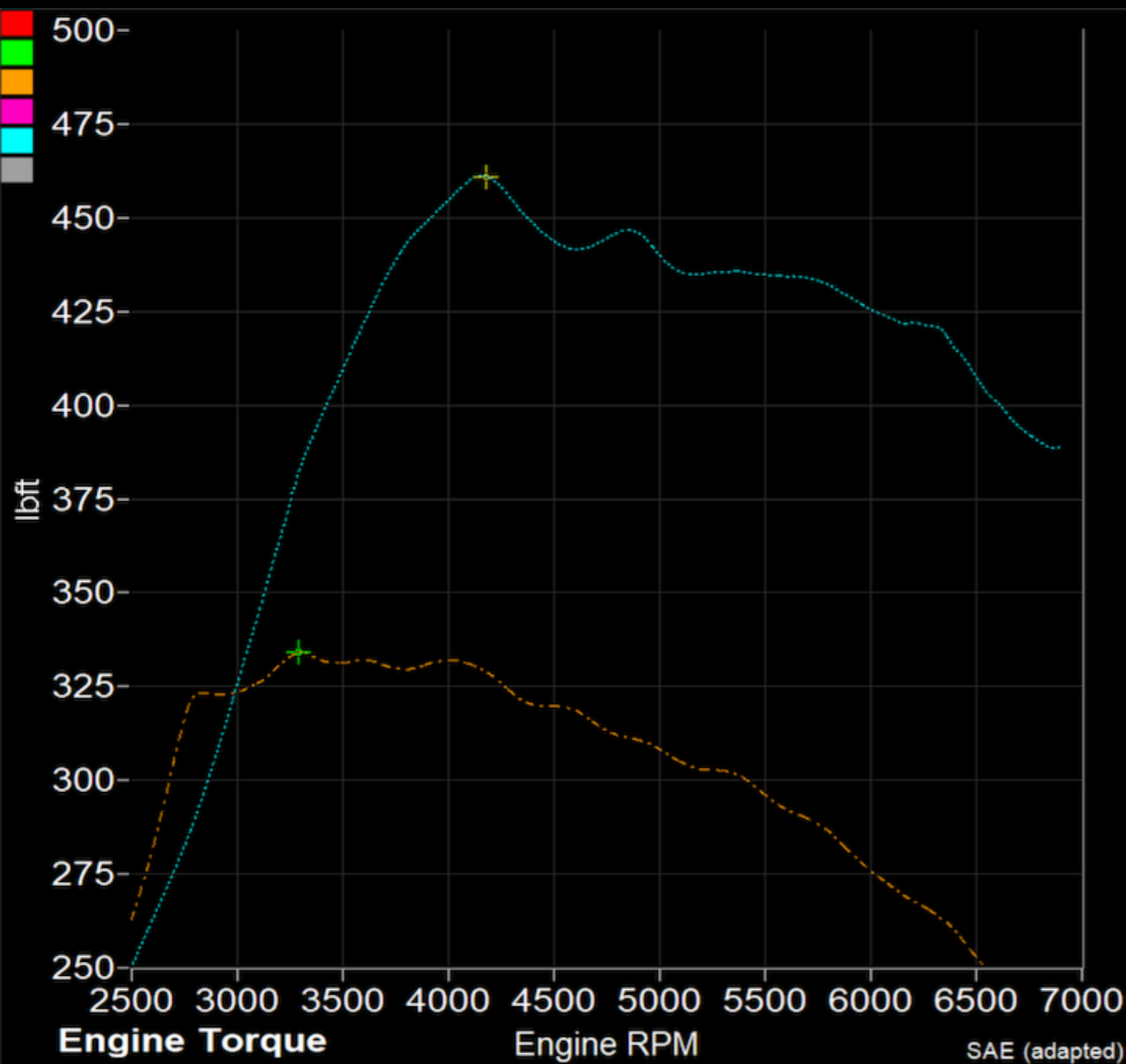


434.73	85.0	4119	ratio 3.746:1
lbft	mph	rpm	tcf 1.000
332.04	67.0	4008	delta 102.69

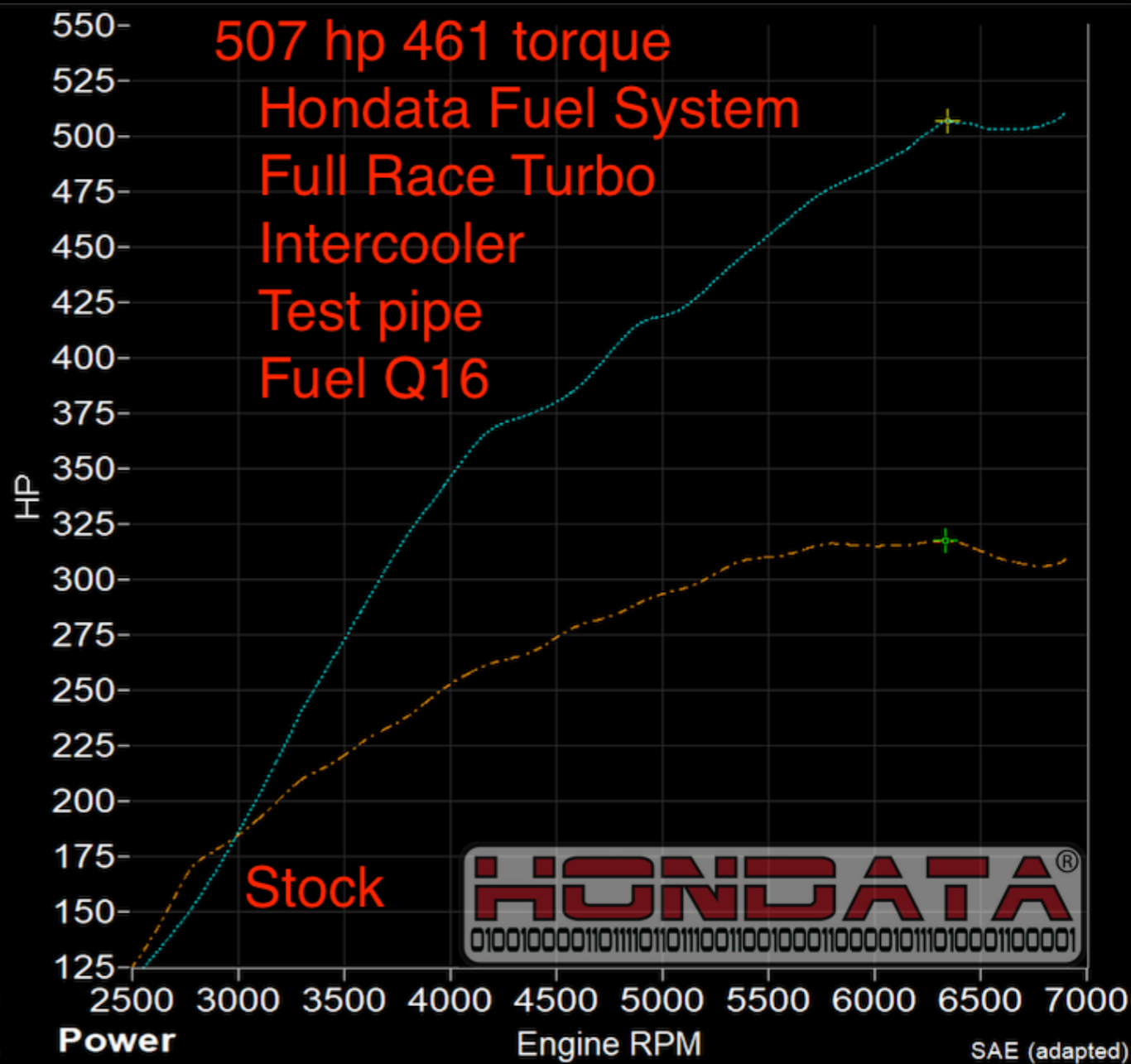


477.39	135.4	6556	ratio 3.746:1
HP	mph	rpm	tcf 1.000
317.33	106.1	6341	delta 160.06

Full-Race Turbo - 506 hp 460 tq

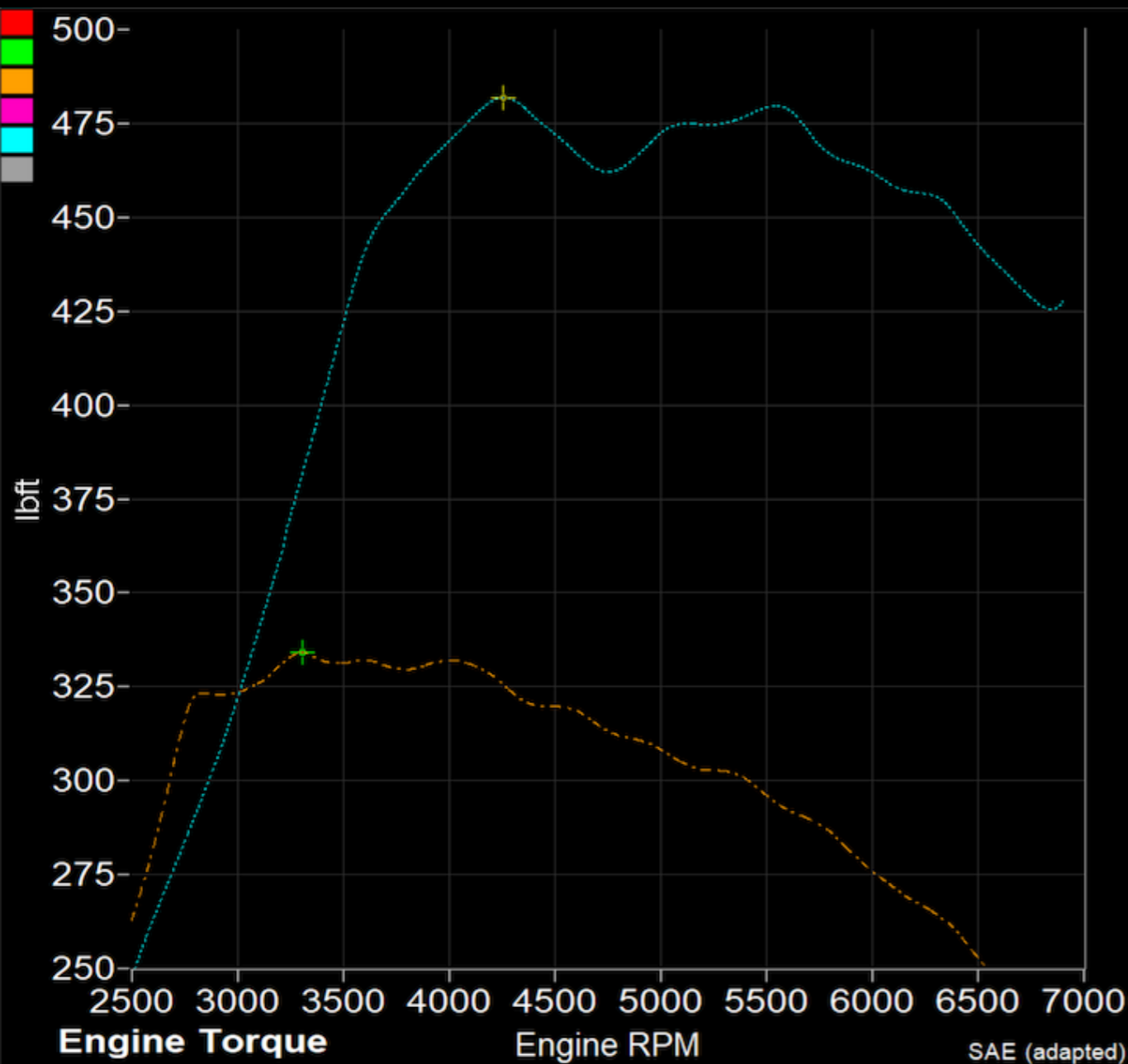


461.02	86.3	4180	ratio 3.746:1
lbft	mph	rpm	tcf 1.000
334.01	55.0	3291	delta 127.01

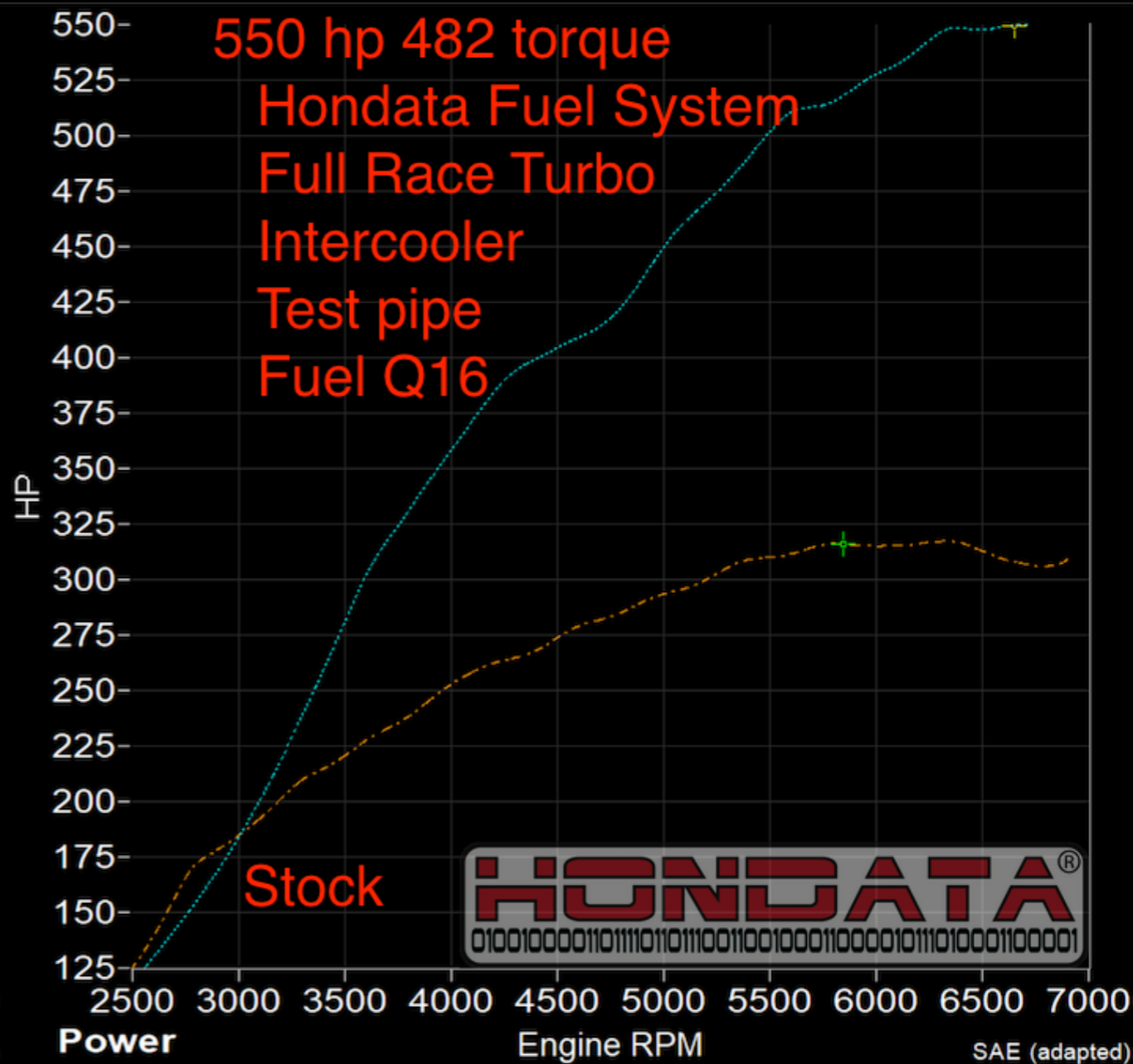


506.98	131.1	6347	ratio 3.746:1
HP	mph	rpm	tcf 1.000
317.33	106.0	6336	delta 189.65

Full-Race Turbo - 550 hp 480 tq



481.90	87.9	4258	ratio 3.746:1
lbft	mph	rpm	tcf 1.000
334.13	55.3	3308	delta 147.77



549.73	137.3	6652	ratio 3.746:1
HP	mph	rpm	tcf 1.000
315.92	97.8	5847	delta 233.81

Recommended upgrade path

USA

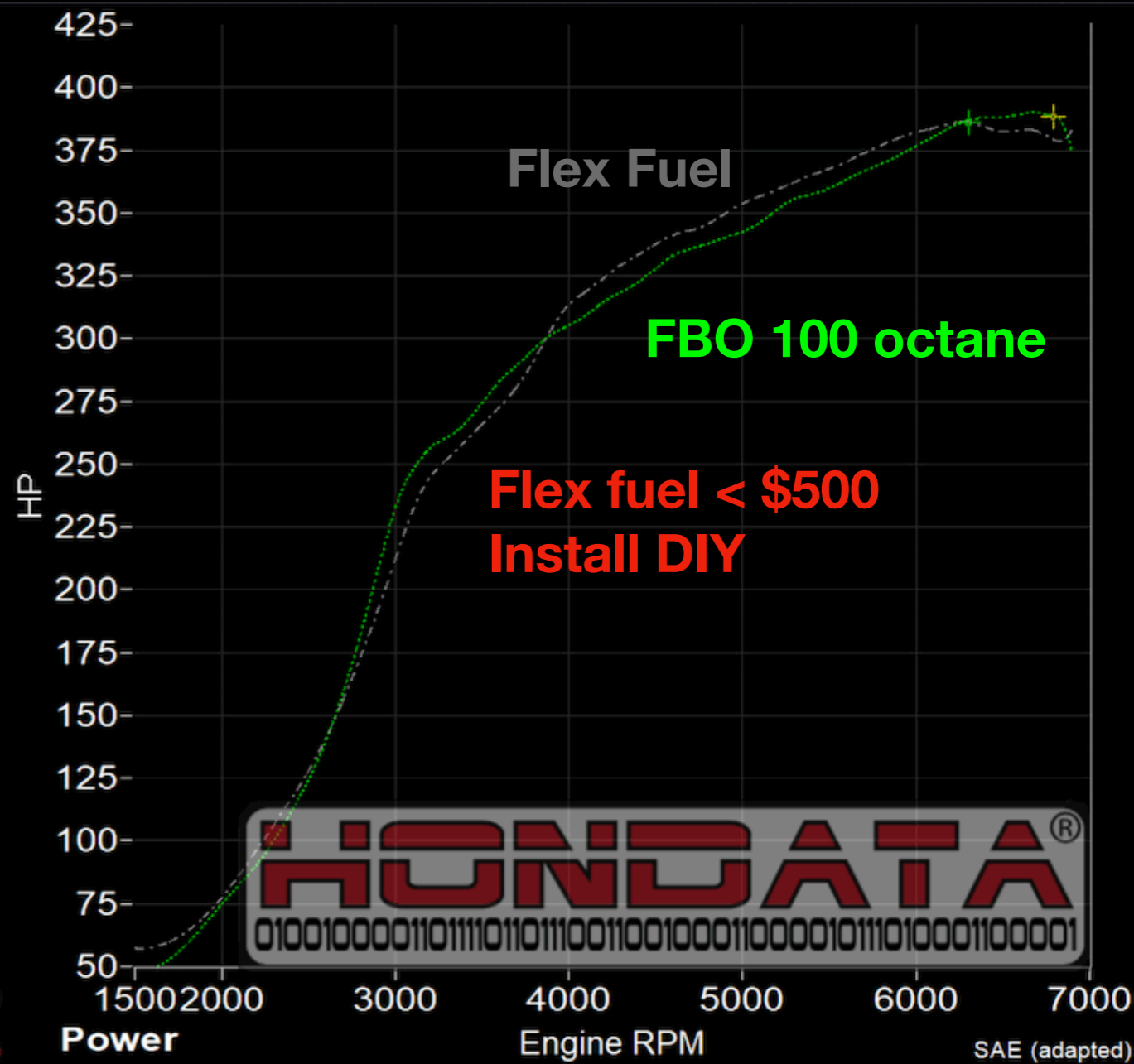
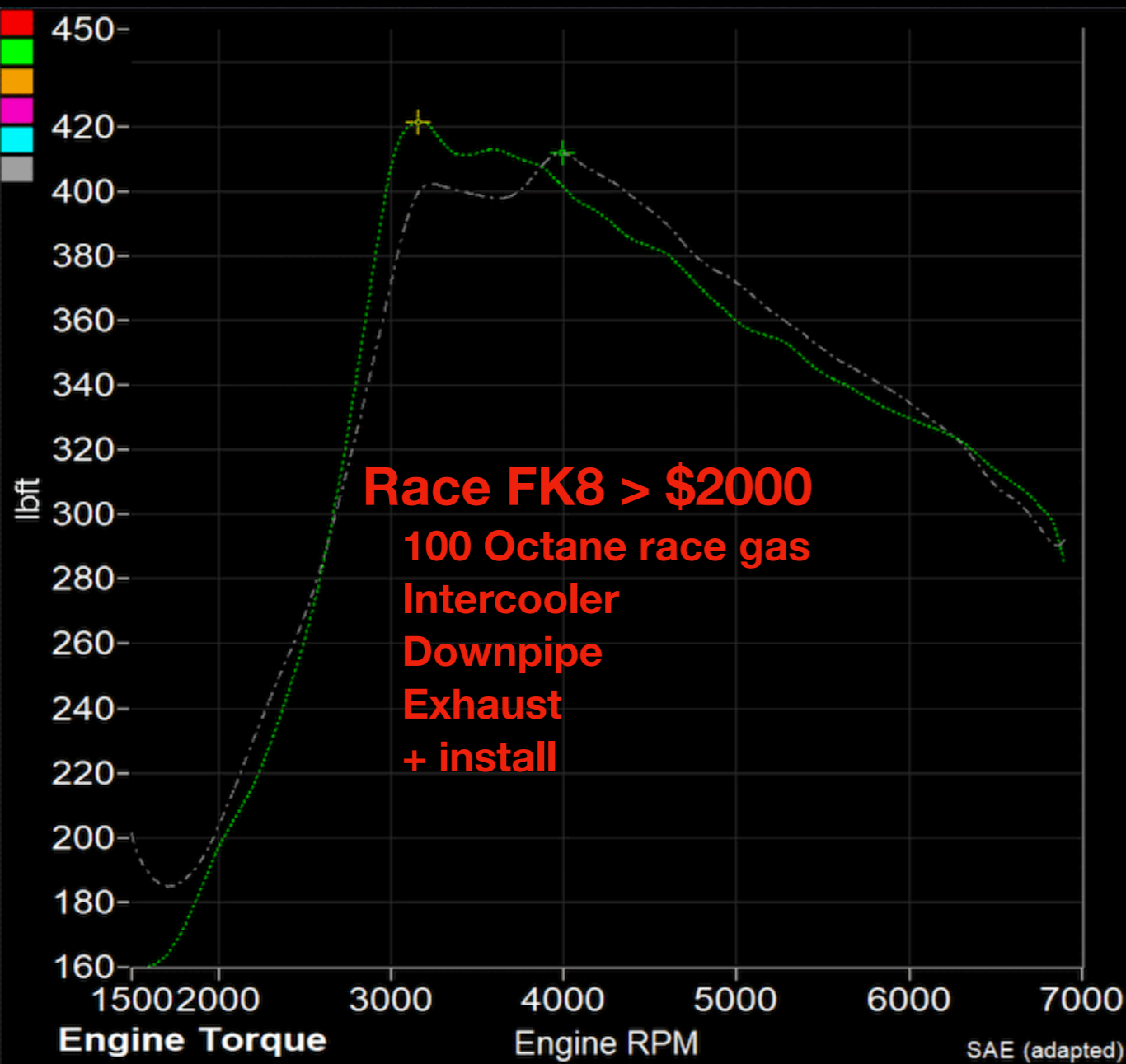
- FlashPro
- Flex Fuel
- Hondata Fuel system
- Intercooler
- Downpipe
- Turbo upgrade

Everywhere else

- FlashPro
- Hondata Fuel system
- Intercooler
- Downpipe
- Turbo upgrade

Power comparison Flex Fuel vs FBO

8 tanks of 100 octane will have paid for Flex Fuel



421.35	52.9	3160	ratio 4.625:1
lbft	mph	rpm	tcf 1.000
411.83	82.5	3995	delta 9.52

388.52	113.6	6792	ratio 4.625:1
HP	mph	rpm	tcf 1.000
386.24	130.2	6304	delta 2.28

Are all those numbers with stock internals. It it safe?

Ed Tidor and BE FORWARD GEORGIA streetthrowback27

Yes! Every vehicle and every dyno chart was with a stock engine. Our flex fuel vehicle ran 450-470 lb ft torque for 18 months over thousands of miles.

Will this be safe on a stock turbo? Joe_134

Absolutely

PMM_FK8: Is there a warranty? What if the HPFP fails in 3 years, do I need to pay for another kit?

1 year warranty. Parts will be available.

Why is it only 24% increase in HPFP flow rate?"

The pump is mechanical and can only move a certain amount of fuel per cam pulse. Imagine using a syringe. You can only move so much fluid per push.

What about other pumps?

We will test other pumps later this year.

Questions

- PakMaster Anything for the Accord 2.0t? -

The Accord 2.0 pump is 10% bigger than the Civic Type R, so there's some tuning headroom already. We're looking into all options. Our focus at the moment is the FK8 CTR.

What about the Civic Si?

We are investigating many options. Our focus at the moment is the FK8 CTR.

NanoPatumbu : How about FK2r?

Later this year. We are working with CPL in the UK to install and test a Hondata Fuel System upgrade to their FK2 later this year.

When will Hondata open up?

When it is safe. The Hondata team is working very hard to ship orders while maintaining social distancing. All incoming and outgoing packages are cleaned and disinfected.

FAQ

This system requires the FlashPro

- How long will it take a Honda dealer to install?
 - 4 -6 hours
- Can I return it to stock?
 - Yes
- Do I need any special tools
 - Yes
- Warranty - 1 year

