

42 Draft Designs

Mk5 FSI/TSI 3" Downpipe FAQ

Q: Will this downpipe fit my TSI?

A: Yes. Our downpipe has been designed to fit both FSI and TSI motors. The downpipe flange has been machined to fit both turbochargers. Some TSI motors (CBFA) have 3 oxygen sensors instead of 2. To accommodate this configuration an extra oxygen sensor bung has been added. Here's the difference and how our downpipe can fit both:

- FSI and early TSI motors are equipped with two oxygen sensors. The first sensor is located before the first catalytic converter directly after the downpipe flange. The second is located after the second catalytic converter.
- CFBA and later TSI motors are equipped with three oxygen sensors. The first sensor is located on the turbo. The second is located before the second catalytic converter. The third is located after the second catalytic converter.
- Our downpipe accommodates both configurations by including 3 oxygen sensor bungs and a plug for whichever bung is not used.
- If installing on a FSI or early TSI motor, plug the second oxygen sensor bung on our downpipe.
- If installing on a CFBA or later TSI motor, plug the first hole on our downpipe.
- The extra bung can be used for a wideband gauge and sensor at any time.

Q: Will I get a CEL (check engine light) after installing this downpipe?

A: Yes. All race series downpipe will cause a CEL. All street series downpipes will eventually cause a CEL.

Q: Why?

A: The FSI/TSI factory downpipe is equipped with 2 high density catalytic converters. These catalytic converters are packed with precious metals to ensure maximum conversion of harmful gases. 2-3 oxygen sensors are in place to monitor the effectiveness of these catalytic converters. When replaced with a single performance catalytic converter, the ECU senses the performance of the catalytic converters is compromised and quickly lights the CEL.

Typically, the CEL means you have a bad catalytic converter. The codes generated tell the technician that the catalytic converters have failed. They have NOT. In this case, you're trading one type of performance for another. The ECU is looking for the catalytic converters to convert all the gases that pass through. The performance catalytic converter is designed to allow any and all gases to pass through as quickly as possible, converting as they pass by.

The only way to assure no CEL is to use a catalytic converter as large, dense, and equally packed with precious metals as the two factory catalytic converter. In a performance market, there is no cost effective way to do this.

If the CEL is a problem, there are performance software upgrades and gadgets available which are suited to be used with aftermarket catalytic converters. Search online or check with your local VW performance shop to discover these options.

Q: What are the specs of your catalytic converter?

A: We use a Magnaflow catalytic converter. The body is made from 409 stainless steel. The catalyst is metal with a 200 cell/inch density. Our catalytic converter is 49 state legal. (excluding California)

Q: What is your downpipe made of?

A: Our piping is 14 gauge 3” aluminized steel. Our flanges are 1018 cold roll steel. Our flex section is 300 series stainless steel. Our catalytic converter is 400 series stainless steel. Our hardware is cad/zinc plated steel.

Q: So what does all that actually mean? I am concerned about rust.

A: Let’s start with the piping. Aluminized steel is a basic low-carbon steel with a coating of aluminum bonded to the pipe inside and out. Like any coating, the aluminum protects the steel from the elements, preventing rust. It holds up to 1600° and will never peel or flake off. The pipe underneath cannot rust until the aluminum corrodes and the coating is degraded.

Our flanges are cut from 1018 cold roll steel. This material machines fairly easily and is consistent. We machine to exacting precision to ensure proper fitment on your vehicle. Precision aside, steel rusts. The flanges will get a coating of rust on them immediately, but are too thick to “fall apart” within the normal lifespan of this system.

Our flex section is made from 300 series stainless steel. The flex section will darken as it’s heated becoming a dark brown color. This is normal for all stainless steel. The clamping bands on our flex sections are aluminized steel and will share the same characteristics as our piping.

Our catalytic converter is provided in 409 stainless steel. 409 stainless steel is essentially mild steel with enough chromium added to slow down the corrosion. It will turn dark brown quickly and will rust slowly over time.

Our hardware is cad/zinc plated. This plating acts as a protective layer reacting with the corrosive environment before it can reach the steel.

Q: Why don’t you make this downpipe in stainless steel?

A: Simply put, it would be too expensive.

Ever notice how expensive a high quality stainless steel system is? Surely you’ve seen all the low priced systems out there. There’s a HUGE difference in materials, build quality, and fitment between the two. We’re right in the middle with a high quality, perfect fitting system made from high quality American made materials. In order to make this system in stainless steel we would have to change it dramatically. How?

- We would have to remove as much weight as possible. Stainless by weight is 3x the cost of mild. So, we would need to use thinner piping and lose the flanges. The modular nature of our product would disappear. Slip joints don’t cut it around here, so we would make the downpipe in 1 piece. The customer would never be able to change the configuration later down the road. Our experience proves that over 50% of our customers change their system within the first 1-2 years.
- The cat would increase in price by 50-100%. American made catalytic converters with 304 stainless bodies are very expensive. (beware of anyone claiming an “all 304 stainless” system using a 409 cat)

The choice for us then becomes: function, form and options for a reasonable price or a bare-bones downpipe for a higher price. This is how we see it. We’re not scared of stainless. We manufacture parts weekly behind the scenes in stainless. To build OUR product the way WE want it and to price it where WE want it for OUR customers, we chose the materials listed above which have been successful for us for over 5 years.

We are well aware that other companies offer downpipes in stainless steel – some cheaper, some more expensive. We are confident in the quality, fitment, and features that our product offers. Yes, there are many high quality stainless systems out there priced at top dollar. There are also many other systems out there built in the US and foreign countries from questionable materials by un-trained workers. Beware of what you’re buying. Just because it says “stainless steel TIG welded” doesn’t mean quality.

Q: What can I do to prevent rust?

A: All of our exhaust products can be purchased ceramic coated. Our coating is professionally applied by a local coating shop. The coating offers a polished aluminum look, a thermal barrier up to 1600°, and the ultimate in corrosion protection. For more information, please visit our website.

Any part of the exhaust system after the catalytic converter can be high-temp powdercoated. Any local powdercoating shop can provide this coating service.

There are a number of high-temp paints available at your local auto parts or paint store which can be applied at home for a minimal cost. If you plan to coat your system, we recommend coating it before installing. Though any coating can be applied at any time, preparing the metal will be easier before anything rusts. Always follow the instructions provided to you by the coating manufacturer – prep, application, and cure.

Q: What's that burning smell?

A: The exhaust should smell like burning oil for about 100 miles. There are oils on the metals leftover from manufacturing. Once burned off, this smell will never return.

Q: Will this downpipe change the sound of my exhaust?

A: Yes. The increase in pipe size and the change in catalytic converter will alter the exhaust note. There are too many variables to provide a definitive answer, but the exhaust will become louder. Here are some certainties to consider when choosing your downpipe:

- Race series will be louder than street series.
- If your aftermarket exhaust lacks significant mufflers, consider our resonated downpipe.
- With 42, everything can always be changed.