

42 Draft Designs

Audi TT 225 3" Downpipe FAQ

Q: How does your 3" downpipe connect to my existing cat-back exhaust?

A: Our 3" downpipe includes a flanged 2.55" reducer that is designed to slide into the factory sleeve clamp. All stock exhaust systems will be a perfect fit. Some aftermarket exhaust systems include a series of adaptors designed to slide into the factory sleeve clamp. If your existing cat-back slides into the factory sleeve clamp in the factory location, our downpipe will fit perfectly.

If your aftermarket cat-back is larger than 2.55" you may be interested in removing the restriction caused by a reducer. We offer 2.75" and 3" adaptors to fit cat-backs larger than factory. Connection to these reducers requires a slip-fit connection or an appropriately sized sleeve clamp.

Q: Does this downpipe require any permanent modification?

A: No permanent modification is necessary to install our 3" downpipe.

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 TT 225 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. An oxygen sensor is in place to monitor the effectiveness of these catalytic converters. When replaced with a single high-flow 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 marketplace, 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: Why don't you use the front hanger?

A: We don't use the front hanger because it's not necessary and it won't fit. Here's why:

The factory downpipe uses an exhaust hanger that mounts to the front subframe. This hanger supports the weight of the factory catalytic converters. This support is important because the factory flex section is positioned vertically, before the hanger. Without this support the weight of the factory cats would eventually stretch the flex section and cause it to crack.

Our downpipe positions the flex section nearly parallel to the ground above the front subframe. Our catalytic converter is incredibly lightweight. Compared to our test pipe, the cat barely adds a pound to the total weight of the downpipe. Installed, the post-flex portion of our downpipe does not weigh enough to require a hanger. Additionally, the location of our flex section does not allow enough room to use the hanger correctly.

The decision to omit the front hanger was not hasty. Our original prototype built in 2005 included provisions for a front hanger and was tested with the hanger in place for months. Analysis of the downpipe for production manufacturing concluded the hanger would be a problem. Testing without the hanger was performed and no adverse effects were found. In fact, our testing showed absolutely no difference. Testing was done on the lift and on the road under maximum loads with various motor mounts including worn out stock motor mount bushings. The hanger does not prevent the exhaust from engine movement whatsoever using our downpipe.

Over the years we've received significant criticism over the omission of the front hanger. We must stress that our downpipe design does not require this hanger and will not benefit from the addition of another hanger. To sum up – the factory downpipe and catalytic converters require this hanger due to the weight of the components and the position of the flex section. Our downpipe is designed completely differently and does not require this hanger under any circumstances.

Q: Will I have to lower my front subframe to install your downpipe?

A: Yes. The shape of the factory downpipe makes removal impossible without lowering the subframe. Technically, you could cut the factory downpipe into 5 pieces and remove it without lowering the subframe, however there still isn't enough room to install ours. The size of the K04 turbo flange alone is too large to fit through the tunnel. Lowering the subframe is the fastest and easiest way to perform this installation – every time.

Q: Do I have to buy performance motor mounts?

A: We highly recommend upgrading your dogbone motor mounts when using our 3" downpipe. Worn out factory bushings cause excessive engine movement. Engine movement translates directly into the exhaust system - flex section or not. If your engine is slinging back and forth so is your exhaust. This means rattles, panic, and worry. Our system is designed to be used with motor mounts. The fitment is exact - 3" piping is a lot to stuff under a TT.

Q: Will this downpipe fit my 180hp TT?

A: Yes and No. K04 swaps are common, but beware of fitment constraints. 180Q owners that have converted their turbocharger and manifold over to factory TT 225 components may use this downpipe. Beware of cat-back exhaust fitment. Although they appear similar, 180Q and 225 cat-back exhaust

systems begin in different diameters in different locations. If you're using this downpipe on your 180Q you must use a cat-back exhaust system designed for the 225.

180FWD cannot use this downpipe under any circumstances. If you've converted your 180 turbocharger and manifold over to factory TT 225 components you should use our VW Mk4 1.8T K04 3" Downpipe to complete the swap.

Q: I've seen pictures of your 225 3" downpipe that showed 4 individual pieces. Why?

A: Our TT 225 3" downpipe has been revised as of 1/2009. Our website has only recently been updated to visually reflect the change. Before the revision, the flex section portion of the downpipe was split into two pipes with a flange connection. Our intention was to create a downpipe that did not require the subframe to be lowered during install. We succeeded, however enough TT owners had difficulty tightening and adjusting this flange connection to warrant a revision. We also discovered over the years that 100% of our customers were lowering the subframe during install, making the additional connection essentially pointless.

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 detailed answer, but the exhaust will become slightly louder. Race series downpipes will always be louder than street series downpipes.