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http://www.musclecarblog.com/

http://www.musclecarblog.com/story-46-howto install a fitch fuel catalyst

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The Truckblog links actually point to the Muscle Car Blog article.

http://www.truckblog.com/

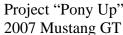
http://www.truckblog.com/story-1152-howto\_install\_a\_fitch\_fuel\_catalyst

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Thursday, December 14 - Story by Mike Wilkes

How-To: Install A Fitch Fuel Catalyst

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With fuel economy being first and foremost on the minds of most Americans, it's easy to be caught up in the bolt-on modifications that claim to get better fuel mileage. When we added the Fitch Fuel Catalyst to Muscle Car Blog's **Project "Pony Up"**, an 07 Ford Mustang GT, we found something that actually boosted our project vehicles average highway mileage from 24 to 27 miles per gallon, which is outstanding for a high performance muscle car. How does it work? The Fitch Fuel Catalyst is an inline permanent fuel treatment component that makes your vehicles engine run better, cheaper and cleaner by further refining the fuel in your fuel tank, before it reaches the motor. As with any motor, engine performance is directly related by the quality of the fuel it is consuming. The Fitch Fuel Catalyst adds an additional refining step to the fuel that is being circulated in your vehicle's fuel system, removing contaminants that have collected in the fuel since it left the refinery. The Fitch Fuel Catalyst works using the same basic principles as your vehicle's exhaust catalytic converter. The fuel is passed through a series of elements which chemically react with the fuel altering its molecular structure. The end result is a cleaner and more stable fuel that reduces or eliminates engine knock, allows for the use of a lower octane, increases fuel efficiency and provides cleaner emissions. In fact, vehicles running with Fitch treated fuel consistently show a reduction in emissions in the order of 60% - 80% in CO, 50% - 65% in HC and 5% -15% in NOx with increases of as much as 5% - 12% in fuel economy.

Who can benefit from this? Honestly anyone that has a vehicle, lawn mower or generator that runs on either gasoline or diesel fuel can see a real benefit from the Fitch Fuel Catalyst. When we installed our Fitch unit on Project "Pony Up" we noticed an audible change in the vehicle's idle within 20 seconds of the initial startup that could only be described as smoothing out. Being that we already run the highest octane possible with car we weren't expecting to see noticeable results, but on the first long trip we took the results were right there and in your face as we averaged 27mpg at 70mph and even saw real-time spikes of 33mpg when we slowed down to 55mph. Granted, our Mustang project car has some pretty interesting performance modifications done to it that may not be easily duplicated by every Mustang owner out there, but it certainly leads you down a different path of thinking.

When we first spoke with the good people at <u>Advanced Power Systems International</u>, we were more than just a little bit sceptical, having been introduced to all manner of <u>fuel economy myths</u>, but after having used the Fitch Fuel Catalyst first hand, I can honesty say I can see the results in just a few hundred miles of operation.

## The Installation

1: The first thing we did after receiving our Fitch Fuel Catalyst was to inventory it ensuring the arrival of all components.



2: When working with any vehicle's fuel system, it's highly recommended that you disconnect the battery.



3: To equalize the fuel system pressure, we removed the fuel cap from the vehicle.



4: After removing the Fitch Fuel Catalyst from its protective plastic wrap, add the connector elbows to the Fitch Fuel Catalyst and tighten the connections.



5: With the elbows installed, connect the input and output hoses. Our project vehicle has Ford's CCD Fuel rail and requires specialized connectors that are provided with the Fitch Fuel Catalyst system.



6: Determining where to mount the Fitch Fuel Catalyst is the next step and for our install we decided to install the Fitch Unit to the vehicle's Cold Air Intake heat shield.



**Note:** When using the aircraft style canister clamps, we used a small zip tie to hold each clamp together allowing for considerably easier installation of the unit



7: With the location determined, the Fitch Fuel Catalyst was bolted to the Cold Air Intake heat shield.

8: After the fitting of the Fitch Unit, making the fuel connections is the next item to be taken care of. After locating the CCD connector on the front side of the right fuel rail, remove the safety clip.



9: With the safety clip removed, disconnect the fuel line from the fuel rail.



**Note:** This step is not as easy as it sounds as the connector has a spring retainer that holds the connector in place and prevents the connector from being removed without a special tool. See the how to article on the second page of this article for detailed instructions on how to disconnect the fuel line from the CCD fuel rail.

**Safety Tip:** When disconnecting the fuel lines, there could be some pressurized fuel still in the system so ensure you are prepared with safety glasses and something to keep fuel from dripping or pooling on the motor.

10: With the OEM fuel connections disconnected, connect the input end of the Fitch Fuel Catalyst's hose to the output from the fuel line and connect the output of the Fitch Fuel Catalyst to the input of the fuel rail. This allows all fuel to be passed through the Fitch Fuel Catalyst prior to being consumed or returned to the fuel tank.



**Tip:** Prior to finalizing all connections, insure your route your fuel lines in way that keeps them protected from chafing, sharp edges and heat.

11: With our Fitch Fuel Catalyst now installed, we bundle tied all fuel lines, reinstalled the fuel cap and connected the battery. Next we turned on the vehicle's ignition without starting the engine, allowing the fuel system to be pressurized to check for leaks.



12: That's it, you are done. Despite needing to be cautious of working with fuel systems, this really is a very easy installation and took us less than one hour to complete the installation.

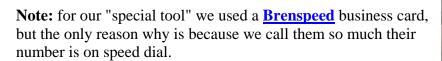
## How-To: Disconnect a Ford CCD Fuel Rail Connector from the Fuel Line

This is a quick little How-To describing procedures to disconnect a Ford CCD fuel rail from the rubber fuel supply line. It's a little tricky if you don't have the special tool to disconnect the fuel line and it's almost impossible to disconnect without applying equal pressure to the entire retainer spring for the fuel line connector. For this tip, you need a business card (that you don't want to keep), a pair of scissors, a flat-tip screwdriver and an open mind.

1: Remove the safety clip that holds the fuel connector in place. You might need a small flat tip screw driver to get it started.



2: Next, fold the business card in half and cut a 3/4 inch section out of the folded side, like the example images.





3: With the folded section towards the inside of the CCD connector's retainer spring, wrap the business card around the whole connector and push the card into the slot, unseating the retainer spring.



4: With the retainer spring unseated, simply pull the CCD connector apart.

