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Installation of Accufab's Power Air Inlet: For 05-07 6.0L PSD

These instructions, courtesy of truckblog.com

Accufab, Inc. developed an aftermarket intake elbow called the "Power Air Inlet" for the 05-07 6.0L PSD that not only dresses up the engine and improves performance, but it is also pre-drilled and tapped to accept a 1/8" NPT male fitting which is perfect for boost gauge installation. If you're like many Ford truck owners, you appreciate the performance of your 6.0L Power Stroke Turbo Diesel engine. Of course, it never hurts to add more power, especially if you're towing an overloaded trailer. The Power Air Inlet was originally developed and tested by Accufab for their shop truck, an F-350 used for towing their race cars on a 48 foot trailer. The Accufab Power Air Inlet made an immediate difference during their testing. Most notably was the 1 mpg increase they experienced traveling the same roads with the same load and experiencing 2 lbs less boost to achieve the same speed. Accufab's independent dyno tests were conducted by Jim D'Amore of JDM Engineering which showed a 9 hp advantage over stock with no other changes and an equal increase in torque.

Power Air Inlet features include:

- Airflow increased by 40%
- Lower EGT's
- Increased mileage
- Less back pressure
- Boost port for aftermarket boost gauges
- Easy Installation
- Available in a cast or cast polished finish

As mentioned, the other notable benefit is the pre-tapped 1/8" NPT fitting on the Power Air Inlet. Like most people who tow heavy loads, or those who are strictly about performance, gauges for monitoring engine statistics are an integral part of the truck. The Power Air Inlet makes installing a 1/8 OD boost line a breeze. Gone are the days of tapping into the MAP line or pulling the stock intake elbow and drilling and tapping it yourself. A simple 3/16" hex wrench removes the 1/8 NPT plug fitting, which enables you to install any 1/8" NPT compression or Push-Lok fitting.

For our we picked up some stainless steel compression fittings to match the high polished finish on the Power Air Inlet:

Stainless steel compression fittings are shown below in two variations.

1. **Part #: SS-200-1-2**, SS Swagelok Tube Fitting, Male Connector, 1/8 in. Tube OD x 1/8 in. Male NPT (Left)

2. **Part #: SS-200-2-2**, SS Swagelok Tube Fitting, Male Elbow, 1/8 in. Tube OD x 1/8 in. Male NPT (Right)

1: Identify the Stock Intake Elbow

2: The plastic shroud shown above can easily be moved out of the way to access the intake elbow bolts. However you will need a universal joint during reassembly in order to apply the proper torque settings.

3: Loosen the band clamp on the Charge Air Cooler Pipe (CAC Pipe). There is no need to remove the clamp, just loosen it enough to allow your little finger to pass underneath. This will allow the CAC Pipe enough room to contort when you remove the elbow. Due to the length of the bolt, the band clamp shown here requires a 7/16" deep socket to remove the nut.

4: Once you have the bolts removed, get your hand underneath the intake elbow to secure the rubber O-Ring in place, and then rotate the entire assembly up towards the firewall. The rubber O-Ring is seated inside a groove under the intake elbow assembly. Although it is fairly secure, it's a good idea to get your hand under there to prevent any chance of it dislodging and falling into the intake manifold.

5: You will note that the stock intake elbow has a bolt that comes out the side. This bolt goes through a tab that is located underneath the plastic shroud. There was no bolt that held it in place on our truck. Just make sure you rotate the elbow towards the firewall once the bolts are removed in order to dislodge the elbow from the manifold.

6: Before pulling the stock intake elbow off the CAC Pipe and installing the Accufab's Power Air Inlet, it is a good idea to lay something down to prevent any debris from entering the manifold. With one hand securing the CAC pipe and the other securing the stock intake elbow, gently use opposing force in an up and down motion to dislodge the elbow from the CAC pipe. You will probably have to crawl up into your engine bay to get enough leverage in order to pull them apart.

7: Seen here is a comparison shot of the OEM unit and the Accufab Power Air Inlet.

8: Once you have the stock elbow off the truck, remove the rubber O-Ring and place it on the new Power Air Inlet. The rubber O-Ring is reusable.

Stock elbow with O-Ring attached:

Power Air Inlet showing the grove for the reusable rubber O-Ring:

Power Air Inlet shown with rubber O-Ring installed:

REASSEMBLY:

9: Reassembling the Power Air Inlet is simply the reverse procedure used for removing the stock intake elbow. Position the Power Air Inlet upside down and with one hand secure the CAC pipe and with the other secure the Power Air Inlet. Use opposing force in a gentle up and down motion to secure the Inlet into the CAC pipe.

Note: Ensure you push the Power Air Inlet in far enough for the grooves to get seated in the CAC pipe.

10: Once the Power Air Inlet has been seated into the CAC pipe, rotate the assembly down and seat the inlet onto the manifold. Reinsert the four bolts using a 5/16" socket, and tighten them down using a criss cross pattern to 10-12 ft lbs of torque. The last step in this procedure is using a 7/16" deep socket to secure the band clap around the CAC pipe. Tighten the band clamp to 12.0 nm or 8.9 ft lbs.

11: As you can see below, the Accufab Power Air Inlet does a fantastic job dressing up the engine. The enhancement from unrestricted airflow is definitely an added benefit. The 1/8" NPT tap makes it simple to install a boost line. We will determine which compression fitting we will use (straight or elbow) when we install our Autometer Ultra-Lite II gauges. The determining factor to the compression fitting used will be boost tube clearance from the engine mounted fuel filter cap when servicing thefuel filters.

Due to the success of the 05-07 Power Air Inlets, Accufab, Inc has developed elbows for the 2003-2004 6.0L PSD. The difference between the model years is the 03-04 models uses an EGR Throttle Plate to assist the flow of exhaust gasses through the EGR Valve. As a result, the Power Air Inlet is shorter in height as shown below.