

Aeromotive, Inc. Technical Bulletin #104

From: Aeromotive Technical Department

Date: 3/28/2019

Re: **Stainless Fuel Filters: How to Clean a Stainless Mesh Filter Element.**

How to clean a stainless mesh fuel filter element:

Tools and supplies you'll need before you start:

- 1.) 1-Can of Carb Cleaner (Brake-Clean will work but Carb Cleaner is much better).
- 2.) Steel Pan (oil drain pan works well here)
- 3.) Safety Glasses
- 4.) Rubberized Safety Gloves
- 5.) Compressed air supply and blow-gun
- 6.) Soft, small, bristle brush (an old toothbrush is not a bad thing here)
- 7.) 8" or larger Crescent style wrench or 1-1/8" open end wrench
- 8.) Bench Vise with soft/bronze jaw insert (or second, matching wrench, see above)
- 9.) Roll or box of reasonably heavy duty, shop-grade paper towels or rags.
- 10.) Replacement o-rings for the filter housing**
- 11.) An area to work in that is open and well ventilated and free of sparks, pilot lights or open flame.

*****Make sure you have spare o-rings for the filter housing before disassembly. In the event you find you need a replacement o-ring once the filter is apart you may be unable to put it back together, which would be a drag if you're planning on attending an event or a race, or need your car for basic transportation. All replacement elements ship with a replacement o-ring, however cleaning an existing stainless mesh style element (do not attempt to clean paper or micro-glass elements) requires you to determine what filter/housing you have so you can order the correct 10-pack of replacement housing o-rings in advance. The good news, Aeromotive offers replacement o-ring 10 packs for all of its filter housing/assemblies. There is only one o-ring option for the canister style filter with a large cup that is removed from a mounted filter head. Bullet style or in-line filters simply require you to measure the outside diameter of the filter housing. Here is a list of options and P/N's:***

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|------------------------------------|-----------|
| a.) Canister Filter & A3000 Filter | P/N 12018 |
| b.) 1-1/4" Diameter In-Line Filter | P/N 12003 |
| c.) 2" Diameter In-Line Filter | P/N 12001 |
| d.) 2-1/2" Diameter In-Line Filter | P/N 12002 |

Procedure to clean the element:

- 1.) Don the gloves and the safety glasses and leave them on until you're done.
- 2.) Drain the fuel tank or block the fuel line from the tank to the filter.
- 3.) Remove the filter from the fuel lines using a wrench to hold the filter and/or port fitting while loosening the AN fuel line, removing the complete filter assembly and draining any excess fuel.
- 4.) Disassemble the filter by holding the end of the housing opposite the parting line (where it unscrews) in a bench vise with padded jaw if possible, and unscrew the other end using a 1-1/8" open end wrench or 8" or larger Crescent wrench. Turn in a counter clockwise direction.
- 5.) Remove the element from the filter retaining boss, it just pulls off, wiggle it back and forth slightly as you pull.
- 6.) Inspect and clean the interior of the filter housing, spray with carb clean and stuff a rag inside and turn it, repeat as needed.
- 7.) Gently tap the filter element in the drain pan, rotating it 3-4 times while doing so. This will knock any large/loose debris off the element.
- 8.) Spray the element with the carb cleaner, using the small tube provided with the spray can to reach down into the element, directing the spray from the inside out. Work your way from top to bottom, rotating the element and making another pass, until you've covered it completely.
- 9.) Inspect the element for any signs of stubborn debris and use the brush to knock it loose.
- 10.) Spray with carb cleaner again, as needed. If spraying from the outside, use acute angle to spray down the outside surface.
- 11.) Empty the pan of carb cleaner and debris, an old oil jug is a good place for this, dispose of properly please.
- 12.) Using compressed air, carefully blow the element dry from the inside out.
- 13.) Install new o-ring on filter body with a dab of light oil or dielectric grease to lubricate the o-ring.
- 14.) Snap the clean element back onto the filter retaining boss (no lubricant on the internal o-ring).
- 15.) Thread the filter housing/end cap back together, ensure the housing o-ring does not protrude and become pinched as the housing is threaded together. Tighten the filter assembly using the same tools used to loosen it (snug is fine, this does not have to be overly tight).
- 16.) Reinstall the filter assembly into the car.
- 17.) Crack a line at the regulator just enough to allow air to purge, wrap a rag around the loosened fitting and briefly cycle the pump on and off until you have purged any air in the line and carefully tighten the hose end.
- 18.) Briefly cycle the pump and carefully inspect hose-ends at the filter, the regulator, and elsewhere in the system to verify there are no fuel leaks. Repair any leaks found until all are resolved.
- 19.) Safely dispose of all rags/towels safely, once they've air dried in a well ventilated area.

Note:

As always, it takes more than may be expected to do any simple task, but don't be intimidated, this is really not difficult to do and it's worth the investment in time and materials to do the job right!!