

# Feuling Oil Filter Cooler

## Cleans and cools at the same time

story by Neil Taylor

photos by Karen Brown

**T**he Feuling Oil Filter Cooler is a dual-purpose, dual-use product. On motorcycles, where space is limited, it's important if you can accomplish several goals with a single item. Feuling's Oil Filter Cooler is such an item.

Essentially, Feuling's unit is an auxiliary filter that works in tandem with the bike's original oil filter. Think of it as double-teaming dirty oil! The Filter Cooler's dual-purpose feature is found in the filter housing itself. See, the housing is the oil cooler. Made of billet aluminum, the Feuling auxiliary filter mounts in front of the regulator on touring models, where it sits right in the slipstream created by the front fender. That way fresh, cool air is always passing over it to help dissipate the

heat that the engine oil extracts from the engine.

The filter component has a special restrictor orifice in the return side that slightly reduces, or slows, the flow of oil through the filter, giving the oil even more time to remain in the filter body so that it can dissipate heat through the small fins milled into its body. The size of the fins isn't overly impressive unless you take into account the speed at which aluminum can actually dissipate heat. After all, an air-cooled engine like a Harley-Davidson relies primarily on the cylinder and head fins to dissipate its heat.

The Filter Cooler mounts to the engine by a billet aluminum adapter plate that is placed in line between the engine and the stock filter. The Feuling kit also comes with its own high-quality K&N filter to replace your stock filter. The Filter Cooler

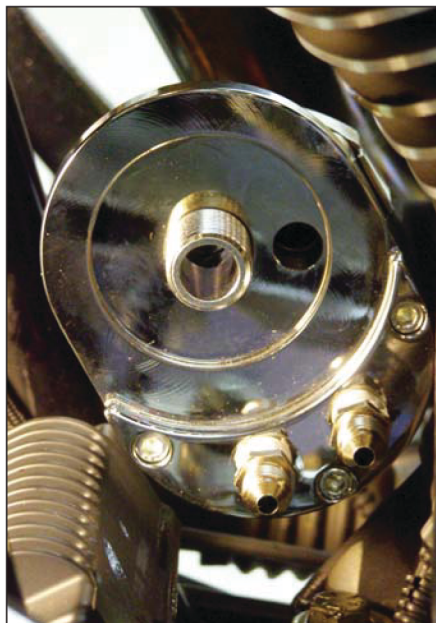


The filter element is a thick cylinder of fine felt-like material. While the Feuling is primarily an oil filter, it is also a capable cooler. The aluminum-finned filter body helps dissipate engine heat.



The whole shebang. The Feuling Oil Filter Cooler kit is an add-on that's easy to install and improves your Big Twin's filtering and cooling capabilities.





The chrome billet adapter installs in the stock filter's location. The included K&N filter then spins onto the adapter and the two AN fittings route oil to and from the Feuling Oil Filter Cooler.



The Feuling Oil Filter Cooler hangs down in front of the engine where it receives its fair share of fresh, cool air. As you might guess, this helps dissipate heat from the oil circulating through the filter.



The K&N filter mounts in the original filter's location, and the two braided lines are routed down to the filter cooler. Note the two zip ties that prevent the braided lines from rubbing against the frame.

attaches to the adapter by braided lines using AN fittings. These are not cheap braided covers, either; they are true crimped braided lines with race-quality fittings. We installed the Touring model Filter Cooler, which mounts to a bracket that utilizes the same two studs the voltage regulator is bolted to. The install is very clean and simple, and two zip ties are included in the kit to fasten the braided lines together and away from the frame. Remember, you're running braided steel lines from a rubber-mount engine to a stationary point on the frame so it's important that the lines are routed away from any other part of the motorcycle. Braided lines have a nasty habit of acting like a file if they rub against anything, metal frame tubes included.

So the question remains: Is the Feuling Oil Filter Cooler more of a filter, or more of a cooler? Well, outward appearances would suggest that it is a filter first because it lacks the "radiator" fins and cooling tubes found on traditional oil coolers. However, this initial impression didn't stand up under real world conditions. Due to the unit's mounting location behind the front fender,

where it receives an ample supply of cool air, the oil may even have a hard time getting up to temperature in cold weather. You can use your bike's oil pressure gauge to determine how hot the engine oil is. See, oil is generally thicker when it's cool, translating to higher oil pressure. As the oil heats up and the engine reaches operating temperature, the oil pressure tends to drop.

We installed this filter/cooler on Dale Hawkins's '06 FLHTCUI last December when the ambient temperatures were rather low. Dale reported back that before installing the Feuling, his bike ran at operating temperature, consistently at 32psi at 2,000 RPM. After the install the gauge showed 45psi. When cold, his oil pressure gauge now reads around 60 psi, almost pegging the needle. He also noted that oil pressure remains higher longer during a ride, and if pressure does drop, it is quick to cool (as indicated by the oil pressure gauge's needle returning to normal).

The cooling question answered, we can next ask: Does it filter? The answer is yes, and our experience with K&N filters suggested that it would do this job well before we

even removed the oil drain plug for the first time.

Finally, you might ask yourself: Do I need it? Well, that depends. Do you ride hard, long miles, with the hammer down in the middle of summer? Do you want to extend time between oil changes without sacrificing oil quality? If yes, then I would say you do need the Feuling Oil Filter Cooler. This is not a "hey look at me" type of performance item, either. It's a functional, low-key add-on that can help protect your bike's engine, be it a stock Harley motor or a high-performance V-twin.

The Feuling oil filter cooler is available for Softail, Dyna, and Touring models. It comes in a traditional chrome or black chrome finish, and kits retail for \$499. Know, too, that replacement oil filter elements are \$19.95. To borrow a phrase from the speed merchants, "How much reliability do you want?" The answer: "How much are you willing to spend?" **iw**

## Resource

Feuling Oil Pump Corporation  
Mojave, California  
619-917-6222  
www.feulingparts.com