# High Pressure - 3600 PSIG Compressed Natural Gas Fuel Filter FFC-112

Installation, Operation & Maintenance

The FFC-112 Series is designed for protecting critical engine components in Natural Gas Vehicles (NGV). Contaminants can be introduced into the vehicle's fuel tank during the fueling process. Contaminants may come from CNG compressors and storage facilities. The FFC-112 coalescing filter is specifically designed to remove oil, water and solid contamination from compressed natural gas.

## Installation

- 1.Locate the FFC-112 downstream of the fuel tank, between a shut off valve and the high pressure regulator to allow coalescing and filtration at tank pressure. This location also provides protection for the fuel regulator.
- 2.Mount the filter in an accessible but protected location for easy servicing.
- 3.Install fuel lines with the fuel entering the filter into the inlet port and exiting through the outlet port.
- 4. Test for leaks with system pressurized, by using leak detection fluid or methane detection equipment.



### **Contact Information**

Parker Hannifin Corporation Finite Airtek Filtration Division Oxford, Michigan T 248 628 6400, F 248 628 1850

www.parker.com/finitefilter

### **Features and Benefits**

- High grade aluminum 6061-T6 construction
- Tested to a 4-to-1 design burst pressure
- Anodized finish
- Long term corrosion protection

### **Applications**

- Protecting fuel system compressed engine components in natural gas vehicles
- Removes oil, water, and solid contamination from compressed natural gas



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#### Service

<u>CAUTION:</u> The FFC-112 Series must not be serviced while pressurized. Doing so may cause serious injury. Close the shut off valve, and slowly relieve line pressure before attempting service. Verify that the pressure has been relieved by using a pressure gauge known to be in good working order.

<u>Replacing the element:</u> Change the element at regular oil change intervals or every 6000 miles (9650 km). Depressurize housing before servicing. Remove drain plug with 1/4" hex key wrench and drain until liquid is removed. Change the o-ring each time the filter element is replaced. Using the flat sections located on the bottom of the bowl, unscrew bowl and remove old element and o-ring. Replace with new components and install bowl. Torque to 30 ft-lbs (40 Nm). Replace drain plug when completed. Torque to 27 ft-lbs (37 Nm). Test for leaks, with system pressurized, by using leak detection fluid or methane detection equipment.

<u>Draining</u>: Drain the housing every 2000 miles (3200 km) or as necessary. Depressurize housing before servicing. Remove drain plug with 1/4" hex key wrench and drain until liquid is removed. Inspect drain plug o-ring and replace as needed. Change the o-ring each time the filter element is replaced. Replace drain plug when completed. Torque to 27 ft-lbs (37 Nm). Test for leaks, with system pressurized, by using leak detection fluid or methane detection equipment.

Sump Capacity: 0.5 oz. (15 cc) Port Size: SAE-6 (9/16-18 UNF-2B) or 1/4" NPTF Flow: Inside to Outside Element Replacement Element Kit: CLS112-\*K \* = Element Grade



Part Number Port Size	1/4″ NPT	SAE-6
Head	47021	47074
Support Post	47031	47031
O-ring (head-to-bowl)	75198	75198
Element	SEE CHART	SEE CHART
Bowl	47019	47019
Plug, (includes o-ring)	71145	71145

Element			
Housing P/N		Replacement Element Kit	
FFC-112 SAE-4	FFC-112-4	CLS112-4K	
FFC-112 SAE-6	FFC-112-6	CLS112-6K	
FFC-112 SAE-8	FFC-112-8	CLS112-8K	
FFC-112 SAE-10	FFC-112-10	CLS112-10K	

#### Notes:

- 1. 3.2" [80 mm] clearance below bowl required for element removal
- 2. Head/Bowl Torque Specification: 30 ft-lbs [40 N-m]
- 3. All dimensions are ± 0.02" [0.5 mm] unless otherwise noted
- 4. Units are shown in inches [mm]
- 5. Drain plug torque specifications: 27 ft-lbs [37 N-m]

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