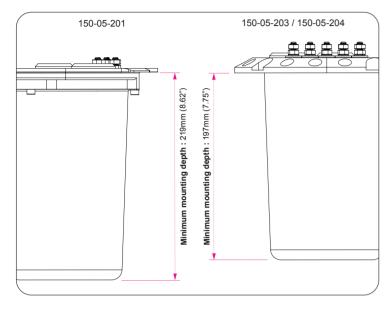
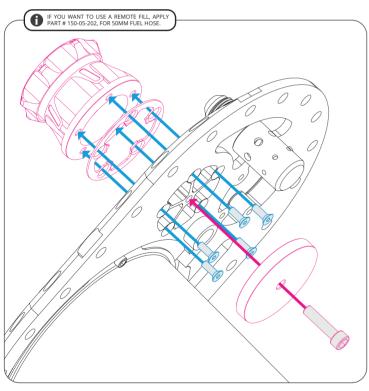
|                            | 150-05-201 CFC Unit     | 150-05-203 ATL          | 150-05-204 Brusniess    |
|----------------------------|-------------------------|-------------------------|-------------------------|
| Fill plate size            | 6x10" / 24 bolt pattern | 6x10" / 24 bolt pattern | 6x10" / 24 bolt pattern |
| Minimum mounting depth     | 219 mm ( 8.62" )        | 197 mm ( 7.75" )        | 197 mm ( 7.75" )        |
| Maximum pickup pipe length | 321 mm ( 12.65" )       | 299 mm ( 11.77" )       | 299 mm ( 11.77" )       |
|                            |                         |                         |                         |



### Fuel cap and fill neck assembly



### **FUEL CAP ASSEMBLY:**

The fill neck and fuel cap need to be assembled with the fill safety valve before use. First, remove the pre-mounted safety valve and then fit the provided gasket in the right place from the top of the CFC Unit and mount the fill neck with the provided bolts. Depending on which CFC Unit version, different bolts are provided, see specification below.

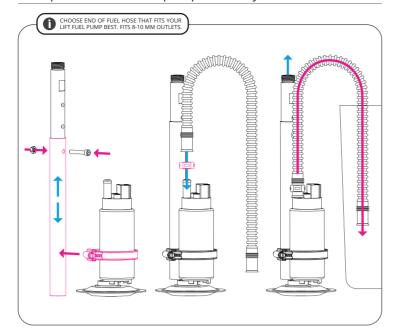
After the fill neck has been mounted, reassemble the safety valve from the underside of the CFC Unit. The safety valve acts as an extra safety in the event of an accident and the fuel hose (when using remote fill) or that the fuel cap would be missing, and prevents fuel flow out of the fuel cell through this large opening.



Note that the valve does not allow any use without a fuel cap, fuel cap must always be used for all types of use.

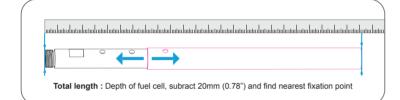
Fill Cap Mounting Bolts Stainless Steel F6S 5x12mm Stainless Steel MF6S 5x20mm

### Pickup bracket and fuel pump assembly



### PICKUP FUEL PUMP ASSEMBLY:

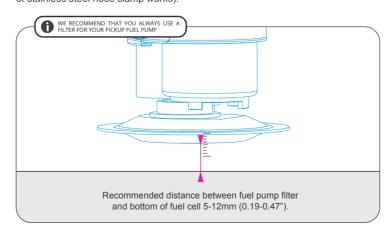
The Nuke Performance Competition Fuel Cell Unit utilizes an adjustable pickup assembly that makes it possible to mount the CFC Unit within most fuel cells available with the included hardware



Start by measuring the depth of your fuel cell, measure from the top edge that seals against the CFC Unit, and then subtract at least 20mm (0.78"). Adjust your pickup pipe to your calculated measurement and locate the suitable fixation hole and fixate the pickup pipe with the included bolt and nut.

Use the included stainless steel hose clamp to fixate your pickup/lift fuel pump to the pickup pipe. With the fuel pump fuel filters mounted, measure the total length of the pickup assembly and adjust the location of the fuel pump so the filter sits 5-12mm (0.19-0.47") above the bottom of your fuel cell. Do not tighten the hose clamp before mounting the assembly to the top lid.

Mount the included 500mm convoluted fuel hose to the outlet port of the fuel pump, the hose has different diameters at the ends, choose the one that fits your fuel pump outlet. Fixate the fuel hose with the included single ear hose clamp (any type of stainless steel hose clamp works)



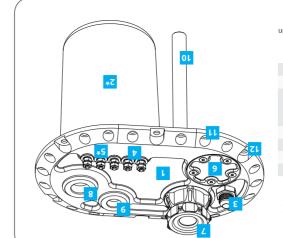
Mount the pickup pipe assembly to the CFC Unit top lid, make sure the fuel pump and fuel hose do not interfere with any of the functions of the top lid, and then tighten the hose clamp fully to fixate the fuel pump.



The convoluted fuel hose included with the Nuke Performance CFC Units is made out of nylon and is 100% safe for in-tank use with all types of fuels including ethanol and methanol use without losing functionality and without the outside dissolving after being soaked in fuel for a long time.

The pickup fuel pumps fuel hose routes into the surge tank bucket and fills the surge tank and provides the high-pressure fuel pumps with fuel. The hose must be routed into the surge tank before the surge tank has been fitted to the lid, there is no possibility of accessing the hose afterward.

Always have proper safety equipment nearby during installation and use. This product is made for motorsports use only. For more info, visit our website. Keep in mind that fuel cells containing fuel, or fuel residues are highly flammable. Take the utmost care and ensure good ventilation when handling fuel.



 $\pm$  150-05-204 includes brackets for brushless fuel pumps and uses a 6-pin bulkhead electrical connector and 3 x lift fuel pump M6 connectors.

( .S/'/ ) ww/61 : uadap Surunow wnwiuiw

12. 6 x mounting points for additional mounting clips 11. 24 bolt pattern for M6 bolts SOUTH TO THE PARTY OF STATE OF THE PURPLE OF

Hose clamp to mount fuel pump to bracket 10. Adjustable pickup fuel pump mounting bracket

9. Keturn port AN-8 OKB thread 8. Outlet port AN-10 OKB thread

7. Fill neck with cap, with fuel cap (remote fill neck available) 6. Fuel level sender, block off plate included

2. 2.0 liter integrated surge tank 1. 6x10" fill plate replacement lid, 24 bolt pattern

Bulkhead 6-pin connector Max ≈30 Ampere / pin \*

5. 3 X HIBRI Pressure fuel pump ivio Electrical Connector

3. Rollover valve AN-8 (3/4 UNF) to AN-6 Male (included)

(duras dund laur ismain laguis) gura 4428 441 x 1

Brackets for 39mm / 46mm fuel pumps included

BIIIET ALMINIM BYACKET TO' SINBIE/dual Internal Tuel pump

Max ≈125 Ampere / each

Max ≈125 Ampere / each

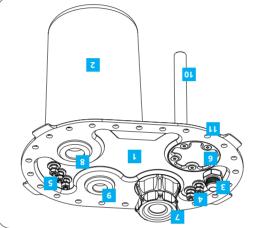
4. 2 x Lift fuel pump M6 Electrical Connector

2 x 1/4 BSPP to Barb Male fittings

Brackets for 42mm fuel pumps \*

ATL Fuel Cell / Saver Cell drop in fuel surge tank and fuel pump hanger. / CFC Unit for brushless fuel pumps.

ATL Competition Fuel Cell Unit / Brushless fuel pump Competition Fuel Cell Unit Part no #: 150-05-203 / 150-05-204



Minimum mounting depth: 219mm ("20.8")

11. 24 x 1/4-28 UNF x 3/4 bolts with nylon washers (included) 500mm convoluted hose and hose clamp for lift pump Hose clamp to mount fuel pump to bracket 10. Adjustable pickup tuel pump mounting bracket

- 9. Return port AN-8 ORB thread
- 8. Outlet port AN-10 ORB thread
- FIII neck with cap, with fuel cap (remote fill neck available) 6. Fuel level sender, block off plate included

Max ≈125 Ampere / each 5. 3 x High pressure fuel pump M6 Electrical Connector

- Max ≈125 Ampere / each 4. 2 x Lift fuel pump M6 Electrical Connector
- 3. Rollover valve AN-8 (3/4 UNF) to AN-6 Male (included) 1 x 1/4 BSPP Plug (single internal fuel pump setup)
- 2 X 1/4 BSM CO Back Maie Maie Tillings Brackets for 39mm / 46mm fuel pumps included
- Billet aluminum bracket for single/dual internal fuel pump Z. 2.0 liter integrated surge tank
  - 1. 6x10" fill plate replacement lid, 24 bolt pattern

Low profile, 24 bolt pattern drop in fuel surge tank and fuel pump hanger

Competition Fuel Cell Unit

Part no #: 150-05-201

### Safety disclaimer















### Information:

For more information about our brand, our products, our history, our dealers, our conditions and technical documentation, visit www.nukeperformance.com or contact your local dealer. This product is developed, designed and manufactured in-house by Nuke Performance AB in Sweden. Make sure to use lubricant before tightening fittings and always use extra care when handling any kind of fuel. All of our products are installed at your own risk and could damage your equipment, engine or vehicle if not properly installed.

> © Nuke Performance AB, Sweden www.nukeperformance.com

# Product Manual

## Competition Fuel Cell Unit

150-05-201

150-05-203

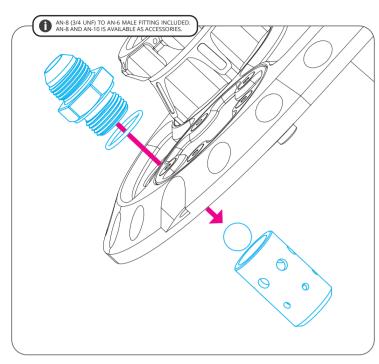
150-05-204



### **VENT VALVE ASSEMBLY:**

The CFC Unit is equipped with a roll-over protected vent fitting for protection if an accident would occur and the car would end up on its roof. It utilizes a stainless steel ball that that by gravity seals the vent when there is a chance of fuel leaking out of the valve. The Nuke Performance CFC Units are delivered with an AN-8 (3/4 UNF) to AN-6 Male (Part #: 700-01-101) fitting. AN-8 Male and AN-10 Male fitting are available as accessories if needed.

AN-8 (3/4 UNF) to AN-8 Male fitting Part #: 700-01-102 AN-8 (3/4 UNF) to AN-10 Male fitting Part #: 700-01-103



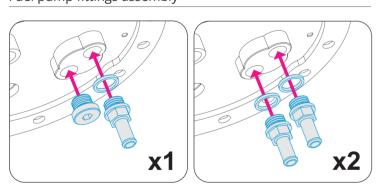
### **VENT TUBING ROUTING:**

When routing the vent tubing (not included), some part of the vent tubing must be positioned above the highest of your fill neck/filler cap to prevent overfill. Recommended placement of vent valve outlet is lower than the fuel cell itself.



Remember to use a vent hose/tubing that is safe for the same type of fuel as you run in your fuel cell. If running alcoholic fuels such as ethanol or methanol, the vent tubing must be proof for alcoholic fuels.

### Fuel pump fittings assembly



### **HIGH-PRESSURE FUEL PUMP FITTINGS:**

The Nuke Performance CFC Units are delivered together with everything you need to route a single or dual setup of high-pressure fuel pumps mounted within the surge tank. These two fuel pumps are then combined into one single AN-10 external outlet, this makes it possible to exclude an external three-way-fitting.

### SINGLE FUEL PUMP SETUP:

If running a single fuel pump setup, mount 1x 1/4 BSPP plug and 1x 1/4 BSPP to Barb 8mm male fitting to the dual ports. The spare barb fitting are not needed for this setup.

### **DUAL FUEL PUMP SETUP:**

If running a dual fuel pump setup, mount 2 x 1/4 BSPP to Barb 8mm male fittings to the dual ports. The spare 1/4 plug is not needed for this setup.

### ADDITIONAL FUEL PUMP MOUNTING KITS:

We recommend that you use a Nuke Performance SAE fuel pump mounting kit, that got it all covered with all the hoses and fittings for the most common fuel pumps for any horsepower needs between 200 - 2500 hp. When running one of the SAE kits, you do not need any of the included parts for the CFC Unit, the kit comes with both 1/4 BSPP plug and 1/4 BSPP to SAE fittings.

Additional sized 1/4 BSPP to hose fittings is available as accessories.

### High pressure fuel pump assembly

### SURGE TANK FUEL PUMP ASSEMBLY:

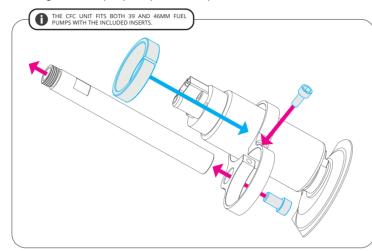
The Nuke Performance Competition Fuel Cell Unit holds a single or dual setup of high-pressure fuel pumps within the surge tank. It fits most common fuel pumps with a common 39 mm diameter such as Aeromotive Stealth, AEM 320L, Deatschwerks DW200, DW300, Walbro GST400, GST450, GST520, and many more. It also fits larger diameter fuel pumps such as Deatscwerks DW400 and Bosch BR540. This makes it possible to design your fuel system for all needs between 200 - 2500 hp with the same fill plate replacement unit. The CFC Unit fits fuel pumps with a diameter of 39 or 46mm. 150-05-204 is also delivered with inserts for 42mm fuel pumps to accommodate brushless fuel pumps.

### SINGLE FUEL PUMP SETUP:

If running a single fuel pump setup, use the same bracket but leave one of the brackets spaces empty

### **DUAL FUEL PUMP SETUP:**

If running a dual fuel pump setup, use both spaces in the bracket.



### Ø 39MM INSERTS:

Use Ø 39mm fuel pump insert when running common Ø 39 mm fuel pumps. To be inserted between the fuel pump and the aluminum bracket.



### Ø 42MM INSERTS:

Use Ø 42mm fuel pump insert when running common brushless fuel pumps such as DW440 Brushless or Protec Cobra Compact. 42mm inserts only delivered with 150-05-204.

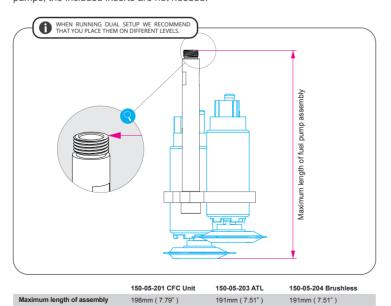


### **LARGER DIAMETER FUEL PUMPS:**

When running larger diameter fuel pumps such as Deatschwerks DW400 and Bosch BR540, the included inserts is not needed.

### **FUEL PUMP BRACKET INSERTS:**

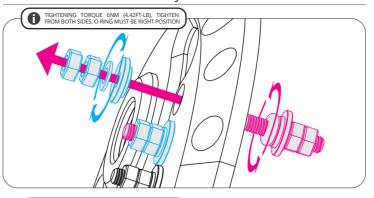
The CFC Unit comes with inserts to fit common 39mm fuel pumps within the same bracket as the larger diameter 46mm fuel pumps. If using larger diameter fuel pumps, the included inserts are not needed

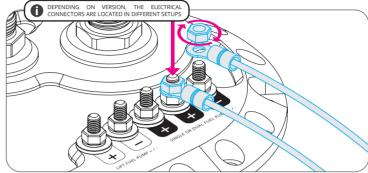


### DO NOT TIGHTEN FUEL PUMP BRACKET BEFORE HEIGHT ADJUSTMENT:

Before you tighten and fixate the positioning of the fuel pump bracket, mount the pipe to the CFC Unit's top lid and follow the next step to measure the length of fuel pump placement to fit perfectly within the surge tank.

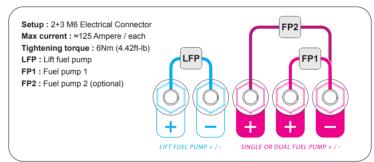
### Electrical connector assembly





### **FUEL PUMP ELECTRICAL CONNECTIONS:**

The CFC Unit utilizes over-dimensioned M6 electrical connectors that work with all possible fuel pump setups. The connectors are mounted to the lid in different configurations depending on the version, you have 2 connectors for the lift fuel pump and 2+1 connectors for the high-pressure fuel pumps within the surge tank. With this configuration, you can choose between how to mount and run your fuel pumps. 10 x cable lugs for the connectors included with the CFC Unit together with 10 x M6 nuts and 10 x M6 washers.

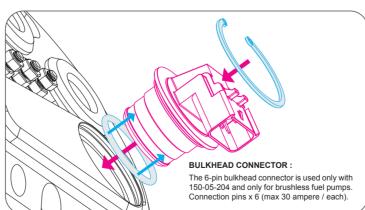


### **TIGHTENING THE CONNECTORS:**

The electrical contacts are pre-mounted on the CFC Units and are ready to be connected to. Install the selected connector, preferably the included cable lugs, over the connector, place a washer over the cable lug, and then the attached M6 nut. Tighten the upper nut with a tightening torque of 6Nm (4.42ft-lb).



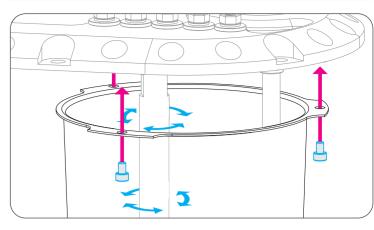
Fuel pumps must always be secured with a suitable fuse selected for the fuel pump used. For more specifications, contact the fuel pump manufacturer.



### **BRUSHLESS FUEL PUMP ELECTRICAL CONNECTIONS:**

For 150-05-204 CFC Unit for brushless fuel pumps, the bulkhead connector is used to work with the additional electrical wires needed. Mount the bulkhead fitting by adding the Viton O-ring to the bulkhead, locate the bulkhead fitting to the CFC Unit top and secure it with the included circlip. This connector is only recommended to be used with brushless fuel pumps which use fewer amperes (max 30 ampere / each). The 6-pins accommodate a single or dual setup of brushless fuel pumps.

### Integrated surge tank assembly



### **SURGE TANK ASSEMBLY:**

When all fuel pumps are mounted, the electrical cables are connected, and everything is in place, it is time to mount the integrated surge tank. Mount the surge tank with the three supplied bolts, the type of bolt depends on the CFC Unit version, see listed specification.

|                           | 150-05-201 CFC Unit   | 150-05-203 ATL       | 150-05-204 Brushless |
|---------------------------|-----------------------|----------------------|----------------------|
| Surge tank mounting bolts | MC6S M5x8 + M5 washer | K6S M4x6 (no washer) | K6S M4x6 (no washer) |

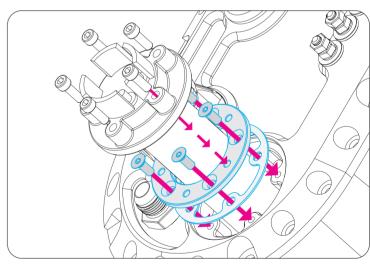
### ADJUST FUEL PUMP ASSEMBLY WITHIN THE SURGE TANK:

If the surge tank does not fit over the fuel pump assembly, a slight adjustment can be performed to the fuel pump assembly. First, make sure that you followed the steps regarding the total length of the assembly and then rotate the assembly into a position that works by slightly loosen the bolt that secures the bracket to the pipe and then you rotate the full assembly. Do not forget to tighten the bolt when a functional position is found. If the fuel pump's fuel filters are turning the wrong way, loosen the bracket bolt and rotate the fuel pumps within the bracket. Do not forget to tighten the bolt when a functional position is found.



You must not use force to position the surge tank, it should at all times go free during installation. Some type of aftermarket fuel filters can be difficult to position in a functional position and may have to be replaced.

### Optional fuel level sender assembly



### **FUEL LEVEL SENDER ASSEMBLY:**

The CFC Unit allows you to mount an aftermarket fuel level sender unit in an optimal position without interfering with the other functions of the CFC Unit. When delivered it is equipped with a slim lightweight block off plate that is easy to remove when installing a fuel level sender unit. The included spacer is used when placing a sender unit with the common 5-bolt pattern and lets you install most common fuel level sender units, even if it has a wider diameter but still use the same pattern.

Nuke Performance provides fuel level sender units in 8 / 9 / 10 / 12 / 13 / 16" and with or without fuel level gauge

### Legal and conditions

### **NUKE PERFORMANCE CONDITIONS:**

By installing the product, you accept the conditions set by the manufacturer. The manufacturer accepts no responsibility for how the installation is carried out, nor for any damage or accidents that may occur. Please note that the use of the product is intended solely for motorsport use.

General conditions found at: www.nukeperformance.com/kopvillkor.html Nuke Performance AB, Sweden - All rights reserved.