



Streetfighter BFMK2 –FGX 1500 Hp Fuel Module

Important! Must Read First

Congratulations on the purchase of the Streetfighter 1500 Hp Intank Fuel system for your Ford.

To ensure your Fuel Module system is fitted correctly and operates perfectly and reliably we advise that this kit is to be fitted by a Streetfighter Dealer workshop. If you are unable to access a Streetfighter dealer we strongly recommend a professional experienced fully qualified technician to install your new Streetfighter 1500 Hp Fuel Module system.

Ask your qualified installer to contact KPM Motorsport on any aspect not clear in the instructions provided. 08 82999 998 / david@kpmmotorsport.com.au

As a wide variety of skills, procedures, special tools and workshop equipment is needed to install this kit:

- KPM will take NO responsibility or give NO guarantees on the operation of this product for fitment not carried out by a Streetfighter dealer or experienced qualified technician.
- KPM Motorsport will take NO responsibility or give NO guarantees on the operation of this product due to not fitting this kit exactly as per the instructions provided.

Ensure correct workshop safety procedures are carried out in fitment of this kit.

Please read ALL instructions before commencing fitment.

Guaranteed

On satisfaction that ALL instructions have been followed as per this document KPM Motorsport will warrant the Streetfighter 1500 Hp Fuel Module system against any defects or faults for 12 months from the date of purchase.

Should you want to extend your warranty and have complete piece of mind, contact KPM Motorsport or one of the Streetfighter dealers Australia wide to enquire on our exclusive **3 Year Factory Warranty Protection***

*conditions apply / contact KPM Motorsport for details

Important

This Fuel Module is engineered to operate perfectly as a complete system when used with all components and correct fuels as follows.

- 1) Streetfighter 1500 Hp Fuel Module (for increased flow and capacity)
 - 2) Adjustable 700LPH fuel pressure regulator (for correct pressures and return flow volume)
 - 3) Plug and Play wiring/relay kit (for correct and reliable current supply)
 - 4) Ethanol/Petrol compatible hose fitting kit
- KPM Motorsport will take **NO** responsibility for the operation of this fuel system if any of the components listed are not utilised with this package.
 - KPM Motorsport will take **NO** responsibility for the operation of this fuel system if any of the components listed are replaced with a non-KPM approved component.
 - KPM will take **NO** responsibility for the operation of this fuel system if using the Streetfighter 1500 Hp **Flex fuel** module on a vehicle **NOT** designed and/or **NOT** fully retrofitted for E85 Ethanol or flex fuel.

Note:

E85 Ethanol is highly corrosive on many components.

Please be aware that if your car is **NOT** built for E85 Ethanol from manufacturer, the remaining components in your fuel system will also need to be replaced or suited for E85 Ethanol.

(Examples of some possible non-compatible components - are fuel injectors, fuel filters, fuel lines, rubber hoses, fittings etc)

Before dismantling

- You will need to reduce residual fuel pressure in the fuel system to 0 kpa to enable disconnection of fuel lines and rail.
- You can do this by removing the fuel pump fuse and running the engine until fuel pressure drops to 0 kpa.
- Disconnect the Battery

Standard Fuel Module removal

- 1) Drain Fuel tank
- 2) Sedan- the fuel module can be accessed by a cover under the rear seat
Ute- the fuel tank will need to be removed to access module
- 3) Carefully remove the fuel lines from the fuel module
(a quick disconnect tool is recommended for disconnecting fuel lines)
(take extra care in not crimping/damaging the fuel line on removal.)
- 4) Remove the electrical connector from the module
- 5) Unscrew the retaining ring holding the module to the tank with the correct tool.
- 6) Sedan – Carefully lift the module from the fuel tank taking care to disconnect the fuel level sender wiring while doing so.
Ute - Carefully lift the module from the fuel tank including the attached fuel level sender as a complete assembly.

Streetfighter Module Fitment

- 1) Sedan- Carefully lower the new fuel module into the tank taking care to re- connect the fuel sender wire to the module connector
- 2) Ute- Carefully lower the new fuel module into the tank taking with the fuel level sender as a complete assembly
- 3) Retention the re-taining ring to secure the fuel module into the tank with the correct tool. (ensure module is sitting square and flush on the seal prior to retensioning)
- 4) Refit fuel lines ensuring they have clicked on properly.
(Take extra care in not crimping/damaging the fuel line on removal or replacement.)

Adjustable High Flow Pressure Regulator Fitment

- 1) Remove vacuum hose and retaining clip from standard pressure regulator housed at fuel rail
- 2) Using care, pull on regulator until it dislodges from its housing.
- 3) Lightly lubricate seals on the fuel pressure regulator blanking plug.
- 4) Push the blanking plug into housing until it is properly and securely seated
- 5) Refit retaining clip.

Location of the new adjustable fuel pressure regulator varies depending on vehicle model and engine type.

FG 4.0 Turbo models

- a) Remove the standard fuel pressure regulator.
- b) Replace with the supplied GFB Adjustable regulator.

Note: Fuel pressure is pre-set at 400kpa on bench, however **MUST** be checked and adjusted if required on car.

FG 5.0 Coyote Models

- a) Remove the Intake airbox assembly.
- b) Fit the supplied new adjustable fuel pressure regulator and bracket to the horizontal flat plastic panel (**as pictured below**)



- c) Disconnect the return fuel hose quick release fitting at the rail.
- d) Fit new STRAIGHT fuel hose quick release fitting to rail and opposite threaded fitting to the inlet fitting on the fuel pressure regulator...

- e) Fit new RIGHT ANGLE threaded fitting to the outlet fitting of the fuel pressure regulator and opposite end male fitting to quick release fitting of the previously disconnected return hose.
- f) Remove the 2 fuel hoses at the front of engine and replace with the supplied fuel hoses.
- g) Replace the vacuum line to the new regulator with the new length supplied

Note: Fuel pressure is pre-set at 400kpa on bench, however MUST be checked and adjusted if required on car.

Airbox assembly should be fitted after final start up and leak check.

Wiring/relay fitment (schematic diagram attached)

- 1) Remove R/H/F wheel
- 2) Remove R/H/F plastic inner guard
- 3) Remove cover on the under bonnet fuse box
- 4) Plug male end connector of the new wiring kit to the fuel module wiring loom connector on car.
- 5) Plug female end connector of the new wiring kit to the fuel module
- 6) Find a suitable and reliable earth point for the black wire eyelet
Sedan- seat belt buckle bolt
Ute – suitable reliable point in close vicinity
- 7) Route the Red and Pink wire from the fuel module area along the existing wiring loom

Sedan – along the front of the rear seat (under the carpet) towards the RHR door. Continue along the R/H seal panel (under carpet) toward the driver's foot well area.

Ute- Along chassis into cabin and drivers foot well area

- From the driver's foot well you can access the RHF inner guard cavity through a large grommet following an existing wiring loom.
 - From RHF inner guard cavity you can enter into the engine bay via a large hole accessed near the fuse box area.
- 8) Drill small hole at the top left hand corner of the fuse box to mount the relay with bolt and nut supplied

- 9) Measure your red and pink wire to this point giving correct length for perfect fitment.
- 10) Cut your Red and Pink wire and crimp securely to the relevant vacant connectors supplied on the relay.
- 11) Mount your relay to the fuse box
- 12) Undo the fuse box power supply junction cable and route the supplied Red wire and large eyelet from the relay to this point.
- 13) Undo the small 10mm head bolt on the inner RHF guard and route the supplied Black wire and small eyelet from the relay to this common earth point.

Start up Procedure

- 1) Refit the fuel pump fuse
- 2) Reconnect your battery
- 3) Ensure you have at least ¼ tank of correct clean/fresh fuel
- 4) Connect a fuel pressure gauge to the supply line at the fuel rail
- 5) Prime fuel system and start engine
- 6) Check all fittings at pump and fuel rail for NO leaks
- 7) Check pressures are within specifications below

If not within the specifications below you will need to check for correct fitment and take the normal course of diagnosis to rectify before proceeding.

Regulated Pressure engine idling 400-450 Kpa
Unregulated pressure engine idling 450-500 Kpa

- 8) Stop engine and relieve fuel pressure
- 9) Remove fuel pressure gauge and refit fuel line
- 10) Re-start engine and check for NO leaks

KPM strongly recommends that you have your engine tune checked by a professional tuning workshop!

Depending on the previous fuel system your vehicle has been tuned to, your car may run differently with the new Streetfighter fuel system pressure and extra supply.

This can cause rich or lean fuel mixtures and possibly be detrimental to your engine!
It is your responsibility to have your vehicle checked and/or re-tuned by specialist methods to ensure correct fuelling and engine safety and reliability.

SFFG1500 Wiring Diagram BA-FGX Falcon 2 PUMPS



