

## LT1/LT4 High Pressure Fuel Pump (HPFP) Installed Height Check

When installing the High Pressure Fuel Pump (HPFP), it is the installer's responsibility to make sure that you have the proper pump installed height and/or lash cap thickness so that you have some preload but do not bottom out the pump. The simplest way to do this is to follow this procedure:

Find the base circle of the camshaft fuel pump lobe. You can do this by sitting the HPFP in its position with the 2 retaining bolts removed. Simply turn the engine while watching the HPFP move up and then down onto the camshaft base circle.

Remove the HPFP

Remove the outer spring of the HPFP as shown in Fig1.

Then re-install the fuel pump with gasket by hand and see if there is preload between the fuel pump lifter and the fuel pump drive rod. If there is no preload, then you will need to install a lash cap.

We have supplied a 2mm lash cap with our kit.

**Fig 1**



If it sits up a little as per fig 2, you have proper preload already and do not require a lash cap. DO NOT USE the lash cap supplied in the kit.

With the gasket installed we recommend approx. 1mm pre-load or

You will want to achieve some preload just as it comes from the factory.

**Fig 2**



Next rotate the engine and or camshaft until the HPFP lobe raises the fuel pump lifter to its peak or highest lift point. Now install the HPFP by hand with no gasket.

Be sure to tighten the 2 HPFP bolts down lightly while carrying out this process.

Measure the gasket thickness.

If it will install by hand with no gasket without the fuel pump drive rod bottoming out or to a spacing less than gasket thickness, then you will have enough clearance when the gasket is installed to not damage the pump. However if the fuel pump drive rod does bottom out before the bolts are tight with no gasket to a measurement more than the thickness of the gasket, you will destroy the pump if you run the engine this way.

Once you have checked and set the installed height be sure to refit the outer spring and gasket of the HPFP before final fitment.

Our Streetfighter camshaft kit comes supplied with a 1.5 mm lash cap. There are many possible reasons for the installed height of the HPFP to vary.

There may be variances in machined components. Some aftermarket valley covers may change the mechanical pumps installed height. If you lower the installed height without compensating for this or if you install too thick of a lash cap, you will destroy your mechanical fuel pump.

Should you require a varying size lash cap, they are available in different sizes.

**It is the installer's job to make sure they have checked the HPFP installed height for sufficient clearances.**