



## FG Coyote 5.0 Supercharger Streetfighter Cover and Snout Upgrade

### **Important! Must Read First**

Congratulations on the purchase of the Streetfighter Cover, snout and pulley upgrade for your 5.0 Coyote Supercharger.

To ensure your Streetfighter upgrade 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 Twin Intake.

Ask your qualified installer to contact KPM Motorsport on any aspect not clear in the instructions provided. 08 82999 998 / [david@kpmmotorsport.com.au](mailto: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 Twin Intake 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

## Before dismantling

### Important

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.

## Dismantle

- 1) Unpack all components and lay out neatly for inspection
- 2) Remove intake filter and ducting assembly
- 3) Remove throttle body from vehicle
- 4) Remove Boss 315/335 plate on plenum lid.
- 5) Loosen supercharger drive belt and remove.
- 6) Disconnect wiring plug at T-Map sensor at plenum lid and move wiring out of the way.
- 7) With a suitable rag wrapped around the quick release connector ( to catch any spillage), unclip the fuel supply line to the fuel rail. **White clip connector**
- 8) Unclip the fuel return line from the rail. **Black Clip connector**
- 9) Unclip the fuel line at either side of the fuel rail at the front of manifold.
- 10) Unclip wiring connector to the intake temperature sensor on the driver's side centre of inlet manifold. Remove sensor from manifold.
- 11) Remove vacuum hoses from waste gate
- 12) Unclip all electrical connectors from injectors and move wiring out of the way.
- 13) Remove the 10mm head fuel rail retaining bolts. 2 x either side of manifold. 1x at the fuel pressure regulator.
- 14) Remove each bank fuel rail separately by gently pulling up the rail to free injectors from manifold. Once free, the rail with injectors connected can be completely removed.
- 15) Remove all 10 x 8mm head bolts retaining the intake runner to cylinder head. ( **See tips** )
- 16) Take care in disconnecting surrounding hoses and connector. With a second person giving you a hand, BE CAREFUL to lift intake manifold assembly up and forward just enough to expose the loom clip and 10mm bolt at rear of manifold.
- 17) Manifold should now be completely free to remove as an assembly from vehicle.

## Removing the standard front supercharger cover on the bench

- 1) Place the supercharger/manifold assembly on the bench with the front pulley facing towards you.
- 2) Position a container or tray under the supercharger front cover assembly to catch the oil on removal. You may need to place container on the floor while overhanging the front snout assembly over the edge of the bench.
- 3) Loosen all 6 bolts that secure the front cover to the supercharger.
- 4) You will find that oil will start to leak from the front cover flange area. Re-position your tray so as to catch the oil while loosening the bolts further until all are completely removed.
- 5) While holding the pulley with one hand, gently tap the front cover with a dead blow soft hammer to loosen and eventually remove the cover assembly from the supercharger. You may also need to pull forward on the pulley while tapping the cover to completely free it from its dowels.
- 6) BE CAREFULL not to remove, disturb and pull forward the gear set and second flange while removing the front cover assembly.
- 7) Once removed, place the cover assembly on the bench and check that the snout shaft to gear spring loaded coupling has remained on the 3 dowels of the gear set. \***Picture 1** (Note :The spring loaded coupling will need to be removed and refit to the Streetfighter snout on re-assembly )
- 8) Clean excess oil around the gear set and flange surface of the supercharger with brake clean or similar.
- 9) Be sure that any existing sealer residue is completely removed and the mating surfaces are prepared and clean for re-assembly.

## Fitting new Streetfighter Cover and Snout to supercharger assembly

- 1) Remove all new Streetfighter components from packaging and ensure that all mating surfaces are clean and ready for assembly.
- 2) The new Streetfighter front cover/snout and pulley assembly has all been preassembled sealed and bolts tensioned for direct replacement. DO NOT dismantle or loosen any bolts on the assembly
- 3) Carry out a test fit of the spring loaded coupling unto the new Streetfighter Snout taking care to fit in the correct direction and to fit the snout dowel on the correct side of the spring. **\*Picture 2**
- 4) The spring loaded coupling will need to be slightly modified so as the perfectly fit and rotate on the shaft and 3 dowels on the Streetfighter Cover/Snout. **\* Picture 3, 4 and 5**
- 5) You will need to lightly file some of the raised material on the coupling until it has clearance on the new Streetfighter cover. Continue fitment and modification until there is no interference with the cover while rotating the shaft. Only minimal clearance is required. **\*Picture 4 and 5**
- 6) The coupling must also be fully seated to its maximum position on the 3 dowels and in the correct direction of fitment while checking for clearance. **\*Picture 5**
- 7) Carry out a test fit of Streetfighter cover with the coupling assembled aligning the 3 dowels on the gear set with the accommodating holes in the coupling. (Ensure the Streetfighter cover flange meets perfectly with the supercharger flange with out effort. **\*Picture 6**
- 8) Remove the Streetfighter snout from the test fit and use the sealant supplied to Run a bead on the sealing edge of the Streetfighter cover.
- 9) Using the 6 new bolts supplied, equally tension and tightens the Streetfighter cover assembly to the supercharger assembly.
- 10) Remove the filler plug from the Streetfighter cover and fill with the total amount (175ml) of the supercharger gear oil supplied. Refit filler plug.
- 11) Rotate the front pulley by hand to ensure that there is no resistance and the snout shaft and supercharger assembly is rotating correctly. You should also feel the coupling spring tension movement as you turn the pulley clockwise.

## Re-assembly of manifold to engine

- 1) Make sure all the o rings on the manifold runners are in place and clean before fitting the manifold on engine. ( Replace any worn o rings as needed. )
- 2) With the help of a second person refit manifold assembly to engine and rest in position.
- 3) The wiring loom clip and bolt under the manifold is not needed as the wiring loom remains firmly in its rest position.
- 4) Re-connect all fittings on the rear runner. ( be sure to route the small vacuum fitting for best correct fit )
- 5) Bolt down manifold in a correct bolt sequence and to manufacturers torque settings.

- 6) Carry out fitment of injector rails, fuel lines, waste gate hoses, wiring, intake temperature sensor, plenum BOSS 315/335 name plate and supercharger belt in reverse order of dismantle.
- 7) Refit intake filter and ducting assembly
- 8) To ensure correct belt grip and tension, replace the standard drive belt with the new shorter belt supplied.
- 9) The engine is now ready for re-tuning for the extra boost delivery.

## **Notes \*Picture 2**

- 1) It is of vital importance that the positioning of the coupling is noted on dismantling. It will need to be refit in exactly the same direction as was removed.
- 2) It is of vital importance that the 3 dowels on the cover shaft and the 3 dowels on the supercharger gear be lined up and assembled on the correct side of the coupling spring. \*pulley/shaft must have spring tension on clockwise rotation.

## **Tips**

Most bolts and screws on this 5.0 S/C Coyote engine have been fitted with loctite

Take extra care in removing bolts as not strip , break or round the bolt or screw heads due to the extra force needed to work the bolts/screws loose.

Pay extra care to the manifold to cylinder head 10x 8mm head bolts. They will need to be patiently worked loose using a lubricant ( eg CRC ) to help remove without breaking.

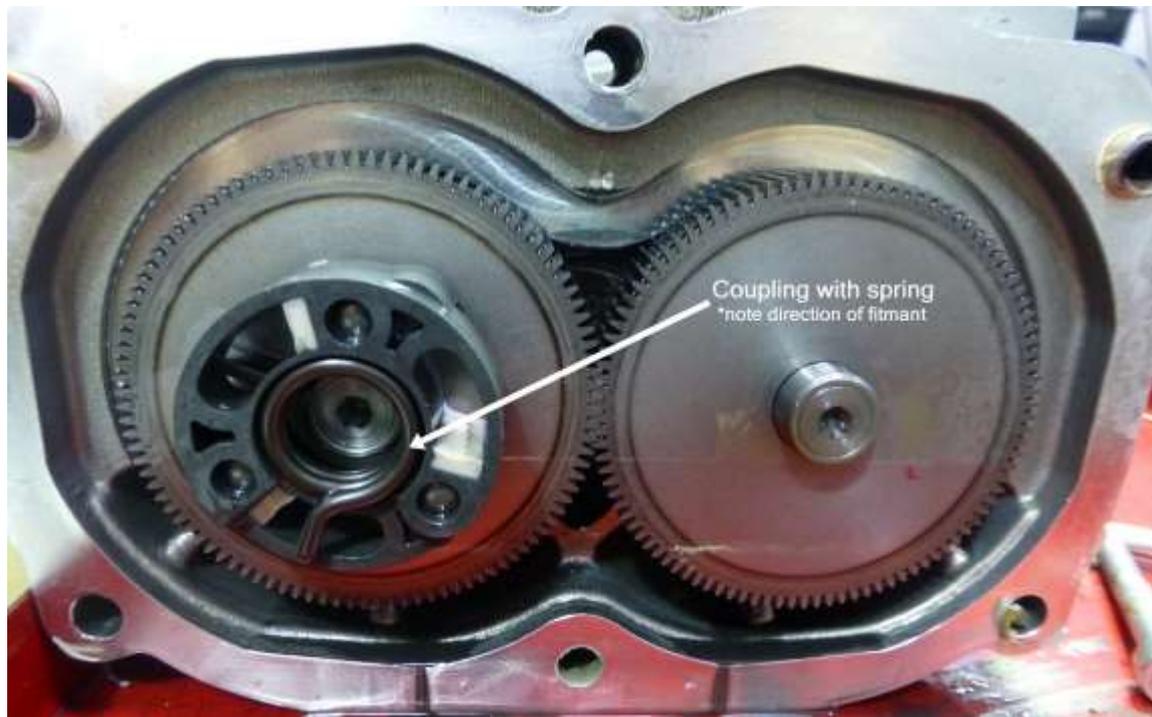
## **Warning**

The new Streetfighter Cover Snout and Pulley upgrade is designed to deliver extra boost to the engine over the standard unit. The vehicle **must** immediately be re-tuned on dyno for correct and reliable idle, start up quality and engine operation and performance.

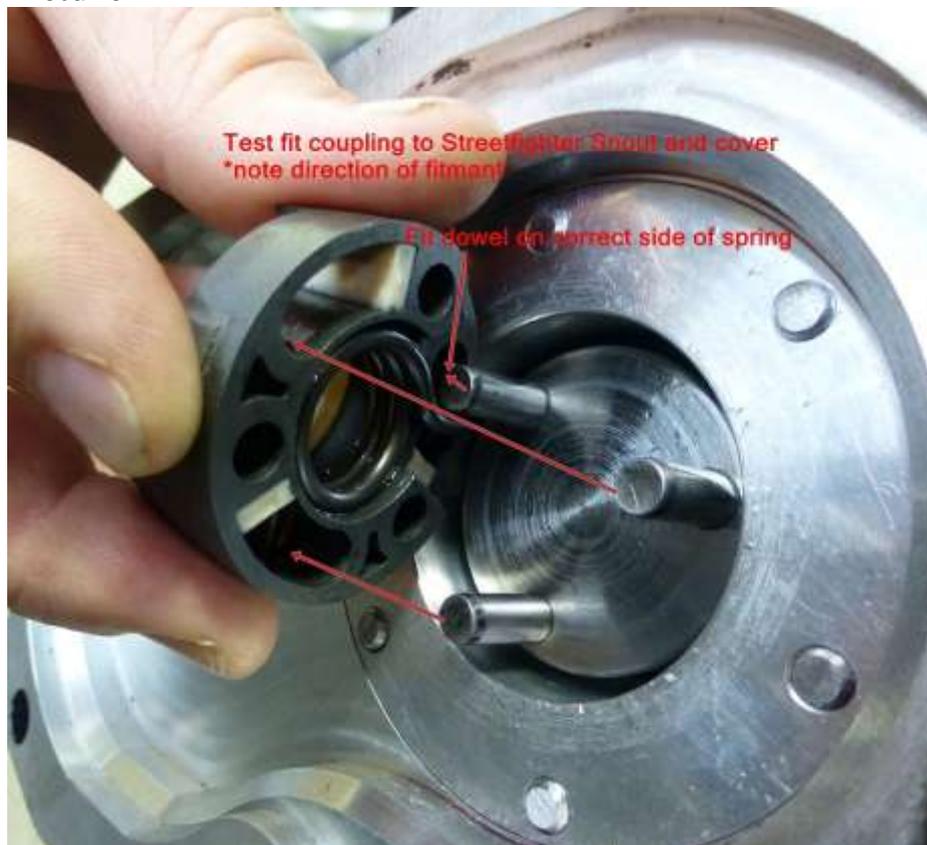
Although it will operate perfectly as a direct replacement to standard, this Streetfighter Cover and pulley upgrade is intended to be used with one our KPM intercooler packages for maximum performance and efficiency.

Please contact KPM Motorsport for more information on our Premium Entry Level or Streetfighter Intercooler packages.

**Picture 1**



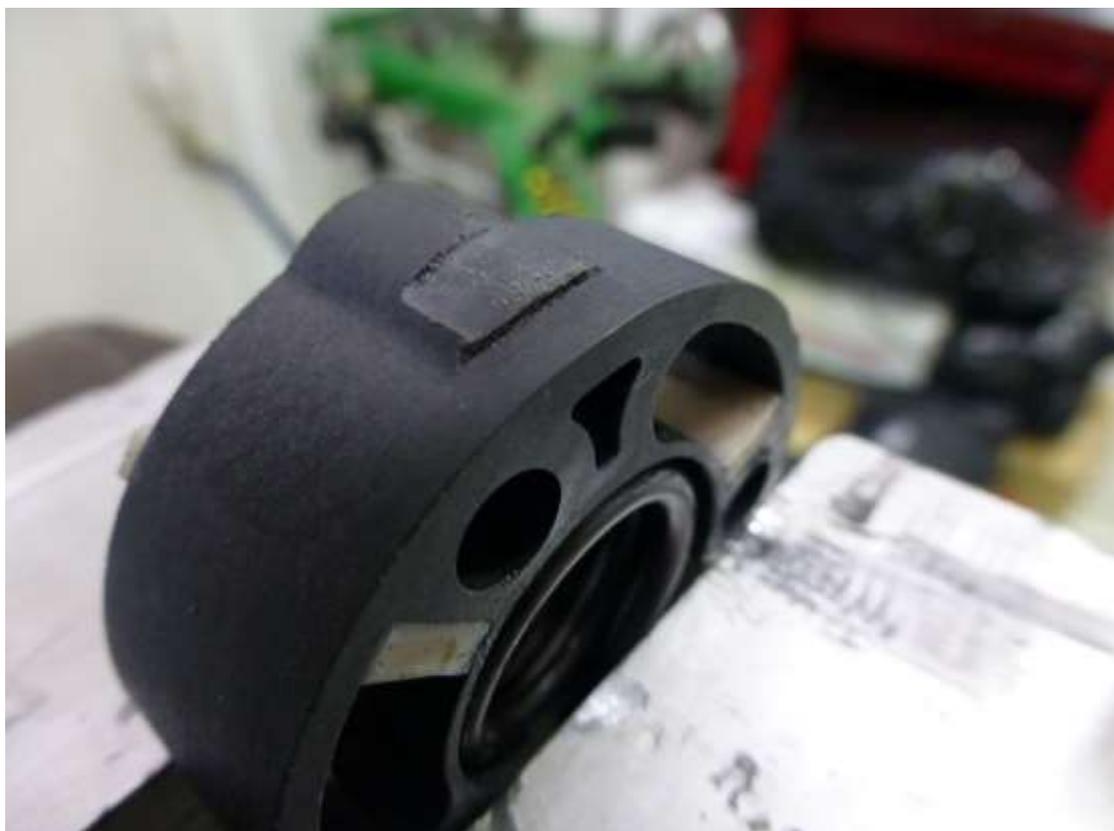
**Picture 2**



**Picture 3**



**Picture 4**



**Picture 5**



**Picture 6**

