



FG Coyote 5.0 S/C Streetfighter Twin Intake

Important! Must Read First

Congratulations on the purchase of the Streetfighter Twin Intake system for your 5.0 S/C Coyote.

To ensure your Twin Intake 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

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) Unscrew the Throttle Position sensor from the throttle body (needed later)
- 5) Remove Boss 315/335 plate on plenum lid.
- 6) Loosen supercharger drive belt and remove from supercharger pulley only.
- 7) Disconnect wiring plug at T-Map sensor at plenum lid and move wiring out of the way.
- 8) 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**
- 9) Unclip the fuel return line from the rail. **Black Clip connector**
- 10) Unclip the fuel line at either side of the fuel rail at the front of manifold.
- 11) Unclip wiring connector to the intake temperature sensor on the driver's side centre of inlet manifold. Remove sensor from manifold.
- 12) Remove vacuum hoses from wastegate actuator.
- 13) Unclip all electrical connectors from injectors and move wiring out of the way.
- 14) Remove the 10mm head fuel rail retaining bolts. 2 x either side of manifold. 1x at the fuel pressure regulator.
- 15) 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.
- 16) Remove all 10 x 8mm head bolts retaining the intake runner to cylinder head. (**See tips**)
- 17) 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.
Manifold should now be completely free to remove as an assembly from vehicle
- 18) Manifold should now be completely free to remove as an assembly from vehicle.

Replacing the standard intake runner on Bench

- 1) Remove plenum lid from manifold
- 2) Remove throttle body support bracket from plenum lid. (New one supplied)
- 3) Remove air diffuser from manifold
- 4) Unbolt manifold from supercharger assembly
- 5) Unbolt all rear intake runner bolts from supercharger
- 6) Remove all needed fittings from standard intake runner
- 7) Make sure the new Twin Throttle Body runner is clean before use.
(If necessary clean and dry thoroughly)
 - a. Fit all need fittings that were removed from standard intake runner to the new Twin intake runner.
 - b. Make sure that the o ring on the REAR entry of the supercharger is in position and clean.
 - c. Align the new runner on the 2 small studs protruding from the supercharger and push on firmly until seated properly.
 - d. Refit all intake to supercharger bolts with loctite.
 - e. Make sure that the o ring on the TOP of the supercharger is in position and clean.
 - f. Align the manifold on the 2 small studs protruding from the supercharger and push on firmly until seated properly.
 - g. Refit all manifold to supercharger bolts with loctite.
 - h. Refit the air diffuser to the manifold assembly.
 - i. Make sure that the o ring on the TOP of the manifold is in position and clean.
 - j. Refit all plenum lid bolts to manifold.

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, wastegate hoses , wiring, intake temperature sensor, T-Map sensor and plenum BOSS 315/335 name plate and supercharger belt in reverse order of dismantle.

New Twin Throttle Body and Ducting fitment

- 1) Remove the large U.S throttle position sensor from the new throttle body
- 2) Fit the previously removed standard throttle position sensor to the new Twin Throttle body
- 3) Using the new supplied gasket and bolts , fit the throttle body to the intake runner.
- 4) Route wiring accordingly and re-connect to the new Throttle body.
- 5) Undo bolts and nuts to remove dipstick tube from rocker cover.
- 6) While dipstick tube is removed, modify ABS plug to slide further down bracket (as per picture)
- 7) While dipstick is removed ,cut off the bracket on dipstick tube that holds the fuel hoses.
- 8) Manipulate the bottom dipstick tube mount to achieve the required angle to pass the new wider intake duct.(sit in vice and bend accordingly until correct)
You may have to test fit several times for perfect result
- 9) Utilise L bracket supplied to mount dipstick tube top bracket , to right hand top bolt of the throttle body.
- 10) Fit the aluminium machined adaptor supplied with hose clamp to hole in the side of new rubber ducting
- 11) Fit new twin rubber ducting to throttle body and intake snout with clamps supplied.
- 12) Re-clip breather hose to ducting adaptor.

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 10 x 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 Twin Throttle Intake is designed to deliver extra air to the engine over the standard intake. The vehicle **must** be tested and possibly 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 Intake 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.