# Ford Focus ST Mk4 Inlet Manifold Fitting Instructions

#### **Tools Required:**

- Ratchet and Socket Set
- Torx Sockets
- Jubilee Flex-Driver
- Trim Removal Tool
- Loctite (recommended)

#### **Kit Contents:**

- 1x AIRTEC Motorsport Inlet Manifold
- 1x Thermal Gasket
- 1x Left-Hand Engine Cover Bracket
- 1x Right-Hand Engine Cover Bracket
- 1x Throttle Body Adapter Spacer
  - Fitting Kit:
- 4x Inlet Manifold Gaskets
- 5x M8x35mm Flanged Socket Head Bolts
- 7x M5 Pan Washers
- 2x M6x45mm Flange Head Bolts
- 1x M6x35mm Flange Head Bolt
- 2x M6x20mm Socket Head Bolts

- 2x Engine Cover Locating Pins
- 1x Front Wiring Harness Bracket
- 1x Rear Take-Off
- 1x Side Take-Off
- 2x M6 Pan Washers
- 1x M5x16mm Button Head Bolt
- 6x M5x8mm Button Head Bolts
- 1x M8 Pan Washer
- 1x M8x12mm Socket Head Bolt
- 1x 1/8th NPT Plug

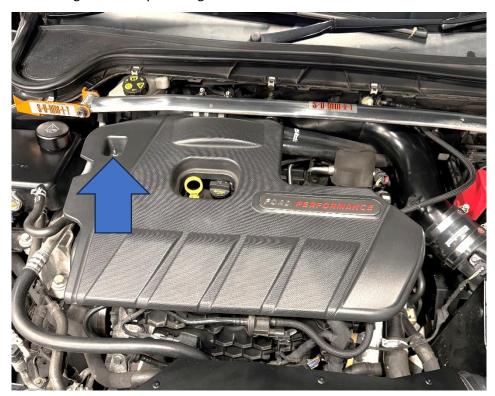


PLEASE THOROUGHLY READ THESE INSTRUCTIONS AND MAKE SURE YOU ARE FAMILIAR WITH THE STEPS BEFORE CARRYING THEM OUT

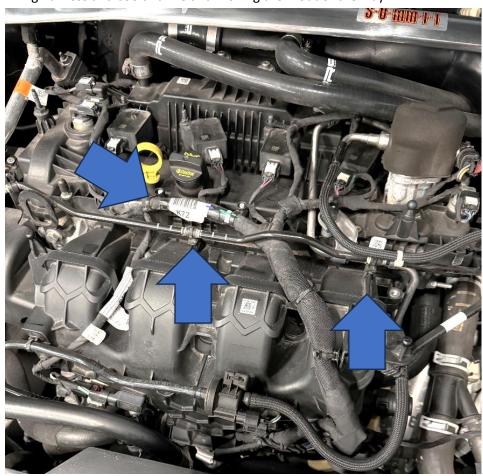


## **Instructions:**

1. Firstly, remove the engine cover by undoing the 10mm nut.

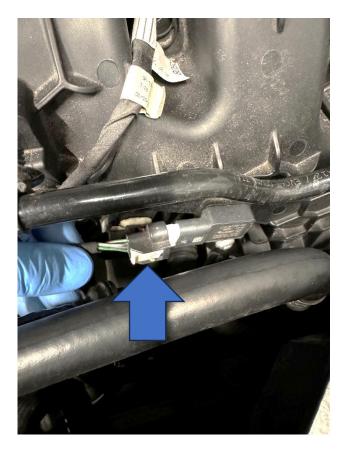


2. Unclip the wiring harness and coolant line and moving them out of the way.

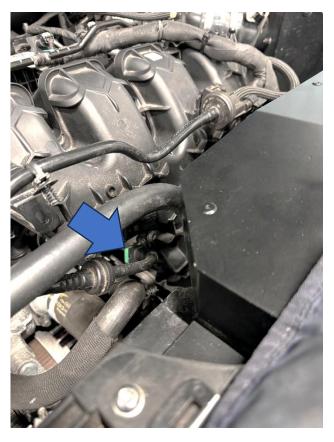




3. Unplug the MAP sensor on the front of the manifold

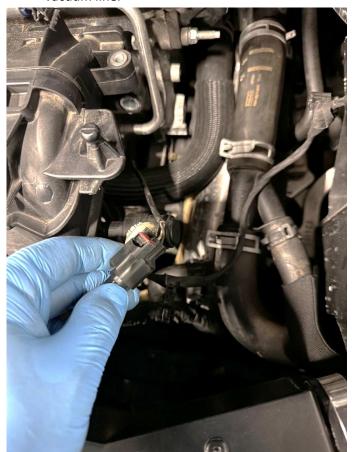


4. Remove the clip from the vacuum hose on the side of the manifold and then you will be able to push the other side of it in to release it, unhook it from the bracket and clip on the side. You will be able to then move the vacuum hose out of the way.

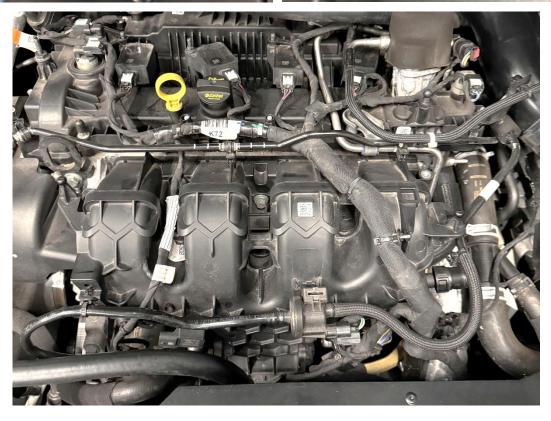




5. Unhook the clips holding the wiring harness and plug to the manifold on the right-hand side along with the vacuum line.

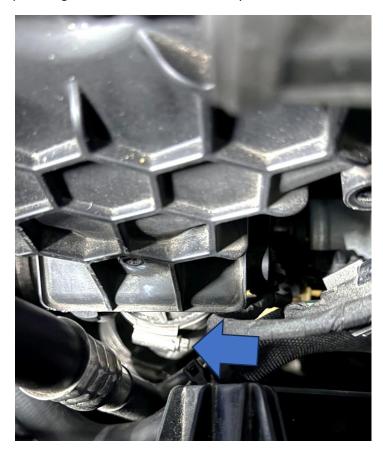








6. Loosen the jubilee clip holding the hose to the throttle body.



7. Now undo the five 10mm bolts that attach the manifold to the cylinder head. **Please note:** one bolt is located behind the wiring loom (orange arrow).

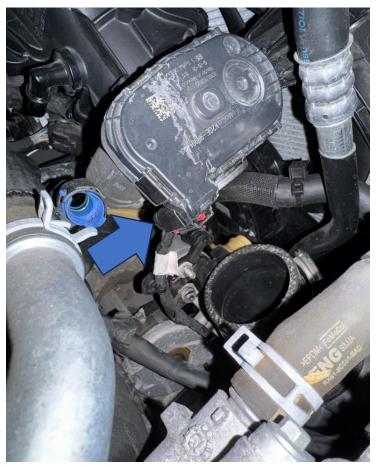




8. Ensure all wiring harness clips have been removed and then tilt the manifold towards the front of the car to gain access to the breather hose on the back to unclip it.

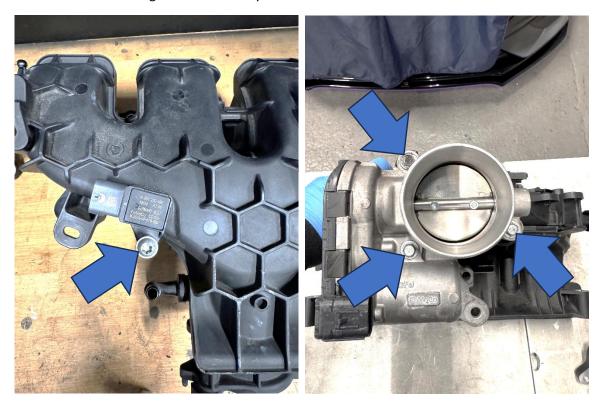


9. You can now access the wiring plug for the throttle body. Pull back the clip to release it, before squeezing so that it comes away. Once free, the inlet manifold can be removed from the car.





10. With the manifold on a bench you can now remove the MAP sensor using a T27 Torx socket along with the three 10mm bolts securing the throttle body.

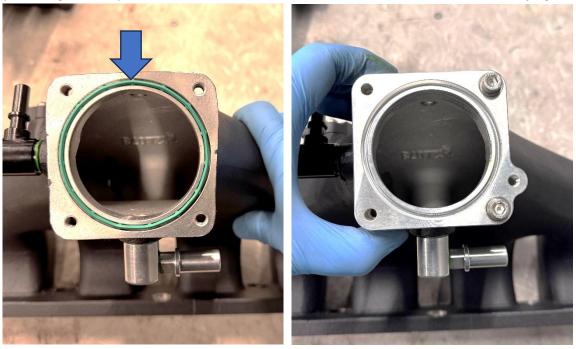


11. On your new AIRTEC Motorsport manifold install the supplied side and rear take-off fittings as shown. **Please note:** We recommend the use of Loctite.

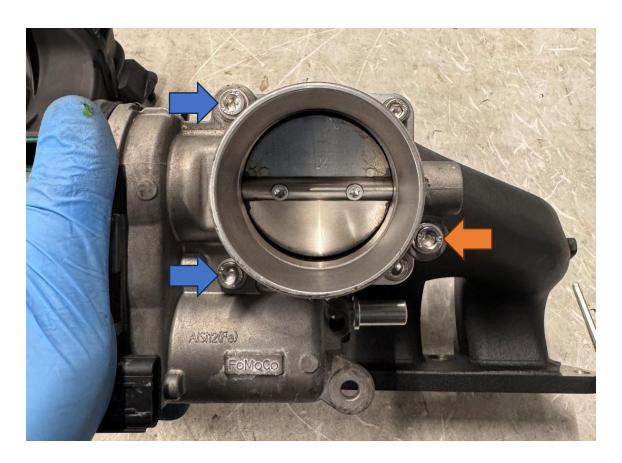




12. Transfer the original throttle body gasket onto the new manifold before fitting the supplied throttle body adaptor using the two provided M6x20mm Socket Head bolts with washers, **but do not fully tighten yet.** 



13. Now fit the newly supplied gasket to the adapter and secure using the supplied M6x45mm Flange Bolts (blue arrows) and one M6x35mm Flange Bolt (orange arrow). Once all the bolts are fitted proceed to fully tighten.





14. Install the MAP sensor with the supplied M5x16mm bolt with washer (blue arrow), along with the NPT plug (orange arrow) provided if you are not making use of the 1/8<sup>th</sup> take off.



15. Now fit the supplied wiring harness bracket using the M8x12mm Socket Head bolt and washer provided.





16. Transfer the four rubber gaskets from the old manifold to the new one, as shown. Then fit the four new supplied gaskets onto the thermal gasket provided, as shown.





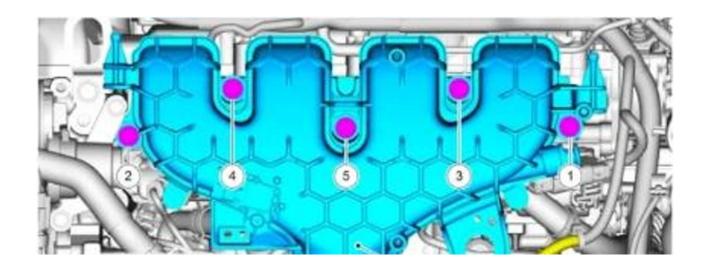
17. Position the manifold in place on the car without boltin it in place yet. Reconnect the silicone hose to the throttle body and tighten the jubilee clip. Then reconnect the wiring plug and the rear vacuum take-off.





18. Slide the thermal gasket in between the cylinder head and inlet manifold and then secure to the cylinder head with the supplied M8 flanged bolts. **Please note:** These are torqued to 20nm and must be tightened in the sequence shown below. We recommend going over these **three** times.



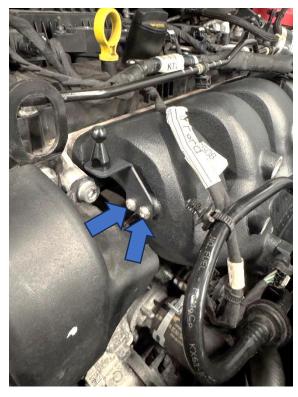




19. Now reattach the vacuum line onto the fitting on the side. This can be rotated as necessary to ensure the fitting angle is correct and then refit onto the bracket. Reconnect the MAP sensor and install the coolant line clip onto the top of the manifold. Make sure all plugs and vacuum lines are reconnected.



20. To refit the engine cover, install the supplied pins onto the new mounting brackets provided, as shown and then install onto the car using the M5 bolts with washers supplied.







### 21. Finally, the engine cover can be reinstalled.



