



DIRENZA
PROVEN PERFORMANCE

FITTING GUIDE

Ford Focus MK3 RS MVT Intercooler

The Direnza Ford Focus MK3 RS MVT is a high performance aftermarket intercooler offering increased cooling and performance over the stock intercooler. The extra capacity along with revolutionary MVT technology gives lower output temperatures which result in power gains and more consistent power.

DISCLAIMER

- Allow the vehicle to cool completely prior to installation.
- We recommend that the intercooler is installed by a professional.
- Direnza is not responsible for any vehicle damage or personal injury due to installation errors, misuse or removal of Direnza products.

TOOLS REQUIRED

- Trim Tool
- T20, T30 Driver
- Flathead Screwdriver
- Phillips Screwdriver
- Pick Set
- 7mm, 8mm, 10mm Sockets
- 15mm, 18mm Spanner or Sockets
- Jack, Jack stands/Ramp or lift

- 1x MVT Front Mount Intercooler
- 3x Hard Pipes
- 5x Silicone Joiners
- 10x Hose Clamps
- 1x MAP Sensor Screw





1. With the bonnet open disconnect the safety catch.



4. Disconnect plug on the back of both headlights and remove the lights.



2. Remove the 2x T30 on each headlight unit.



5. Use pick to remove washer jet. Lift and roll upwards to release. Do this on both sides.



3. Lift and pull the headlight towards you to release the unit from the clip underneath.



6. Remove 5x screws across top panel & 2x push clips.



7. Under wheel arch, remove 2x T30 Torx and 2x trim clips. Repeat this on both sides.



10. Take off undertray.



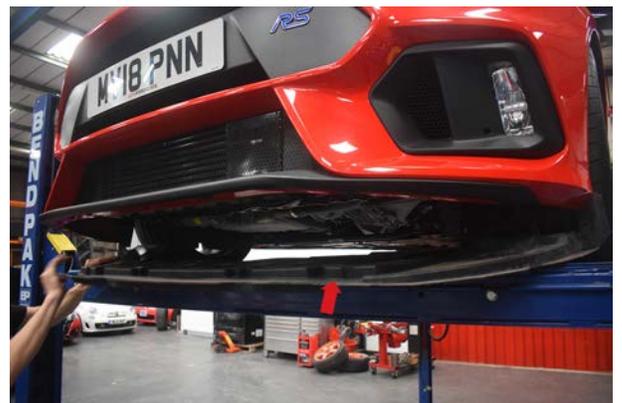
8. Remove 7x plastic screws from the underside of the bumper. You can use the trim tool to help pull these out.



11. Remove 7x screws on front edge of bumper holding on the bumper undertray.



9. Remove 8x Torx on the engine undertray. There are also 2x clips to remove.



12. Remove bumper undertray.



13. From underneath unplug 1x foglight plug. (Located on passenger side).



16. Remove bumper and move to a safe place.



14. Pop out the two sides of the front bumper away from front wing.



17. From underneath the car, remove 2x 15mm bolt and 2x 18mm nuts on the chassis brace and remove.



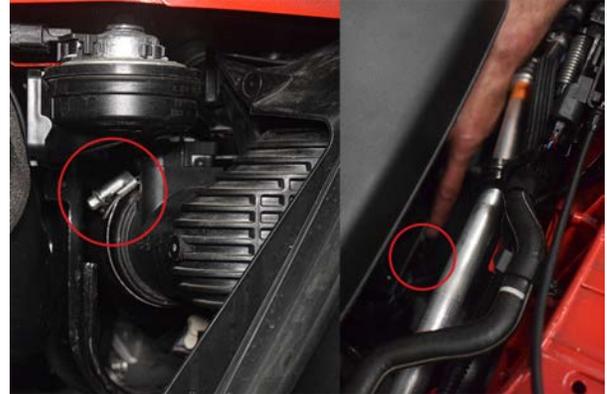
15. Lift clip and push down and rubber stop on the top of bumper, located on the drivers side.



18. Remove 2x 10mm nuts on hot side boost pipe support brackets. We have circled one, follow the pipe to locate the second.



19. Loosen 2x 7mm jubilee clips on hot side boost pipe. One is located near the end tank and one near the turbo.



22. The jubilee clips are located near the outlet on the end tank and on the throttle body.



20. Remove hot side boost pipe.



23. Remove cold side boost pipe.



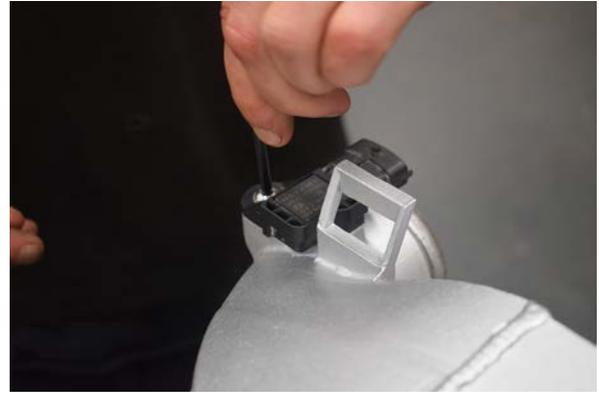
21. Move onto the cold side boost pipe and loosen 2x 7mm jubilee clips.



24. Unplug MAP sensor.



25. Use 8mm socket to remove 2x bolts on lower intercooler brackets. (One each side of the OEM intercooler).



28. Remove OEM MAP sensor from the standard intercooler and place into the MVT intercooler. Use supplied hardware to secure it.



26. Remove the intercooler.



29. You can loosen radiator support brackets (2x 10mm per side) to help fit the MVT.



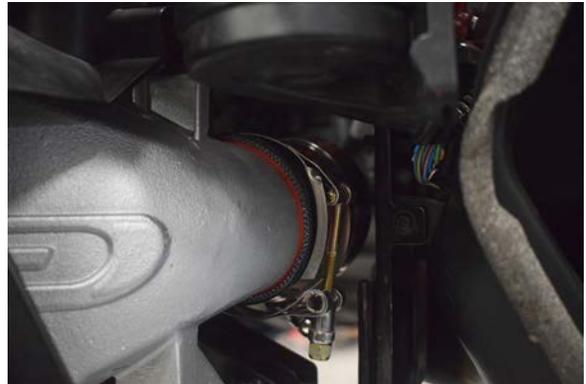
27. Take metal clips from the OEM intercooler and place them onto the equivalent position on the MVT.



30. Lift MVT intercooler into position, ensuring it is sitting securely on all mounting and guide points.



31. Secure the MVT in original position using 2x 8mm bolts.



34. Place all necessary clamps in position before installing hot side boost pipe.



32. Plug in MAP sensor.



35. Place the smallest silicone joiner onto the hot side boost pipe, to be connected to the turbo.



33. Install silicone joiner on the hot side end tank (1 of 3 joiners the same size).



36. Lift boost pipe into position, Secure this pipe to the turbo using supplied clamps.



37. Re-install nuts on the hot side boost pipes support brackets.



40. Secure all boost pipes and joiners in position by ensuring all clamps used so far are tightened sufficiently.



38. Place 2x clamps and silicone joiner onto the other end of the hot side boost pipe.



41. Place largest silicone joiner onto the throttle body.



39. Install second hot side connector pipe by sliding it into the two silicone joiners. (1 on the end tank and 1 on the hot side boost pipe).



42. Put 90 degree silicone joiner onto the cold side End tank.



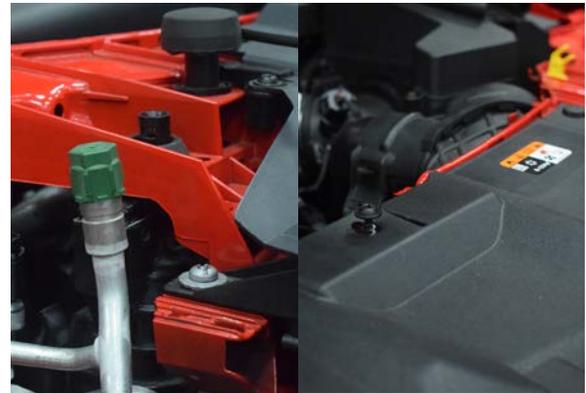
43. Install cold side boost pipe into the silicone joiner you have placed onto the throttle body and 90 degree silicone.



44. Secure all pipes and silicones using supplied clamps each silicone should have two clamps to fix either end of the joiner to the appropriate part.



45. Re-install chassis brace by reversing step 17.



46. Re-install bumper and all fixings.

47. Remember to plug in the fog lights!



48. Re-install bumper undertray by reversing step 11.



49. Install engine undertray. reversing steps 9 & 10.



52. Ensure the bonnet safety catch is connected before closing the bonnet!



50. Install headlights reversing steps 2 & 3.



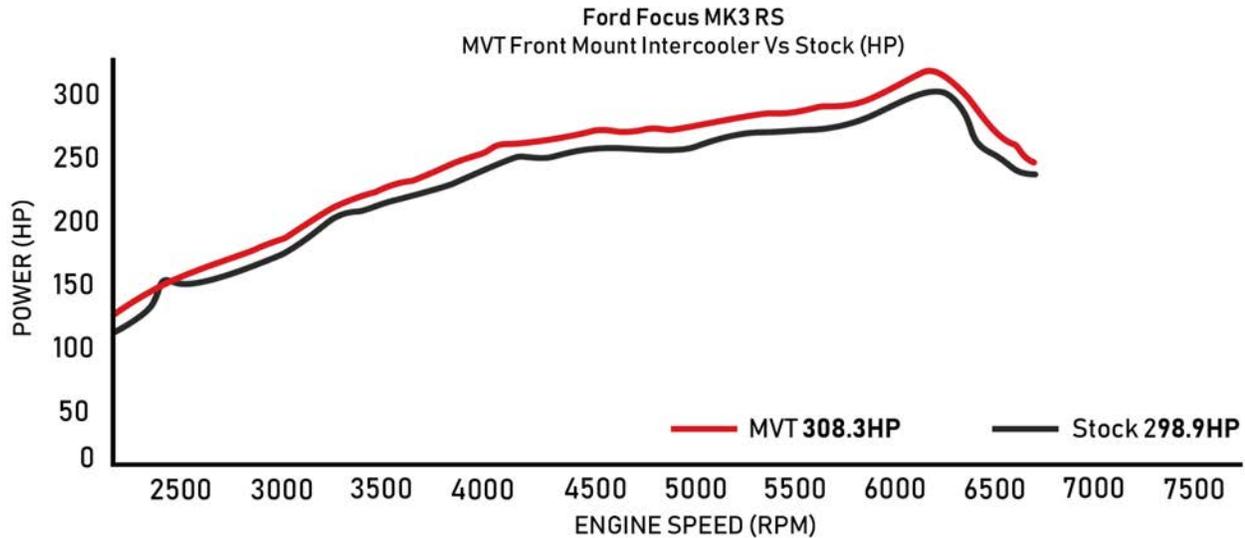
53. Your MVT Intercooler is now fitted.



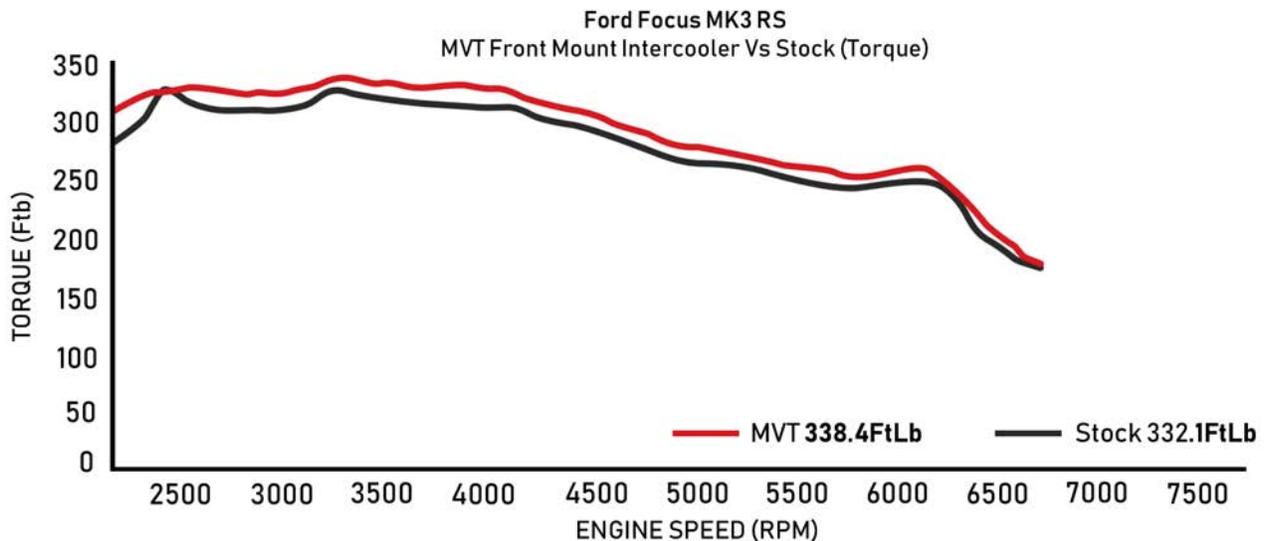
51. Install washer jet covers.



Vehicle info: MY2018 Ford Focus MK3 RS.



Without any engine remapping, the Focus RS fitted with Direnza's MVT intercooler makes 308.3bhp, that's 9.4 more than standard. With a torque reading of 338.4FtLb that's 6.3 FtLbs gained. A fantastic upgrade for a bolt on part which offers even more potential gains if combined with a remap.



Track tests on the intercooler showed temperatures to be upto 8.4 degrees lower than standard. The lower outlet temperatures provide better performance whilst also protecting the engine. The pressure drop across the intercooler was also 0.62psi lower than standard. This means the Turbo doesn't need to work as hard to produce the same amount of boost.