



BMW F40 M1351 MVT Intercooler Installation Guide

The Direnza Performance MVT is a high performance, aftermarket intercooler offering increased cooling and performance over the stock setup. The extra capacity combined with our revolutionary Multi Vane Technology is designed to lower intake temperatures and prepare your vehicle for additional tuning and modifications.

## 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**

- T25 Torx
- T30 Torx
- 10mm Socket
- 16mm Socket
- M10 Allen Key



## Contents

1x MVT Front Mount Intercooler



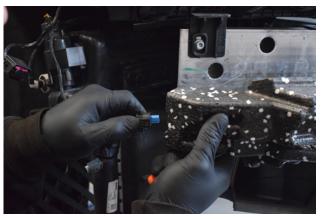




1. Remove the front bumper.



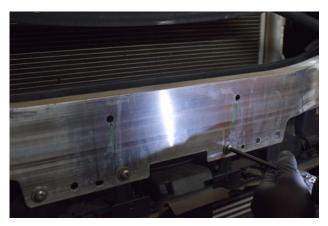
2. Remove the plastic clips from the crash bar polystyrene.



3. Unplug the crash sensors on both sides of the polystyrene.



4. Remove the polystyrene.



5. Remove x4 screws on the front face of the crash bar.



6. Lift the scoops from either side of the car and pull out from keyhole slot in the brackets they are connected to.





7. Pull the scoops forward to release them from the plastic pin on the front cooling shroud.



8. Lift up x4 tabs on the shroud to release it from it's mounting points.



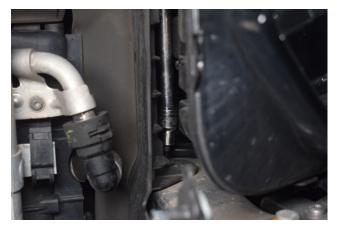
9. The plastic front shroud can now be removed.



10. Remove 1x screw from the bracket located either side of the car.



11. Remove the screw securing side mounted radiator air scoops.



12. Undo the second screw and remove the scoop. Repeat on other side.

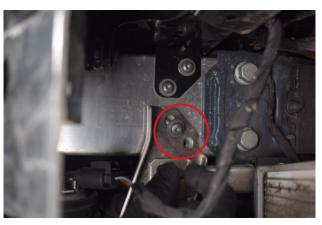




13. Remove bolt from behind the side brackets.



14. Remove the bolt from the lower subframe assembly, repeat on both sides.



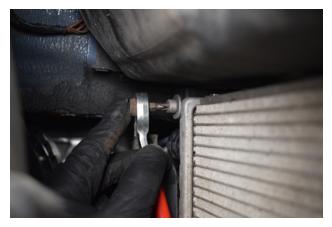
15. Undo 2x screws situated close to the horn assembly.



16. Unplug the horn.



17. Step 16 continued.



18. Remove the bolt from the top corner of the side mount radiators. Repeat on both sides.





19. Remove any plastic clips or wiring from the bracket.



21. With the bracket out of the way, the brake cooling duct can now be removed.



23. The lower subframe assembly can now be pulled forward and removed.



20. You can now remove the support bracket.

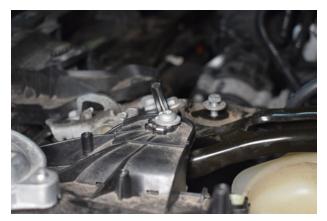


22. Remove additional 2x bolts from each side of the lower subframe assembly. Repeat on both sides.



24. Remove headlight bolt located underneath in the wheel arch.





25. Remove top headlight mounting bolt.



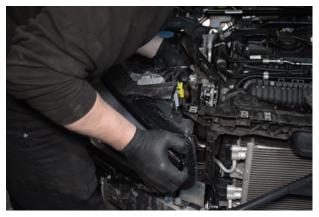
26. Remove the most reward headlight mounting bolt.



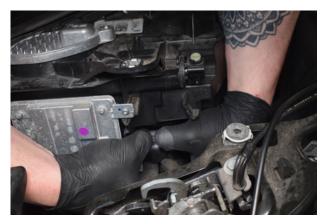
27. Step 25 & 26 continued.



28. Repeat previous steps on the other side.



29. With all the bolts removed, the headlight can be lifted out of position.



30. Before removing completely, ensure all plugs and wires are disconnected from the back of the unit.





31. Step 30 continued.



32. Remove any additional clips.



33. Remove 3x bolts securing the plastic trim on the slam panel.



34. Remove central bolt on front brace.



35. Remove further 2x bolts on front brace and remove.



36. Remove bracket from the top of the crash bar by removing 2x bolts.





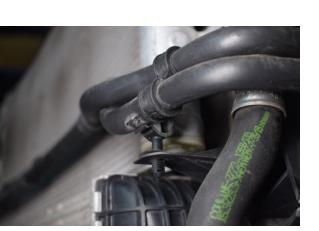
37. Step 36 continued - Repeat on the other side.



38. The crash bar can now be removed.



39. Unclip the intercooler shroud and remove.



41. Unclip all pipework connected to the intercooler



40. Remove the screw on the air-con pipe bracket.



42. Step 41 continued.

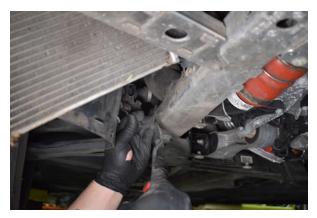




43. Before going any further, place a screwdriver/or similar into the radiator mounting point to stop everything falling.



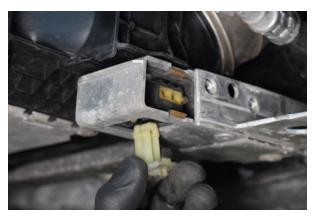
44. Unplug headlight leveling sensor.



45. Unclip any wire from the side of the subframe.



46. Remove 2x bolts securing subframe assembly to the subframe. Repeat on the other side.



47. Remove the plastic locking clip from underneath the intercooler mounting point.



48. Simultaneously lift the intercooler and drop the support frame to release from each other.





49. Repeat the process on the other side.



50. Remove the screw from the intercooler mounting bracket.



51. Unclip the the boost hose from the intercooler.



52. Unclip the second boost hose.



53. Remove the final screws securing the intercooler to the car, repeat on both sides.



54. The intercooler can now be removed.





55. Step 54 continued.



56. Lift the Direnza MVT intercooler into position.



57. Push the boost hoses over the inlet/ outlets on the intercooler. You will hear a popping noise as they clip into place.



58. Step 57 continued.



59. With the boost hoses connected relocate the mounting screws to secure the intercooler to the car. Repeat on both sides.



60. Place the 'C' clips around the pipes that sit above the intercooler.





61. Squeeze the clips together and secure to the intercooler.



62. Reconnect the Air Con bracket to the intercooler.



63. Place the intercooler ducting into position on the car.



64. Secure using original screws, repeat on both sides.



65. Slide the lower subframe assembly into subframe.



66. Tighten and secure with 2x bolts and repeat on the other side.





67. If the side scoops where removed earlier, place back into position.



68. The crash bar can now be lifted back into place.



69. Re-Install the crash bar brackets x2



70. Lift the side mounted radiator back onto their mounting points if removed earlier.



71. Plug the horn in.



72. Install the second ducting panel by clipping it into position on the crash bar.





73. The tabs will slide over clips on the first ducting panel you fitted.



74. Slide the second piece of the lower subframe assembly back into position.



75. Secure using 2x bolts. Repeat on the other side.



76. Install final bolt to secure the side bracket.



77. Insert a further two screws into the side bracket to fix to the crash bar.



78. Step 77 continued & repeat on the other side.





79. A further mounting bolt has to be installed from the rear of the bracket.



80. Install 4x screws into the crash bar.



81. Step 80 continued.



82. Install torx screw to secure the plastic scoop.



83. The scoops also clip over the plastic pin on the front ducting.



84. The scoop clips into the keyhole on the support brackets.





85. Install lower mounting screw on the support bracket located underneath the scoop.



86. Install the support bracket on the other side and repeat previous steps for installation.



87. Step 86 continued.



88. Secure the plastic scoop using a T25 torx and repeat on the other side.

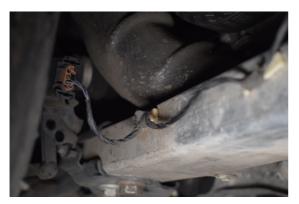


89. Clip in any wiring as you go.



90. Plug the headlight leveling sensor back in.





91. The wire for the sensor clips in down the side of the subframe assembly.



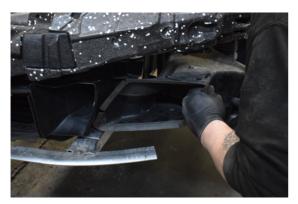
92. Install the polystyrene onto the crash bar



93. Plug in crash sensor and repeat on the other side.



94.?



95. Install side mount radiator scoop.



96. Step 95 continued.





97. The radiator scoop is secured with 1x screw on each side.



98. Step 97 continued.



99. Install front brace.



100. Install front brace using 3x Torx screws.



101. Step 100 continued.



102. Step 100 continued.





103.Place the plastic slam panel back into position.



104. Step 103 continued.



105. The plastic panel can be secured by installing torx screws on each side.



106. Plus one central torx screw



107. Plug everything in on the rear of the headlight unit.



108. Step 107 continued.





109. Place the headlight into position.



110. Secure headlight with all original hardware.



111. Step 110 continued.



112. The final mounting screw is located in the wheel arch.



113. Step 112 continued.



114. Repeat the headlight installation process on the other side.





115. Step 114 continued.



116. Re-install the front bumper.



## You may also like...





BMW 1 Series F40 M135i 3" GPF Delete

BMW 1 Series F40 M135i Ceramic Coated Downpipe

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