

## MERCEDES A45 AMG – (2013-15) DSG OIL COOLER KIT INSTALLATION INSTRUCTIONS.



## **Tools required:**

- Vehicle ramp or jack and suitable axle stands.
- 17mm thin spanner.
- 10mm spanner.
- 8mm, 10mm Socket, suitable ratchet.
- T25, T30 Torx driver.
- 7mm Hose clamp driver.
- 4mm, 6mm Allen key driver.
- Flat-blade screwdriver or flat panel clip removal tool.
- Suitable containers for measuring out oil.
- Safety eyewear, footwear, gloves and protective clothing are also recommended.

Please thoroughly read through and familiarize yourself with these instructions in their entirety prior to beginning any part of the installation process of any component. Please also ensure the vehicle and engine has cooled down sufficiently to avoid risking possible skin burns or other injury.

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## For this installation, we recommend only the use of Mercedes ATF DCT grade DSG Gearbox oil.



- 1. To avoid injury allow the vehicle to cool down fully before starting this installation.
- 2. Raise the vehicle on a ramp or using a jack and support with suitable axle stands.
- 3. Open and secure the bonnet. Carefully remove the battery cover and using a 10mm spanner disconnect the 2x battery terminals. Use a suitable piece of packing material to prevent the terminals from touching the battery while the parts are being installed.

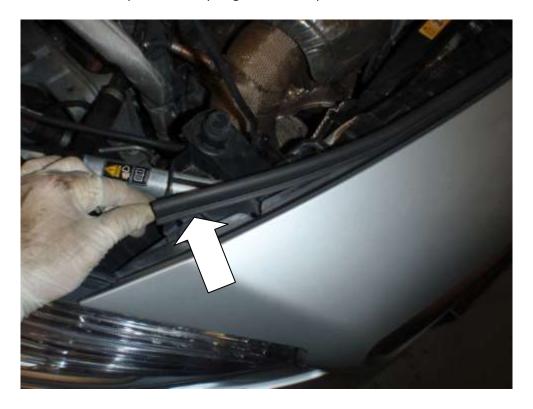


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Note: Failure to correctly disconnect the battery may cause issues with the crash protection system (SRS) and the ECU.



4. Remove the rubber strip from the top edge of the bumper.



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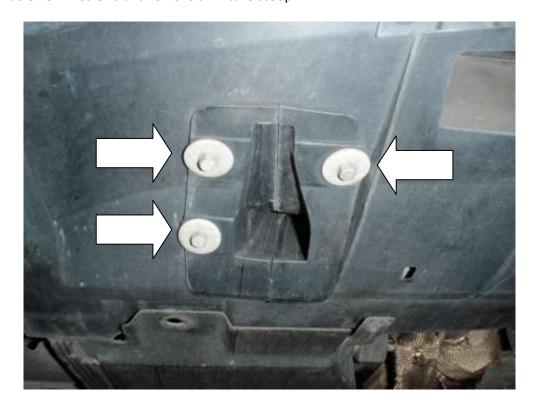
5. Using a T25 Torx driver undo the 5x screws across the top of the bumper.



6. Using a flat panel-clip tool or similar remove 2x plastic clips from each arch liner.



7. Undo 3x 8mm screws and remove air intake scoop.





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8. From the underside of the vehicle, undo 7x 8mm screws.



9. Using a 10mm socket, extension bar and 1/4" drive ratchet undo 2x bolts. Pull the arch liner to one side to access. Repeat the process for the opposite side.

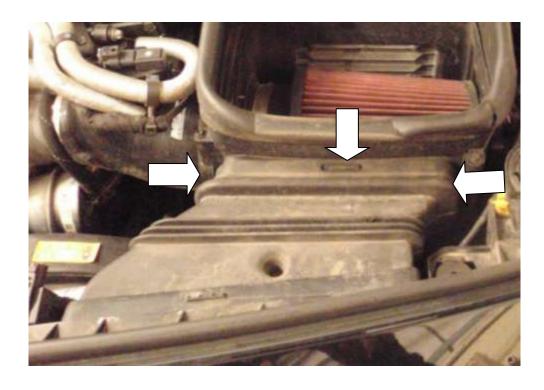


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10. The next part requires two people to carefully pull the bumper away from the vehicle. While one person holds the bumper, the second person needs to reach inside and disconnect the temperature sensor and large electrical connector (located on the left-hand side of the vehicle viewed from the front).



11. Unclip and remove the intake scoop.

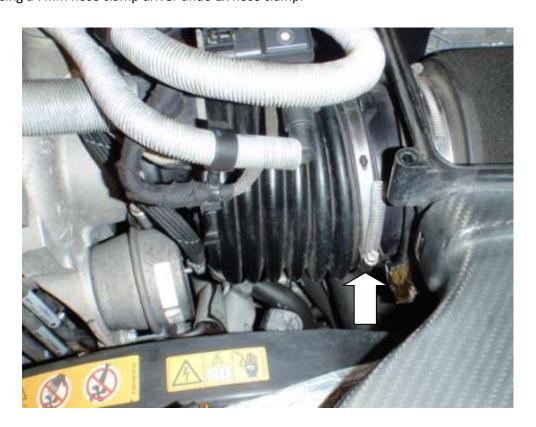


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12. Unclip the 2x wiring connectors from the ECU.



13. Using a 7mm hose clamp driver undo 1x hose clamp.



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14. Unclip the wiring to the MAP sensor



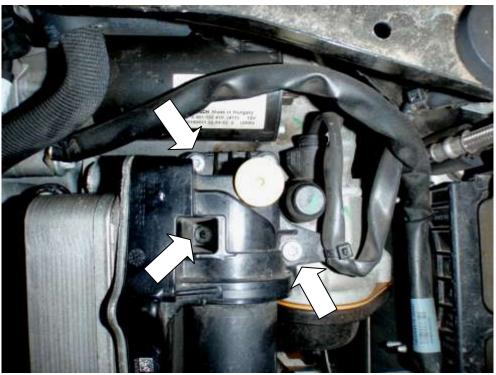
- 15. Carefully pull the intake hose off of the air box lip.
- 16. Pull the air box and ECU assembly upwards to remove it from the vehicle. This will allow access to the DSG oil filter assembly.



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17. With suitable absorbent clothes ready, using a T30 Torx driver undo 3x bolts and unclip 1x cable clip.





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- 18. Rotate the assembly so that the (black section) filter housing is upwards to reduce the amount of oil that is lost from the system. Undo 5x bolts and separate the heat exchanger (silver section) from the filter housing.
- 19. Place the 2x 19x3mm O-rings in position and insert the Forge oil cooler adapter plate between the heat exchanger and the filter housing. Secure in position with 5x M6x30mm Allen cap bolts and washers supplied.



- 20. Fit the 12mm extended banjo fitting, 2x 12mm copper washers and M12 x P1.5 Banjo bolt to the lower port on the adapter plate. Do not tighten fully.
- 21. Fit the remaining 12mm extended banjo fitting, 2x 12mm copper washers and M12 x P 1.5 Banjo bolt. Do not tighten fully.



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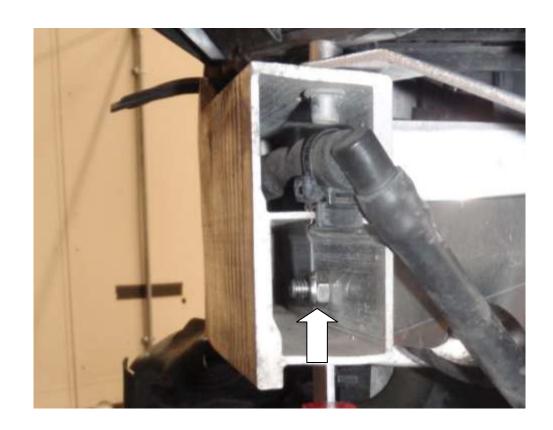
22. Refit and secure the filter assembly housing to the top of the gearbox. You will need to rotate the banjo outlet to a vertical position to allow access to one of the filter mounting bolts.



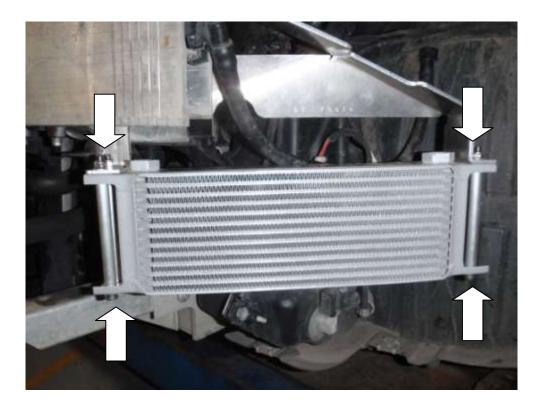
23. With the M8 Allen cap bolt, 8mm washer, M8 Nyloc nut, M6 x 16mm Allen cap bolt and 6mm washer secure the oil cooler mounting bracket to the crash bar.



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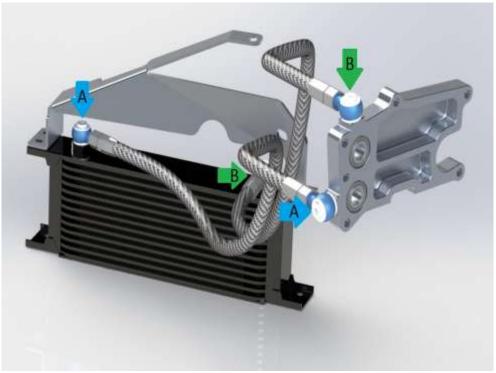


24. Secure the oil cooler to the mounting bracket with the 4x M6 x 110mm Allen cap bolts, 8x 6mm washers, M6 Nyloc nuts and 4x 10mm sleeves.



25. Fit the longer of the two supplied oil lines to the lower banjo fitting.





26. Using a thin or suitably modified 17mm spanner tighten the lower banjo bolt.



27. Fit the remaining oil line to the top banjo bolt outlet.



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28. Fit the 2x M14 banjo fittings, 2x copper washer and 2x banjo bolts to the top of the oil cooler. Do not fully tighten.



29. Connect the two oil lines to the oil cooler. The longer of the two lines connects to the RH oil cooler port.



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30. Ensure that the lines are in the correct positions before removing the RH banjo bolt and prefilling the oil cooler with 260cc of the correct grade of oil (Please see the oil specified at the beginning of the installation instructions).



- 31. Refit the banjo bolt and fully tighten both banjo unions and the unions between the oil lines and banjo outlet.
- 32. Remove the banjo bolt from the adapter plate and add 85cc of the correct grade of oil (Please see the oil specified at the beginning of the installation instructions).



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- 33. Double check all the fixings and hose unions are fully tightened.
- 34. Reassemble your vehicle, your installation is now complete

