



PERFORMANCE BY
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IE MK5/MK6 2.0T FSI & TSI FDS INTERCOOLER INSTALL GUIDE

PART NUMBER: IETPCB1

Thank you for purchasing another high quality Integrated Engineering product! This instruction sheet is used for installation of the Integrated Engineering FDS Intercooler Kit. This kit needs to be installed by a professional or by an experienced technician. Integrated Engineering is not responsible for any damage caused by incorrect installation.



Kit Contents:

- (1)- IE FDS Intercooler
- (1)- Billet Hose Adapter
- (1)- Left Side Silicone Hose (L Shaped)
- (1)- Right Side Silicone Hose (S Shaped)
- (3)- 60-80mm Clamps
- (1)- 50-70mm Clamps
- (4)- M6x18mm Bolts
- (4)- M6x16mm Bolts*
- (4)- M6x14mm Bolts**
- (8)- M6 Flat Washers
- (4)- 5/16" Aluminum Spacers
- (2)- M10x75mm Bolts
- (4)- 1/8" Aluminum Spacers*

*Used only on cars with ozone sensor

**Used only on cars without ozone sensor

Tools Required:

- 3/8" Drive Ratchet
- 3/8" Drive 6" Extension
- Torx T30 Socket
- Torx T25 Socket
- 3/8" Drive 16mm socket
- 5mm Allen Key Socket (long)
- Flat Blade Screwdriver

Also Needed:

- Coolant

1. Open IE FDS Intercooler Kit, inspect all components, and verify their quantities.
2. Park your car on a level surface or on a lift and apply the emergency brake. Allow engine to fully cool before beginning installation.
3. Start by removing the T25 screws along the top side of the grille. Carefully remove grill by pulling on the bottom side. The lock tabs secure it to the bumper; be careful not to break lock tabs.



4. Remove T25 screws holding front bumper cover on. There are two on the top of the bumper and five in each fender well, making for a total of twelve. Remove the plastic under tray from beneath the engine. There are a total of eight bolts holding this on. Remove the ten bolts along the bottom side of the bumper cover.



5. In order to remove bumper, you will need to pull outward on the "wings" near the fender wells. Carefully pull bumper off of car; be careful to not break the clips that hold it on. Unplug foglights and sidemarkers from both sides. If your vehicle is equipped with headlight washers, you will need to unclip the hose that attaches to the pump in the washer fluid tank. Cap the tank, or drain fluid into catch tank. Once the cover has been removed, you can slide off the foam piece covering the crash beam.



6. If your car has the factory airbox installed, remove the two T25 bolts on the air guide that bolts to the radiator support and the pipe that attaches to the airbox.



7. Remove the four bolts on each side holding radiator support to the frame rails, using 16mm socket. Using the two included M10 bolts, install them in the outer bottom holes before removing the other bolts holding the radiator support. This will allow you to slide the radiator support into service position without having to completely remove it.



8. Unclip intercooler hoses from the core. Remove left side intercooler hose from throttle pipe by unscrewing clamp that fastens it. Using flat blade screwdriver, unclip right side intercooler hose from turbo outlet pipe. Set both hoses aside, they will no longer be needed.



9. Unclip lower coolant hose to drain coolant from radiator using flat blade screwdriver. Remove

radiator cap to allow coolant to freely drain. Unclip upper radiator hose from radiator.



10. Remove fan shroud screws from radiator. There are a total of four T30 bolts holding it on. Unplug fans, remove shroud from the bottom.

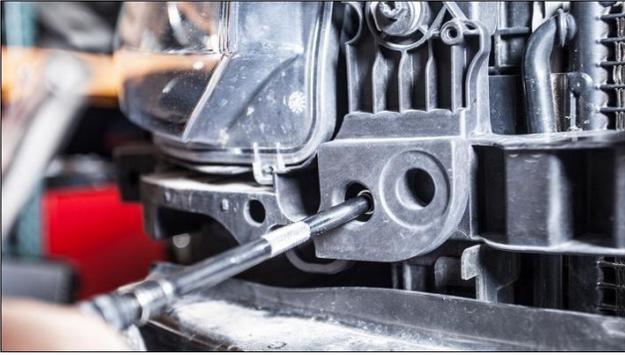


11. Remove four T30 screws holding radiator to intercooler. Remove radiator from bottom of car. Drain the remaining coolant from the radiator.



12. Remove two T30 bolts holding intercooler to radiator support. They are on the top side, accessible from the front of the vehicle. Once those are removed, you will be able to tilt the intercooler and A/C condenser back a few inches. Once that is done, remove the 4 screws that hold the condenser to the intercooler.

There are four on the front side of the intercooler, two on each side. The fifth bolt is near where the A/C lines attach to the condenser on the right side of the vehicle.



13. To remove the factory intercooler, first pull up to get the locating pins out of the radiator support. Once it has been lifted out of the support, you can carefully remove the intercooler from the bottom of the car. Slide off the intercooler brackets, which will be reused on the IE FDS Intercooler.



14. Prepare the IE FDS Intercooler for installation by removing protective cardboard sheets and clear plugs on the inlet and outlet. Slide on plastic intercooler mount brackets.



15. The new intercooler will install from the bottom, confirm that you have it oriented with the inlet and outlet facing the rear of the car.



16. Bolt the A/C condenser to the intercooler using the included M6x18mm bolts, washers, and 6mm spacers. The spacers will go between the condenser and the intercooler. Use the washers directly underneath the heads of the bolts.

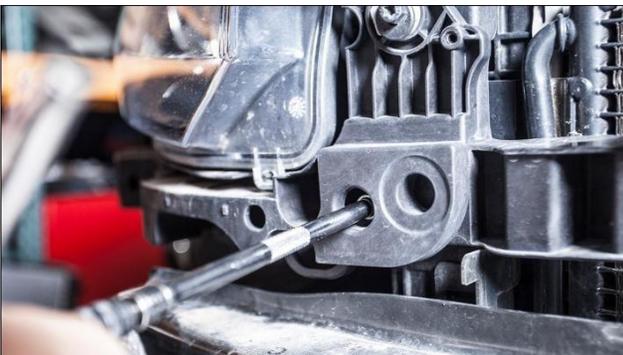


17. Slide the locating pins on the bottom of the intercooler into the grommets in the radiator support. Reinstall bolts to secure the intercooler to the radiator support.

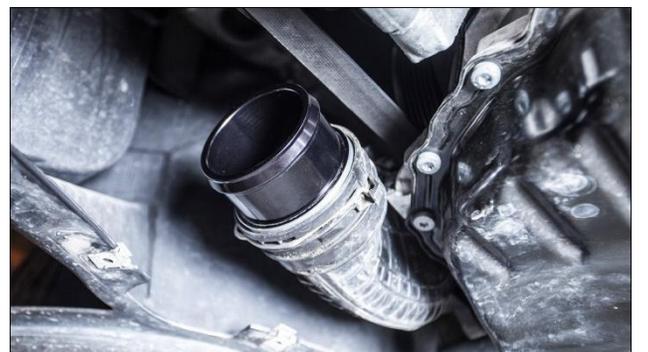


19. Plug in fans, reconnect coolant hoses.

20. Remove the O ring from the factory right side intercooler hose. Install onto the billet hose adapter included. Be careful not to damage O ring when removing from the factory hose. Install billet adapter into turbo outlet pipe by sliding in and securing clip.



18. Reinstall radiator, mounting it to the intercooler using the provided M6x14mm bolts with washers if the car does not have an ozone sensor. If the car is equipped with an ozone sensor, you will use M6x16mm bolts, along with washers and 1/8" spacers. Reinstall fan shroud to radiator using the OEM bolts. On some vehicles, it is necessary to lightly pull outward on the A/C lines to install the radiator, as they sit on the lower radiator mount.



21. Install silicone couplers onto IE intercooler. The “L” shaped hose will install on the left side of the car, the “S” shaped hose will install on the right side of the car. We recommend sliding the appropriate clamps on beforehand, as it will make the installation simpler. Tighten clamps with flat blade screwdriver.



22. Reinstall radiator support bolts. Once you have three installed, you can remove the bolts that were holding the car in service position. Install the remaining two bolts.
23. Plug in fog lights and sidemarkers. Reinstall bumper cover.
24. Reinstall grille.
25. Reinstall plastic under tray. You will notice that one of the bolts will interfere with silicone intercooler hose. Remove the threaded nut insert from the plastic mount point and do not install that bolt.



26. Fill engine cooling system with proper mix of factory-specified coolant, then bleed off any air trapped in the cooling system.
27. Start car, check for leaks.

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