

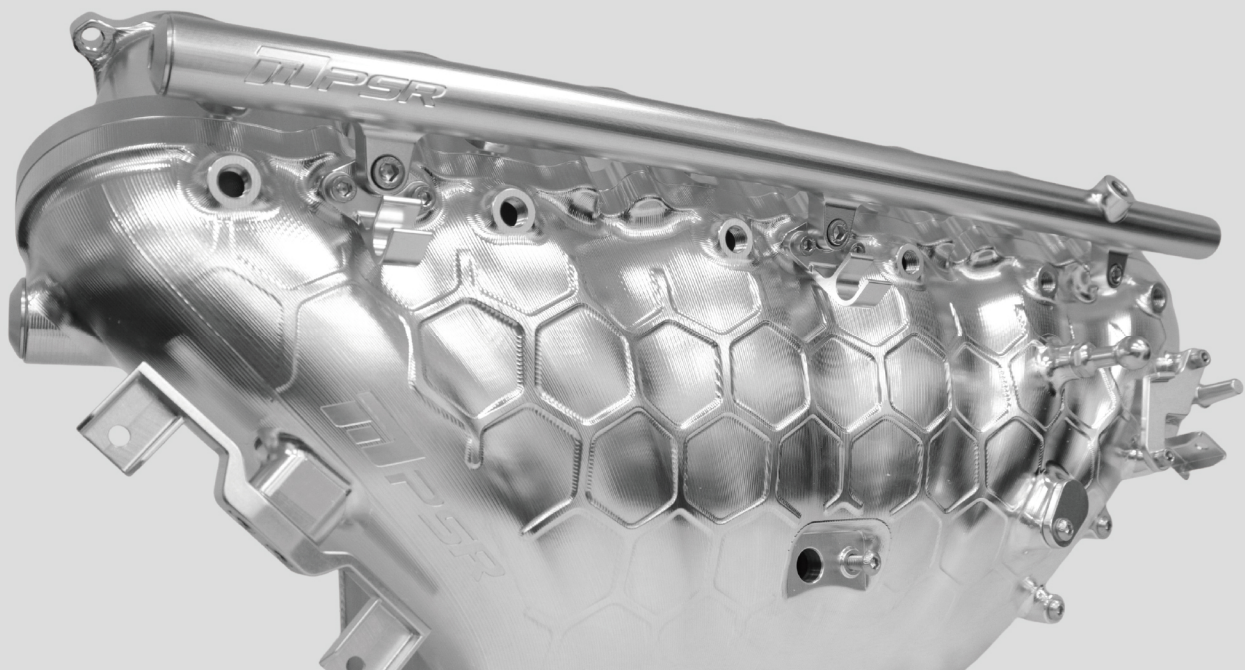
# BMW G8X S58 Billet Intake Manifold

## Installation Instructions

This installation is not recommended for a novice or the “new guy” in the shop. Use caution when installing, as not to damage any factory components or components included in this kit. If you are not experienced in working on cars we recommend taking this kit to your local performance shop for installation.

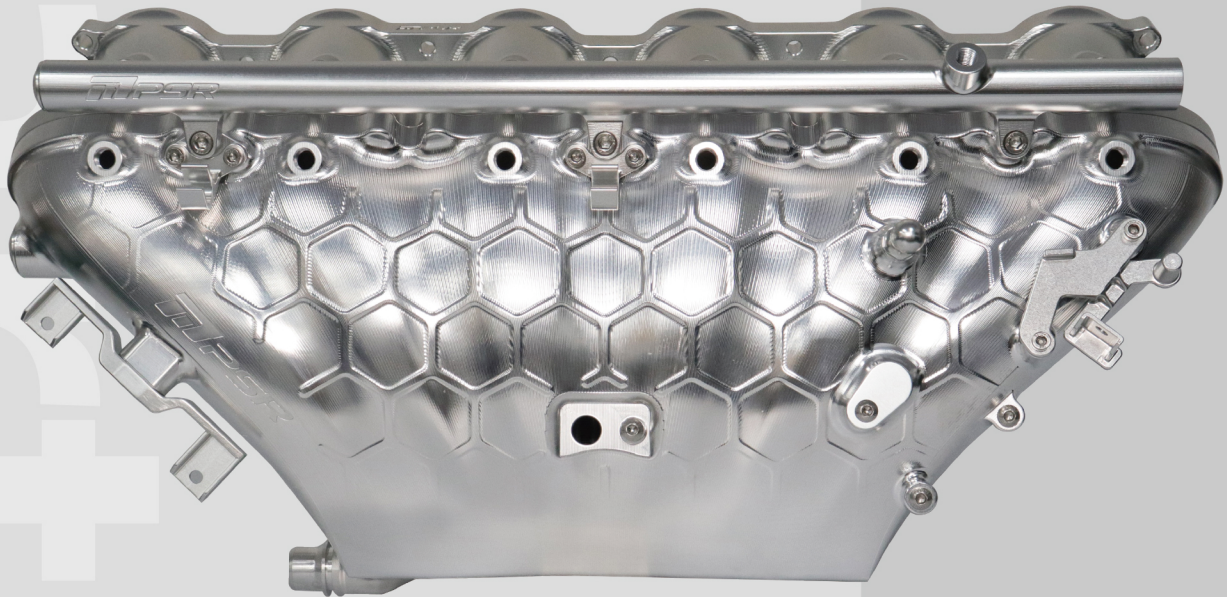


**All parts are aftermarket; customers assume full responsibility for compliance and safety.**



## Parts list

Some parts have been pre-installed on the S58 intake manifold before shipping. Before installation, please check the tightness of all parts and screws. Install the remaining parts according to actual needs.



## Parts list



[S58-IM-GRD]  
S58 Intake Manifold  
Heat Shield Gaske



[W52-2.5-ORG]  
Fluorine Rubber  
O-Ring OD 522.5



[Bolt-M512-SSHS-HR]  
Stainless Steel Button Head  
Hex Socket Screw M5x12



[S58-IM-ZQGJT-KIT]  
S58 Intake Manifold PCV  
(Oil Vapor) Fitting Assembly



[Bolt-M630-SSHS-Cap]  
Stainless Steel Socket  
Head Cap Screw M6x30



[Bolt-M645-SSHS-Cap]  
Stainless Steel Socket  
Head Cap Screw M6x45



[S58-IM-Xring]  
S58 Intake Manifold  
X-Ring Seal



[GBAN842-4]  
1/8NPT to 6mm  
90 Degree Elbow Fitting



[GBAN920-06-08]  
ORB AN8 to AN6  
Adapter Fitting (Black)



[GBAN920-08]  
ORB AN8 to AN8  
Adapter Fitting



Vacuum Hose

**When installing the PSR intake manifold,  
it is recommended to first install and pressurize the cooling system.  
Avoid disassembling coolant pipes to prevent burns!!!**

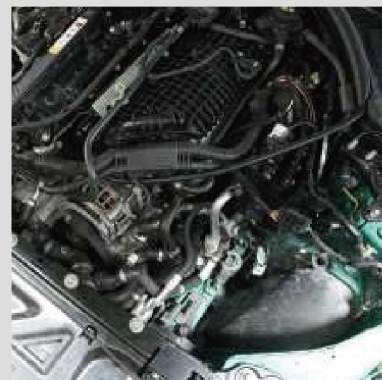
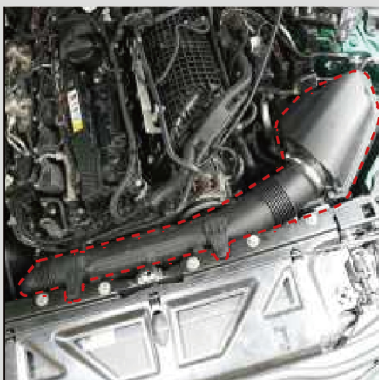
Before disconnecting the battery negative terminal,  
use a diagnostic tool to read the vehicle fault codes.

After installing the PSR S58 intake manifold and reconnecting the battery negative terminal,  
read the fault codes again to ensure all components are correctly installed.

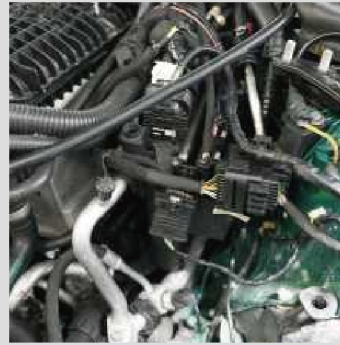
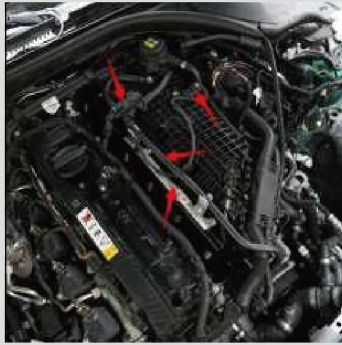
1. Use a 10# wrench to disconnect the car battery negative terminal.
2. Use 16# / E18# socket to remove the strut brace. Remove the engine cover. After removal, as shown in the image below.



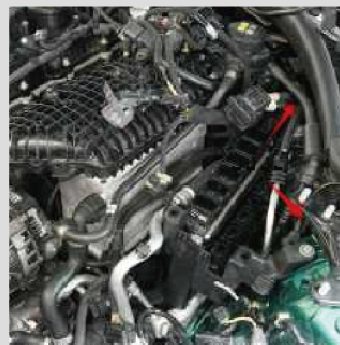
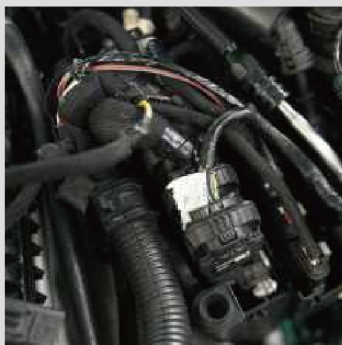
3. Remove the right-side air filter assembly and intake pipe. (Left of the image below).
4. After removing the intake pipe, as shown. After removing the intake manifold, as shown.



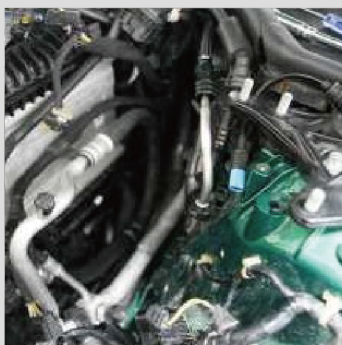
5. Remove the vacuum hose, vacuum hose bracket, and pressure sensor. (Left of the image below).
6. Remove the engine control unit cover, prepare to remove the engine control unit and wiring harness.



7. Sequentially unplug the engine control unit connectors and all surrounding plugs from front to back, then move aside the ECU (as shown in the right of the image below).
8. After unplugging the connectors (as shown in the right of the image below).



9. Use a 10# socket to remove the 2 screws securing the engine computer (at the arrows in step 8), then remove the ECU (as shown in the left image below).
10. Drain all coolant from the vehicle, prepare to remove the intercooler coolant reservoir (circled in the image below).



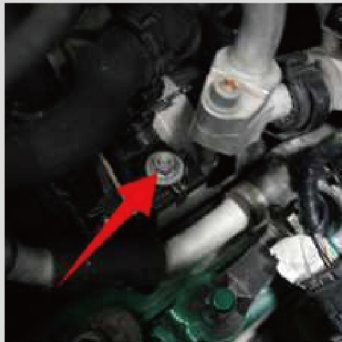
11. Use an E5 socket to remove the screws securing the intercooler coolant reservoir.

12. After removing the intercooler coolant reservoir, as shown (Note: Disconnect the bottom coolant hose before removal).



13. Use a 10# socket to remove the water pump securing screws, then lift the electric water pump.

14. Release the turbocharger hose clamp/clip, and disconnect it from the throttle body.



15. Disconnect the throttle body coolant hoses (inlet and outlet) and throttle body connector (bottom left image).

16. Disconnect the throttle body heater/cooler (dashed line in bottom right image) and vacuum line connector (bottom left image).

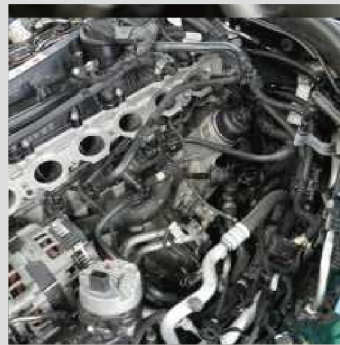


17. Disconnect the left and right coolant hoses of the intake manifold heat exchanger/radiator (inlet and outlet).



18. Use a 10# socket to remove the intake manifold securing screws (7 pcs) and remove the original factory intake manifold.

19. OEM intake manifold removal completed (bottom right image).



20. Install the original factory intake pressure sensor and water-cooled bracket securing O-ring/seal on the PSR intake manifold.

21. Install the original factory throttle body on the PSR intake manifold.



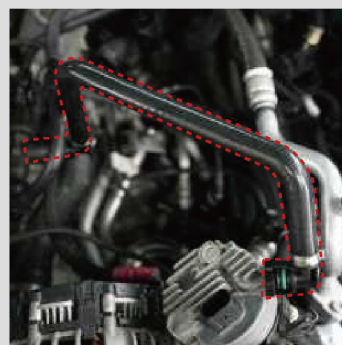
22. Install the original factory lower pipe bracket rubber and water bracket securing rubber ring/O-ring on the PSR intake manifold.

23. Install the original factory intake manifold gaskets/seals (6 pcs) on the PSR intake manifold. Check for any damage to the seals during installation.



24. Install the PSR intake manifold heat shield gasket (secured with M5 screws ×2) and seals/gaskets \*6.

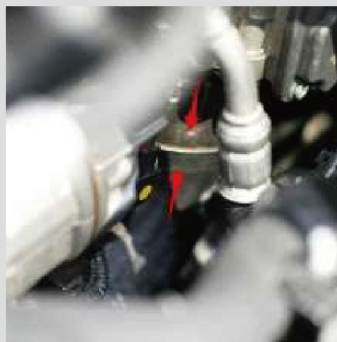
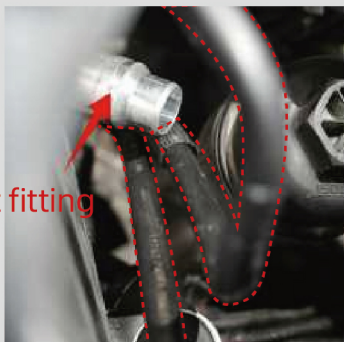
25. Install the PSR vacuum hose (pay attention to the hose fitting direction and installation position as shown in the image). If you have already removed and disabled the EVAP (fuel vapor) system solenoid valve and related components, you can completely ignore those parts and do not need to install the original hose route. Instead, use the blocking plugs/caps included in the PSR kit and install them at the corresponding ports on the intake manifold.



26. When installing the PSR intake manifold, note that the 2 vacuum hoses (as shown) must be positioned above the coolant outlet fitting.

27. When installing the PSR intake manifold, align the throttle body port with the vacuum port.

coolant outlet fitting



28. Check that the PSR intake manifold mounting bracket rubber grommets/O-rings are placed in the correct positions.

29. The intake manifold is correctly installed as shown in the images.



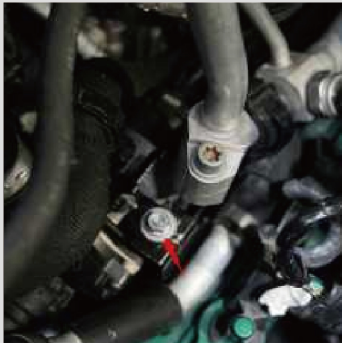
30. Install the PSR intake manifold securing bolts \*7.

31. Connect the throttle body coolant hoses (inlet and outlet) and the PSR supplied vacuum hoses (right image below).



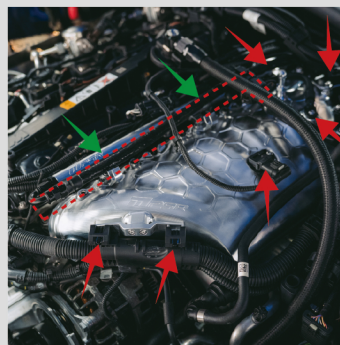
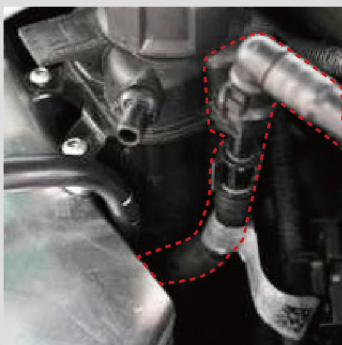
32. Use a 10# socket to install the electric water pump securing screws.

33. The accessory kit includes pre-installed water pump fittings. Select the appropriate fittings based on your fuel line specifications and pre-install them to the suitable position on the fuel rail. After installing the fuel rail, connect the fuel lines according to the fuel system configuration to the appropriate positions on the fuel rail, and ensure all connection points are fully sealed.



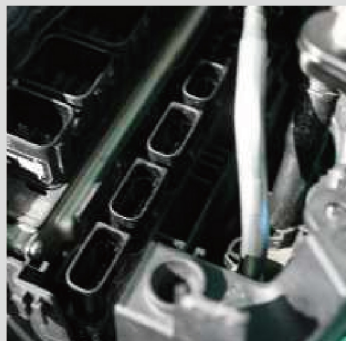
34. Note the positions of the 2 hoses shown in the image (if installed incorrectly, the hose lengths will be insufficient).

35. Install the remaining 2 hoses. If the vehicle has disabled this system function (as in step 25), these hoses (red dashed lines) can be omitted. The hose brackets (green arrows) can also be omitted.



36. Reinstall the engine control unit (ECU) back to its original position.

37. Connect the engine control unit connectors from rear to front.

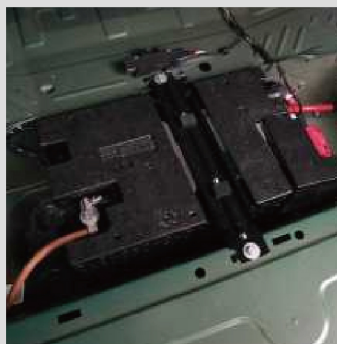
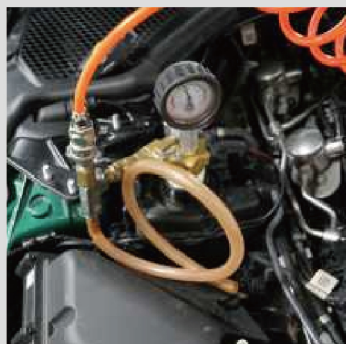


38. Install the air filter assembly and intake pipe.



39. Vacuum the entire cooling system to check for leaks, then add coolant to the specified level/mark.

40. Before reconnecting the battery, please double-check that all components are correctly connected and installed in their proper positions!



41. Install the strut brace, engine cover, and engine control unit cover.



PSR S58 intake manifold installation is fully completed.