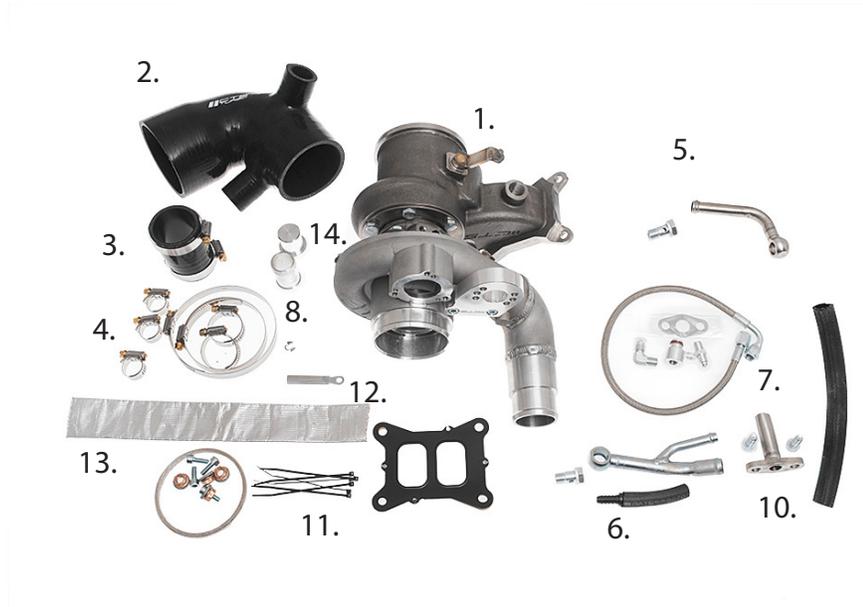




### WHAT IS INCLUDED

1. BOSS Turbo
2. Turbo inlet Pipe
3. Turbo outlet Pipe
4. Hose clamps
5. Water drain hardline
6. Water feed hardline
7. Oil feed line
8. PCV bung
10. Oil drain hardline
11. Turbo gaskets and hardware
12. Wastegate rod
13. Thermotec sleeve
14. Turbo inlet pipe plug



### TOOLS REQUIRED

1. Torx set
2. Triple Square Set
3. Metric Socket Set
4. O2 Sensor removal tool
5. Allen key set
6. VAG Com VCDS

### NOTES

Vehicle used in this guide is a 2015 VW Gti. Other cars will follow the same steps. We highly recommend installation using a hoist. Professional installation recommended. Always make sure the car is safe to work on. Do not work on a hot motor.

### STEP 1

Drain the coolant and oil from the car.

Remove the air filter housing.

Remove the heated oxygen sensor.

Remove the downpipe from the factory turbo.



### STEP 2

Loosen the hose clamp and remove the Torx bolt of the factory turbo outlet pipe. Disconnect it from the factory turbo.



### STEP 3

Remove the ground wires from each ignition coil and remove the wireharness out of the way.



### STEP 4

Unscrew the coolant hardline from the engine and disconnect it from the coolant hose. Pivot the coolant hardline so it is out of the way.



### STEP 5

Remove the  
cam adjustment  
actuators.

Note, the seals can  
be reused.



### STEP 6

Remove the  
heatshield



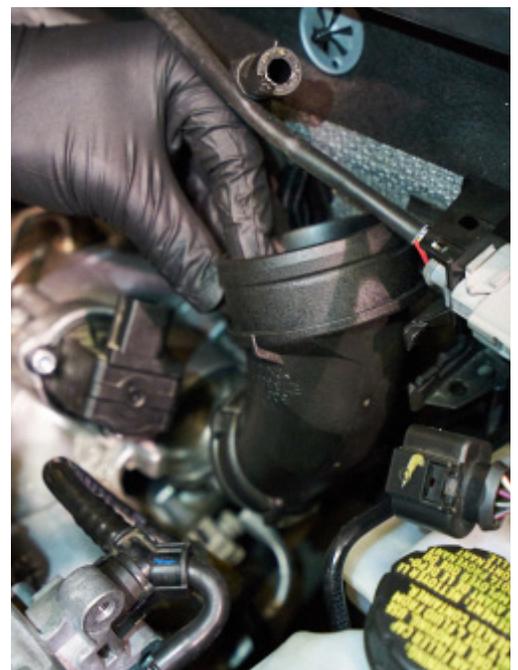
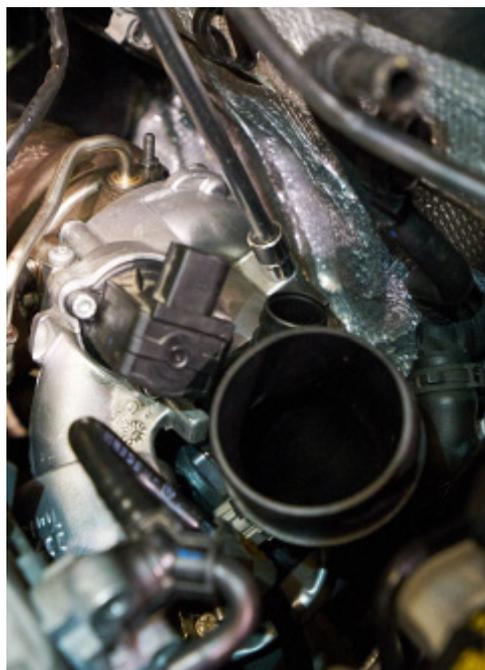
### STEP 7

Remove the turbo support bracket.



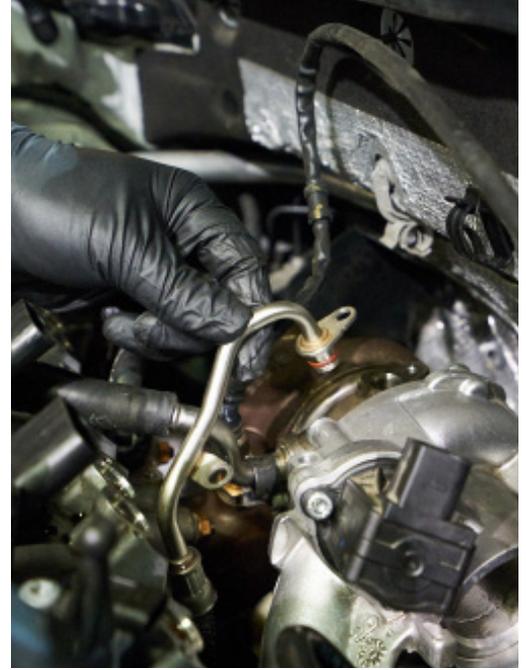
### STEP 8

Disconnect the turbo inlet pipe and remove it.



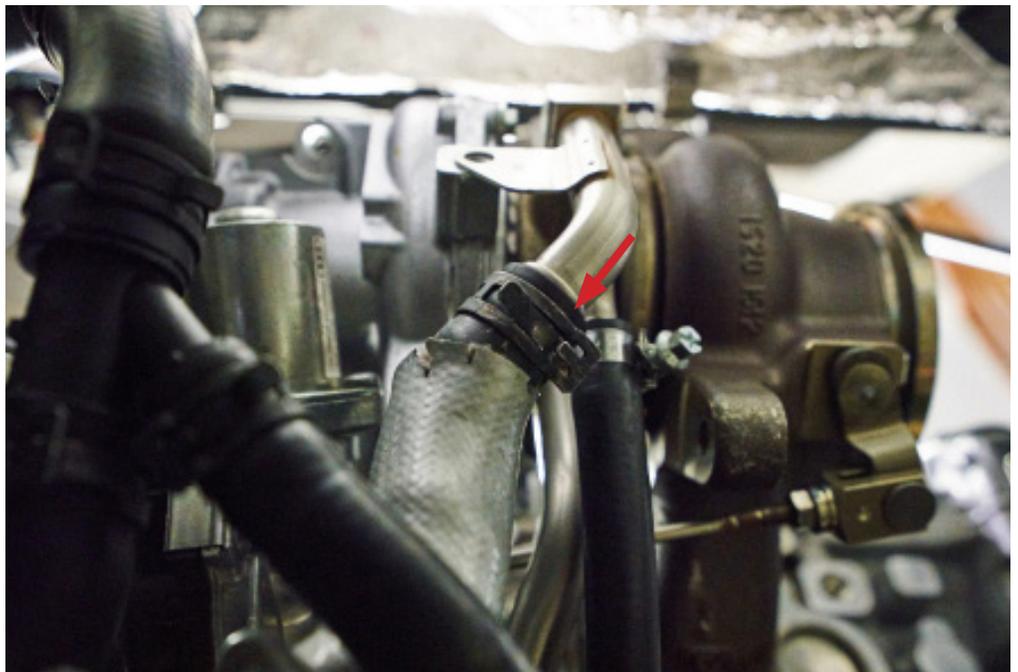
STEP 9

Remove oil supply line.



STEP 10

Remove the coolant  
drain line



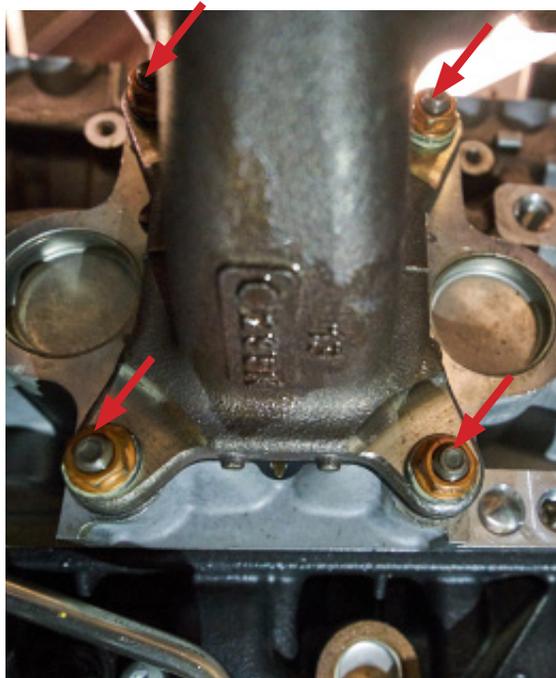
## STEP 11

Unclip the wastegate connector



## STEP 12

Unbolt the turbo charger from the cylinder head and remove upwards.

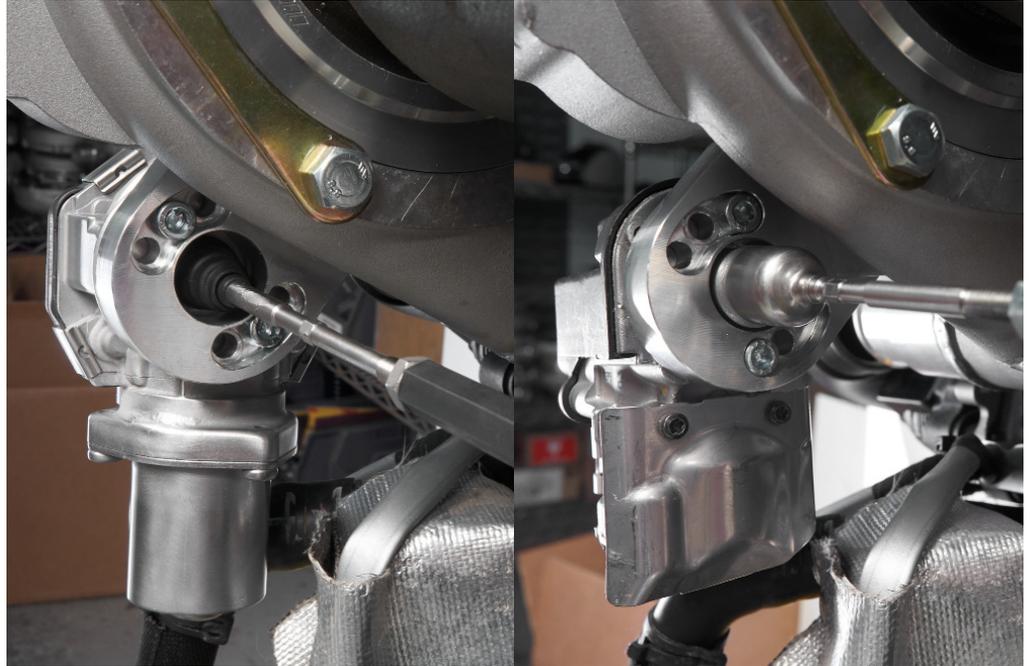


**STEP 13**

Remove the wastegate from the stock turbo and install onto the BOSS turbo in this orientation.

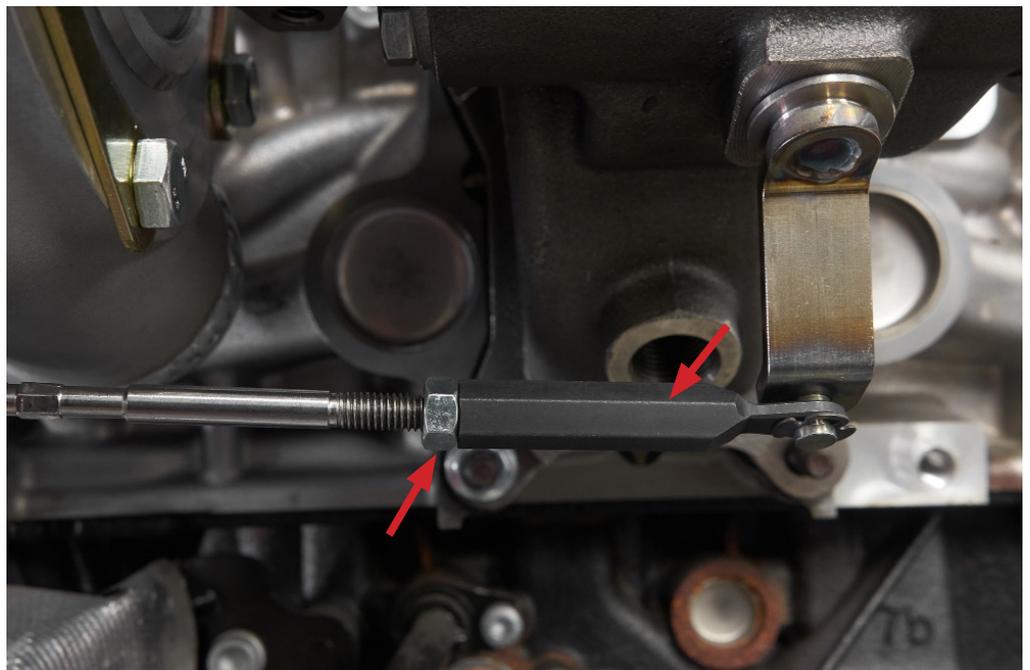
Note: The two different sets of mounting holes to use dependant on your wastegate.

IS20 (GTI) - Left  
IS38 (GolfR) - Right

**STEP 14**

Adjust your wastegate arm to the length you need (by threading the black end piece in either direction) - FOLLOW THE WASTEGATE ADJUSTMENT PROCEDURE AT THE END OF THIS GUIDE.

Use the bottom lock nut to keep the arm in place once adjusted correctly.



### STEP 15

Install new gasket on the exhaust side of the BOSS Turbine housing.

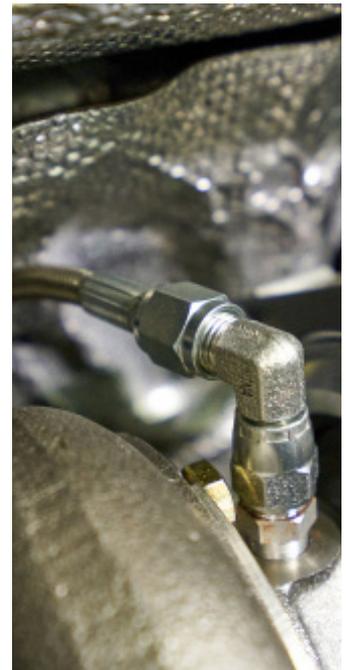
Install new exhaust manifold gasket on the engine block.

Install BOSS Turbo onto the engine block with the new locking bolts supplied.



### STEP 16

Install the GT oil restrictor on the top of the turbo, the 90 degree fitting, and the provided stainless steel braided line.



### STEP 17

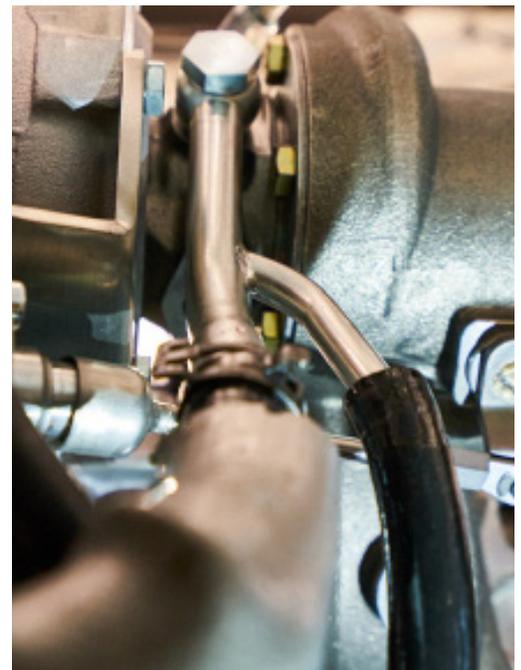
Install waterfeed with the supplied banjo washers and the banjo bolt.



### STEP 18

Install the water drain hardline.

Reconnect the hoses.



## STEP 19

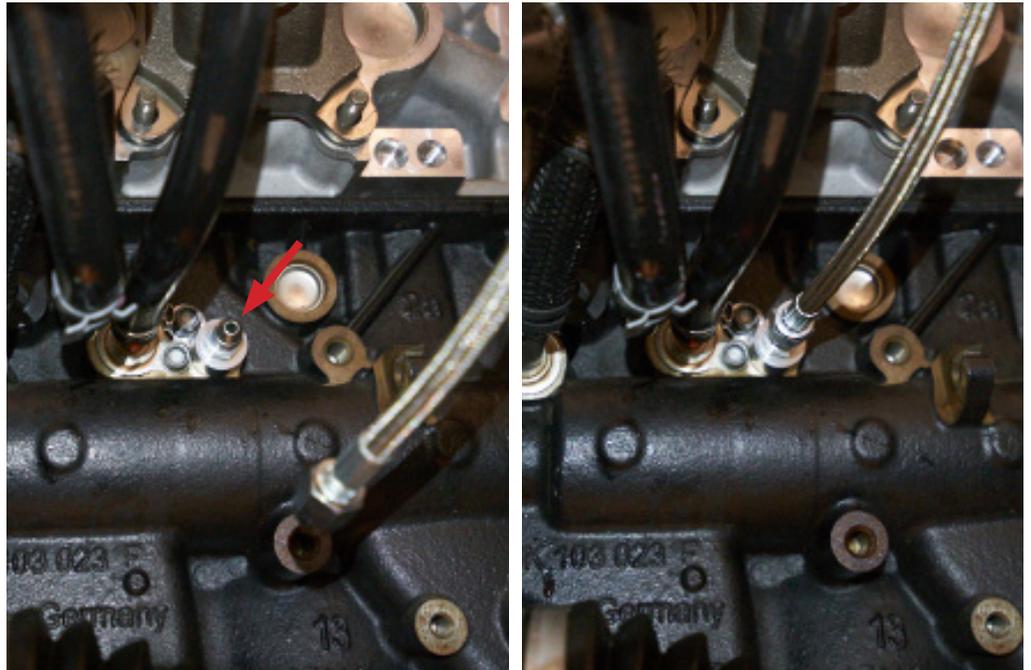
Install the oil drain  
hardline and gasket.

Connect supplied oil drain  
hose to factory location on the  
block.



## STEP 20

Connect the  
stainless steel  
braided oil feed line  
to the engine using  
the provided adapter  
and oil feed fitting.

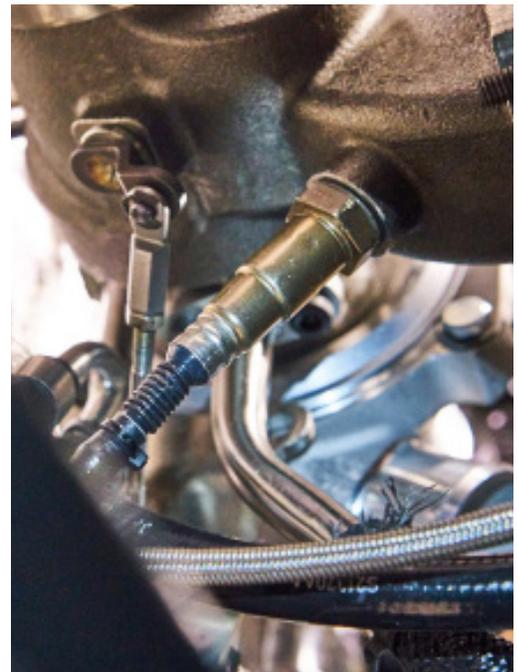


**STEP 21**

Reconnect the wastegate actuator plug.

**STEP 22**

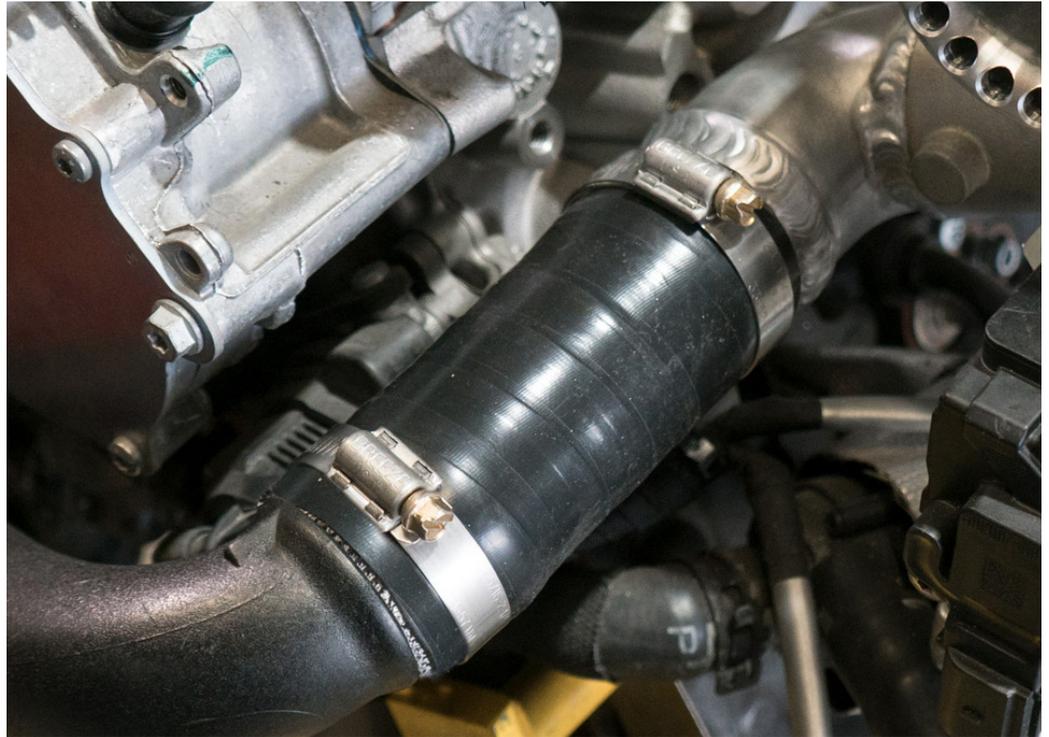
Zip tie the thermotec sleeve to the O2 sensor and attach to the turbine housing.



## STEP 23

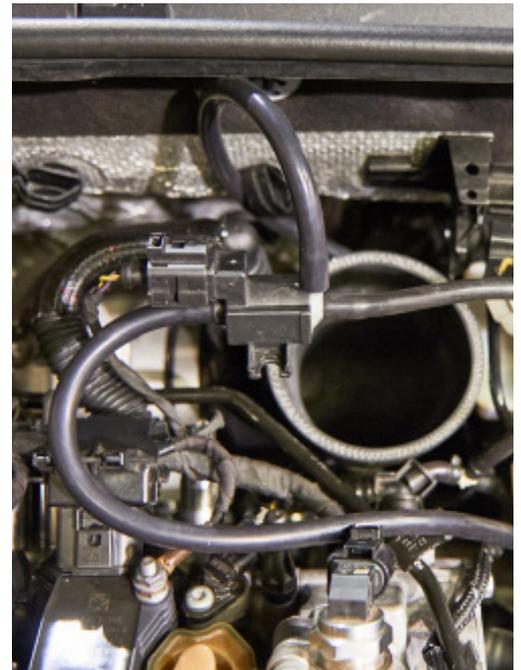
Install turbo outlet  
silicone.

Do not tighten  
clamps all the way



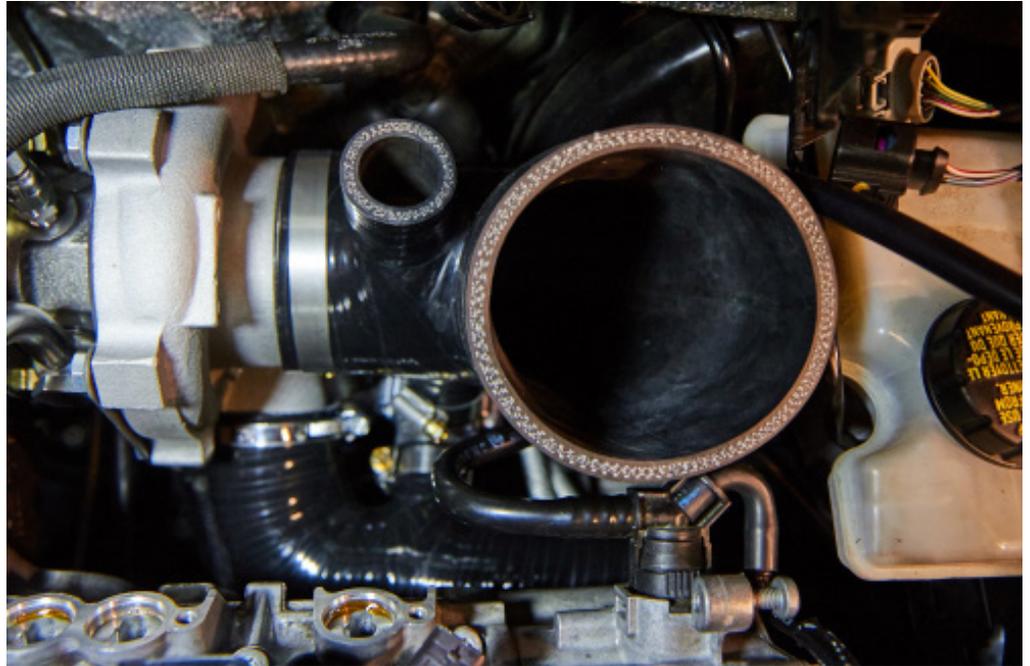
## STEP 24

Install the BOV/DV into the  
location on the compressor  
cover



STEP 25

Install turbo inlet pipe



STEP 26

Reinstall the Cam  
adjusters



### STEP 27

Reconnect PCV pipe to the turbo inlet silicone using the provided aluminum bung.



### STEP 28

Reconnect coolant lines to the coolant hardlines and fasten back onto the engine block.



**STEP 29**

Reconnect all connections to the ignition coils and cam adjusters.

Refasten ground wires for the coil packs

**STEP 30**

Refasten ground wires for the coil packs



STEP 31

Reattach the turbo  
heatshield



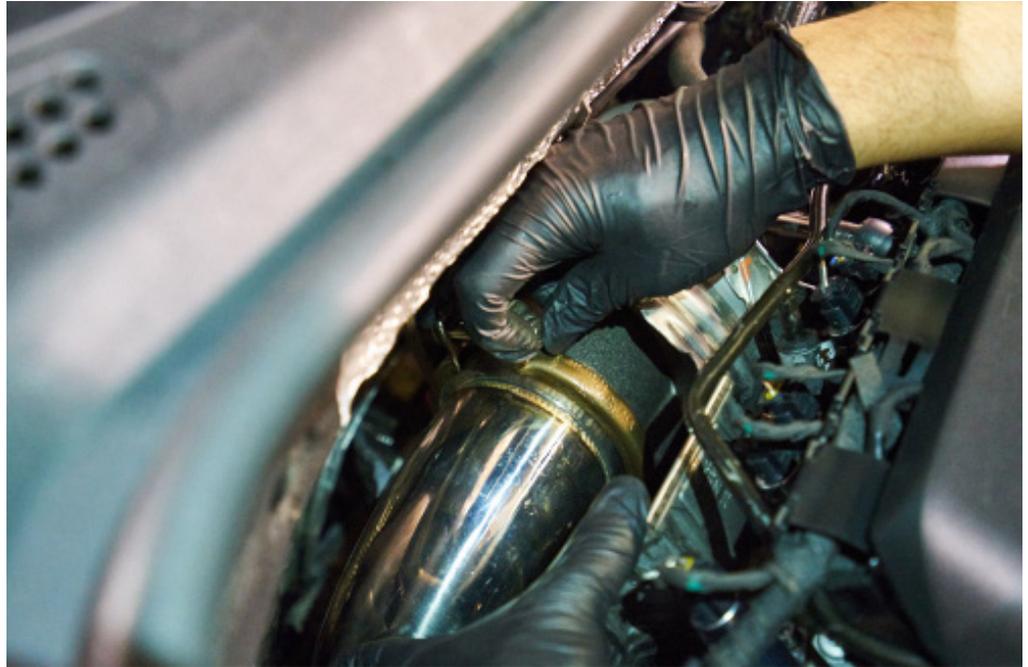
STEP 32

Reinstall the air  
intake kit.



**STEP 33**

Reconnect the downpipe to the turbo.

**STEP 34**

Reinstall the engine cover.

You are done!

Note: The wastegate will need to be calibrated using a Vag Com. See the following two page for detailed instructions.



### MQB Bolt-On Speed Solution (BOSS) Wastegate Adjustment

1. Assemble the BOSS turbo with wastegate actuator installed.
2. Loosen jam nut on the wastegate rod.
3. Turn the rod until the wastegate door is loose, i.e. it should wiggle freely.
4. Slowly turn the actuator rod to tighten the wastegate until the wastegate door makes contact with the housing. Once this occurs, the wastegate door should no longer wiggle freely.
8. Install the turbo and plug in the wastegate actuator connector.
9. Leave the turbo accessible for further adjustments. Best to accessible the turbo from underneath with the downpipe removed.
10. Plug in the VCDS cable into the OBDII port.
11. Turn on the ignition, but DO NOT turn on the engine.
12. Open the VCDS program.
13. Go to "Select Control Module"
14. Go to "01 – Engine"
15. Go to "Basic Settings – 04"
16. In the menu, choose "IDE03869 - Test: Charge pressure actuator"
17. Click "Show Measuring Data" on bottom left.
18. Search the list and select "Charge Pressure Actuator: acknowledgement (location: IDE00396)"
19. Click "Go" on Basic Settings window.
20. Note the wastegate voltage and adjust as required (target voltage: 3.60V to 3.80V)
21. To adjust voltage, click "Done, Go Back" on Basic Settings and adjust the rod on the wastegate. To increase voltage, loose the wastegate rod. To decrease voltage, tighten the wastegate rod.

