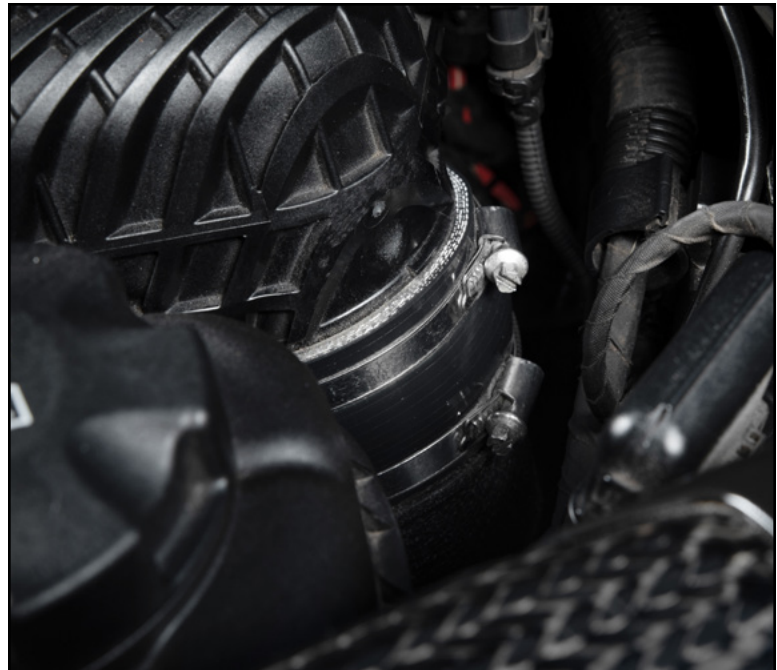




## BMW F8x M3, M4 S55 Charge Pipe Kit Installation



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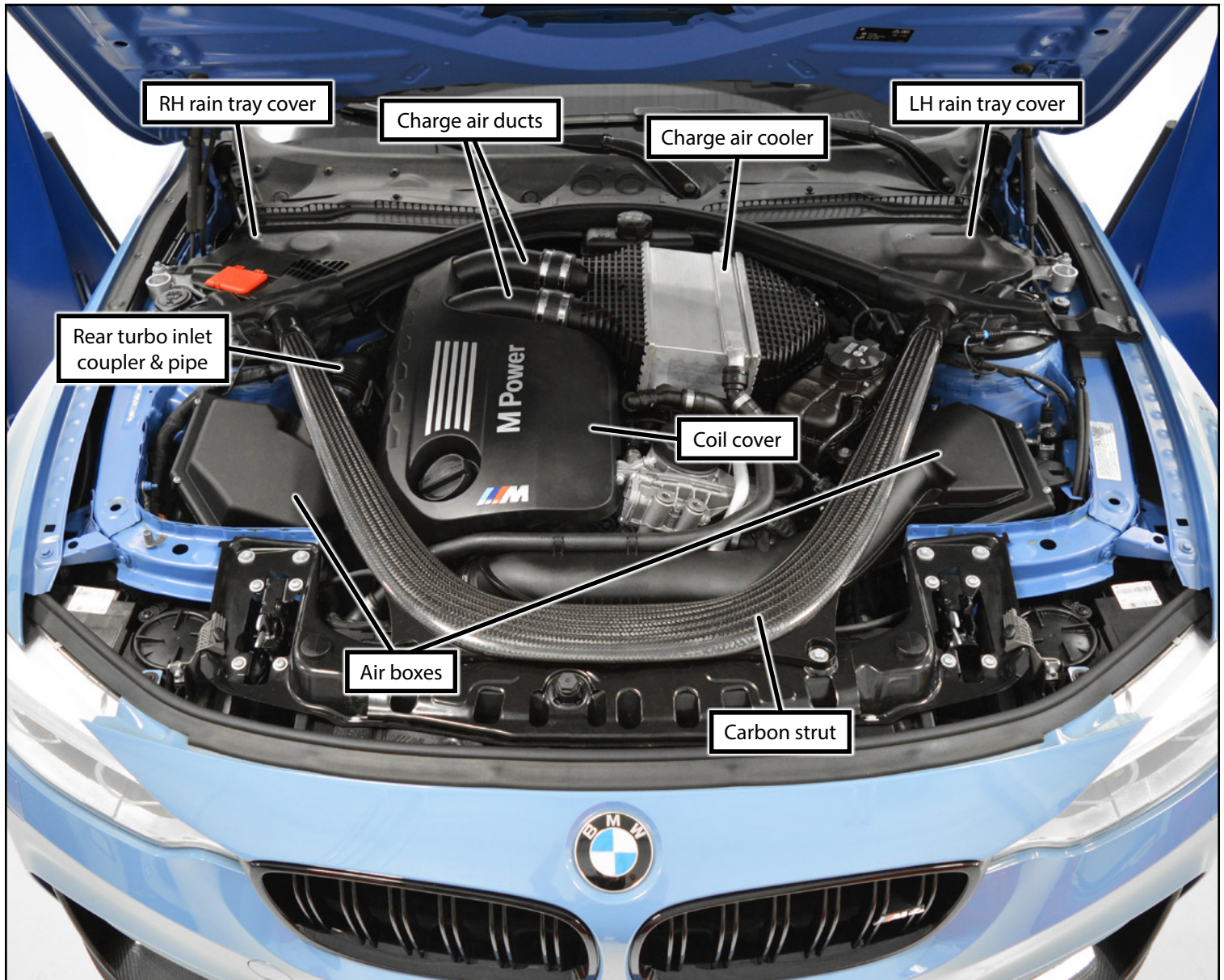
**Be sure to completely read these instructions before installation.**

## Section 1: Project Overview

Let's take a moment to look at what we will be removing for this job:

1. Coil Cover
2. LH and RH rain tray covers
3. Carbon strut
4. Air boxes
5. Rear turbo inlet coupler & pipe
6. Charge air ducts
7. Charge air cooler

*Now let's get to it!*

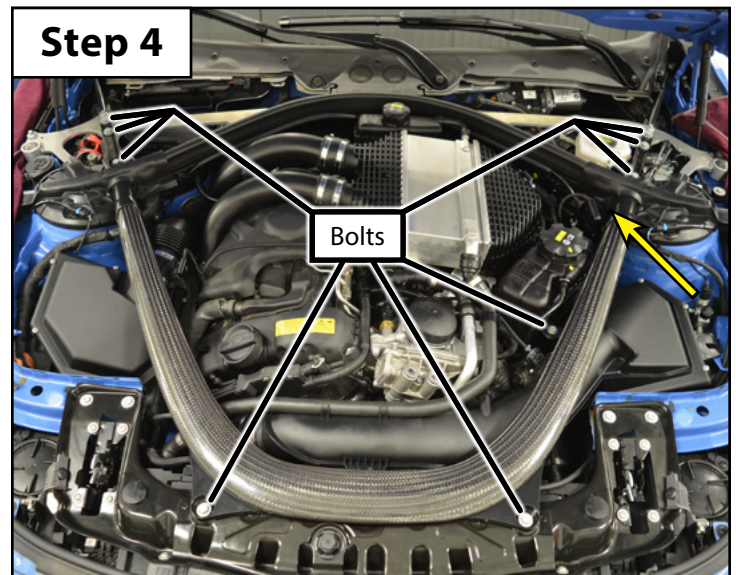
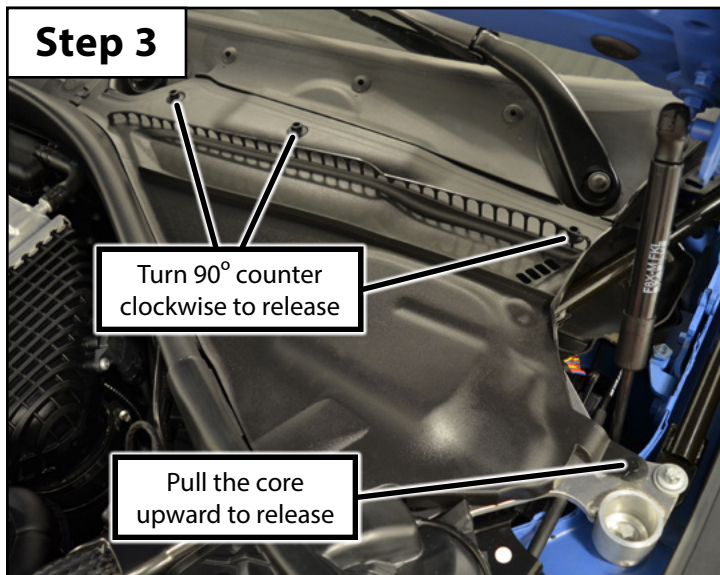
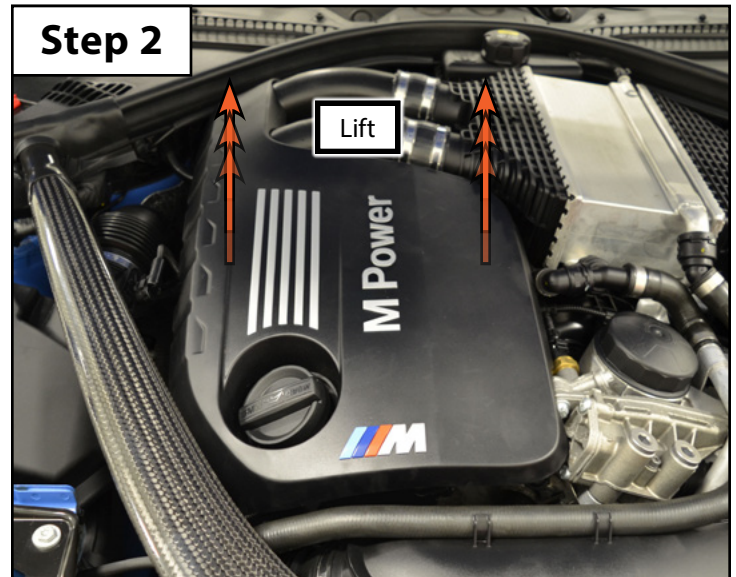
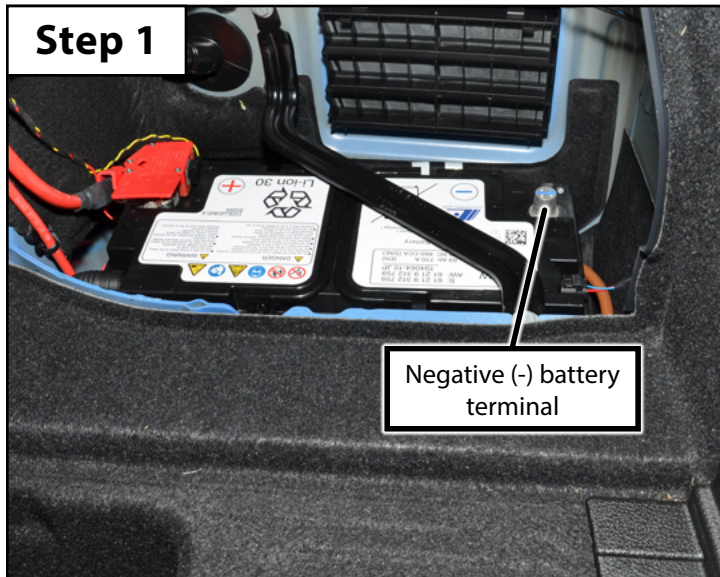


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## Section 2: Removing the Stock Charge Pipes

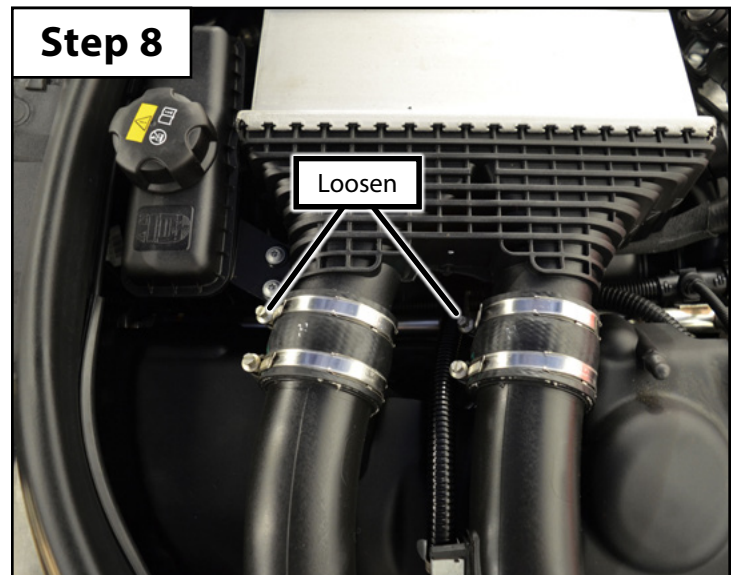
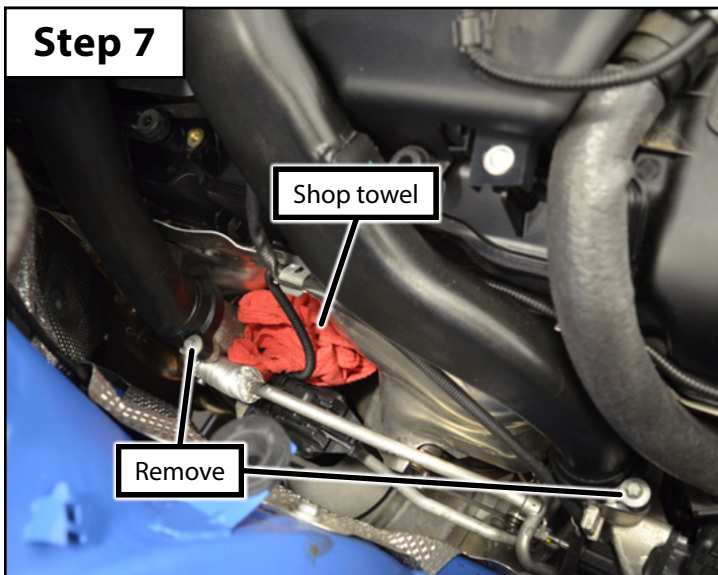
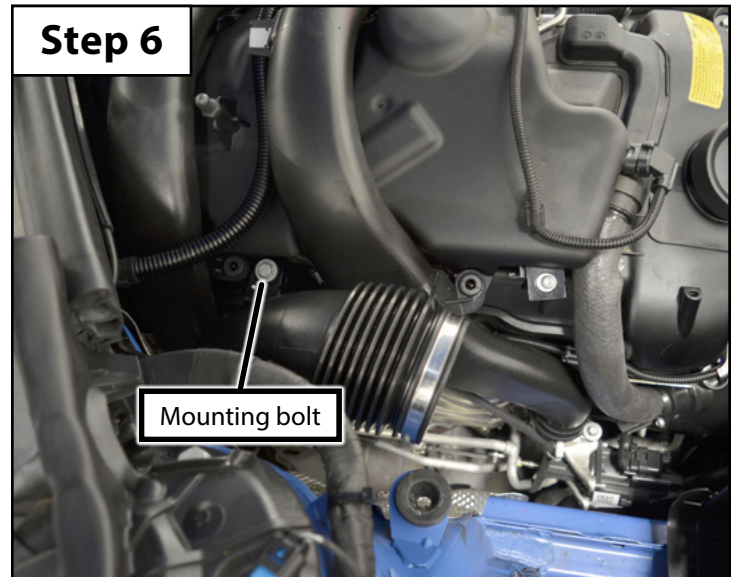
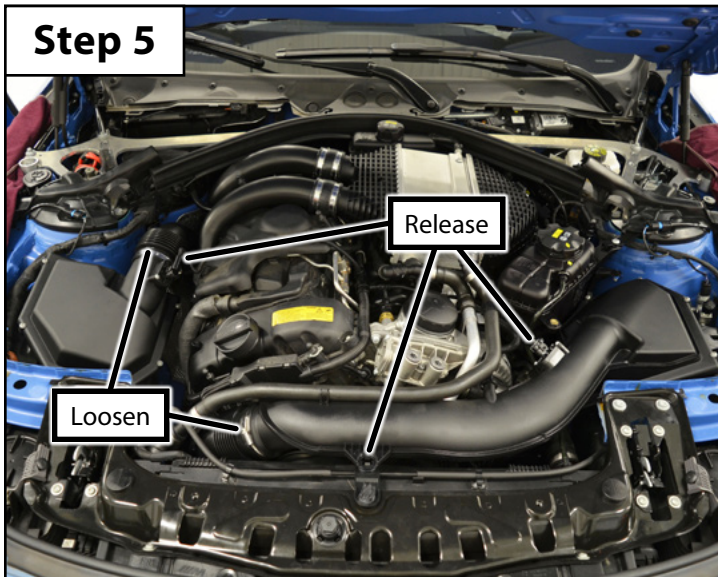
- Step 1**
- We strongly recommend you disconnect the negative (-) battery cable.
- Step 2**
- Grasp the coil cover and pull it upwards to release it from its mounting grommets.
- Step 3**
- Turn the three 10mm plastic nuts 90° counter clockwise to release them.
  - Pull the core upwards out of the plastic expansion rivet to release it.
  - Lift the rain tray cover out of the vehicle (LH rain tray cover show in the photo).
  - Repeat this process to remove the other rain tray cover.
- Step 4**
- Remove all of the bolts from the carbon strut.
  - Release the plastic expansion rivets which secure the rubber weather strip from the LH strut tower (**YELLOW** arrow).
  - Carefully lift the carbon strut out of the engine compartment and set it aside where it won't be damaged.





## Section 2: Removing the Stock Charge Pipes

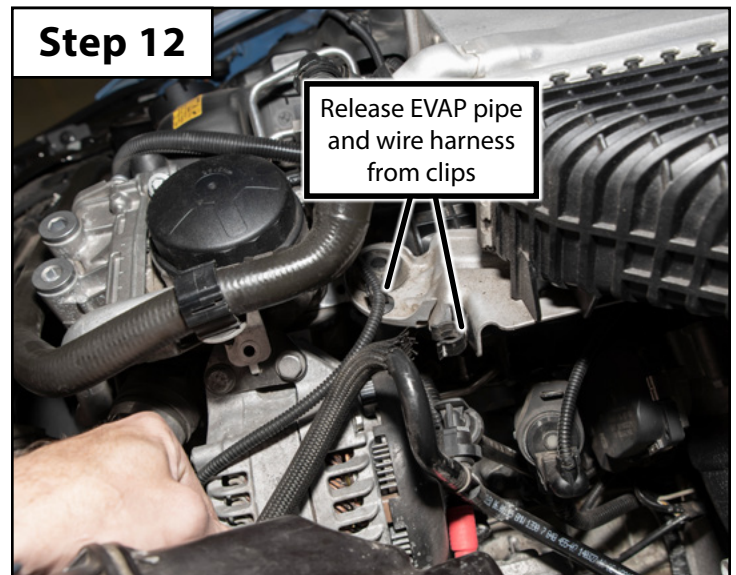
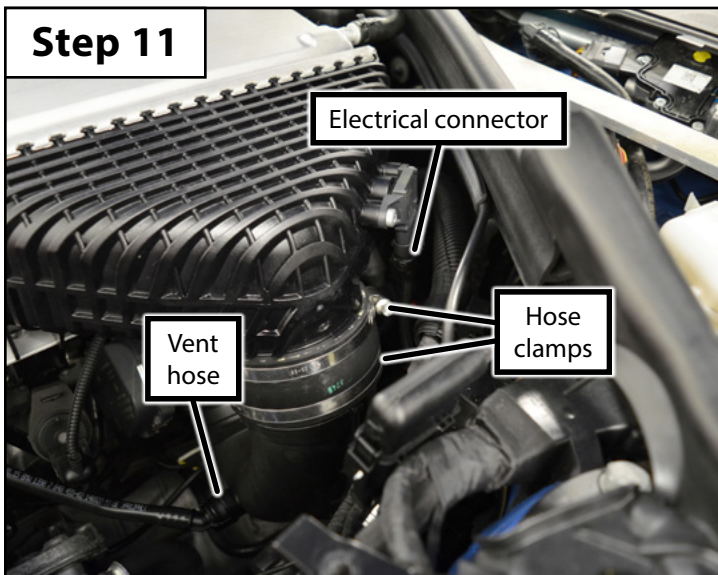
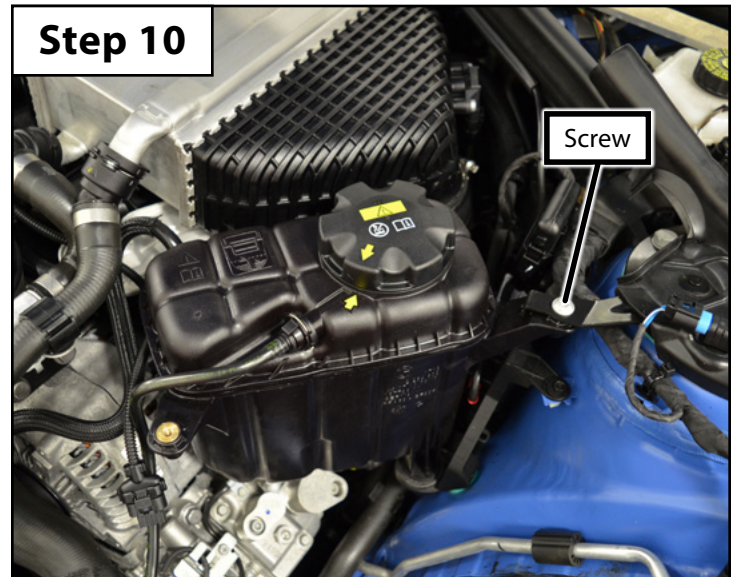
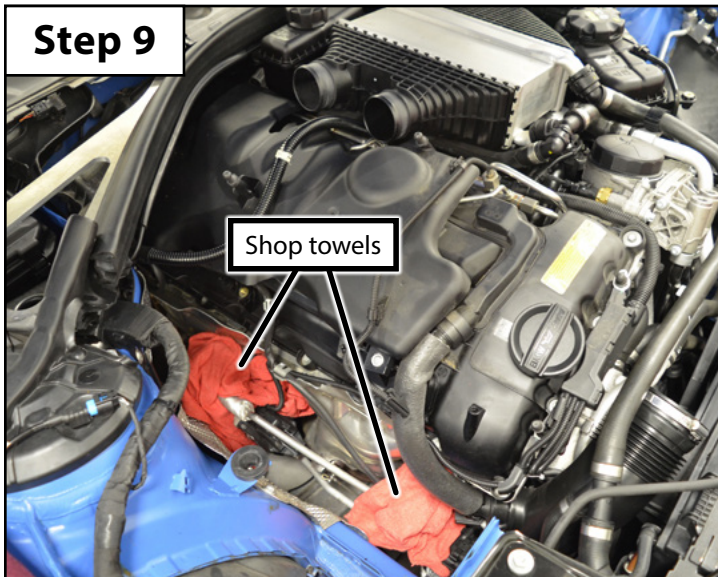
- Step 5**
- Loosen the hose clamps on the two air boxes.
  - Release the MAF sensor connectors.
  - Lift the air boxes straight upwards to release them from their mounting grommets.
- Step 6**
- Remove the bolt which secures the rear turbo inlet coupler & pipe to the engine.
  - Lift the rear turbo inlet coupler & pipe straight upwards to release them from the turbocharger.
- Step 7**
- Place a clean shop towel over the turbocharger inlet to prevent any debris from falling in.
    - Securing the towel in place with a zip tie can be helpful here.
  - Remove the E11 Torx bolt from each charge pipe.
- Step 8**
- Loosen the hose clamps between the two charge air ducts and the charge air cooler.
  - Remove the cap from the charge air cooler expansion tank.





## Section 2: Removing the Stock Charge Pipes

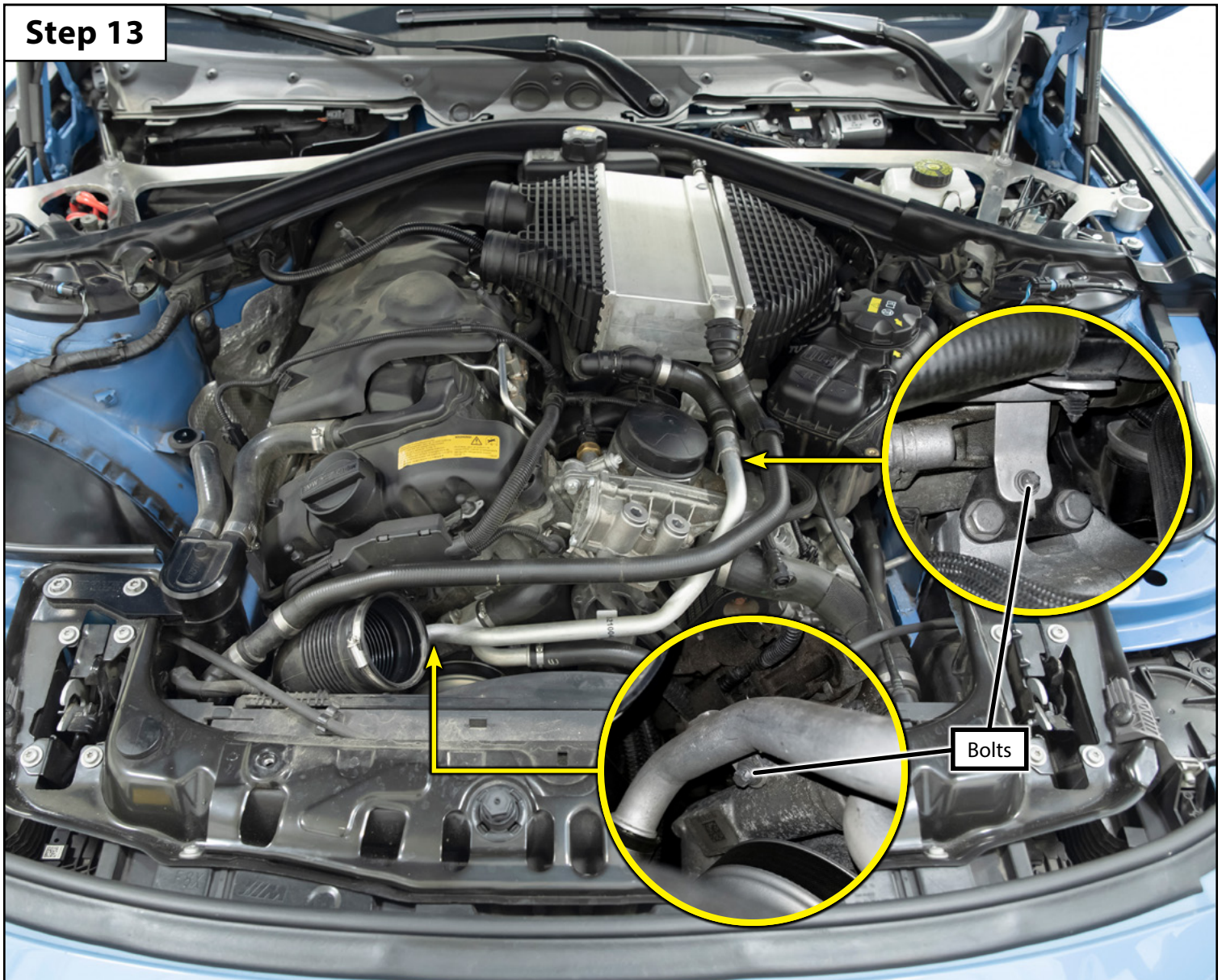
- Step 9**
- Lift the charge air ducts straight upwards to release them from the turbochargers.
  - Use clean shop towels to prevent any debris from falling into the turbocharger outlets.
    - Securing the towels over the turbocharger outlets with zip ties can be helpful to keep them in place.
- Step 10**
- Remove the single T30 Torx screw which secures the coolant expansion tank to the LH strut tower.
  - Lift the expansion tank upwards slightly to release it from its mounting grommet.
  - Set the expansion tank to the side **WITHOUT** removing the coolant line.
    - This eliminates the need to drain and refill the primary coolant circuit.
- Step 11**
- Release the electrical connector on the charge air cooler near the throttle body (TB) coupler.
  - Loosen the upper hose clamp on the TB coupler.
  - Disconnect the vent hose from the TB coupler.
- Step 12**
- Release the EVAP pipe and wire harness from their mounting clips on the LH front corner of the charge air cooler.





## Section 2: Removing the Stock Charge Pipes

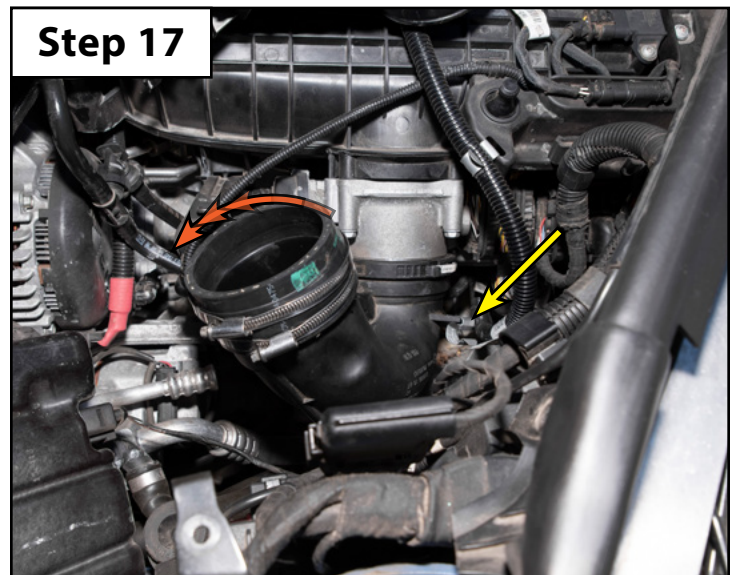
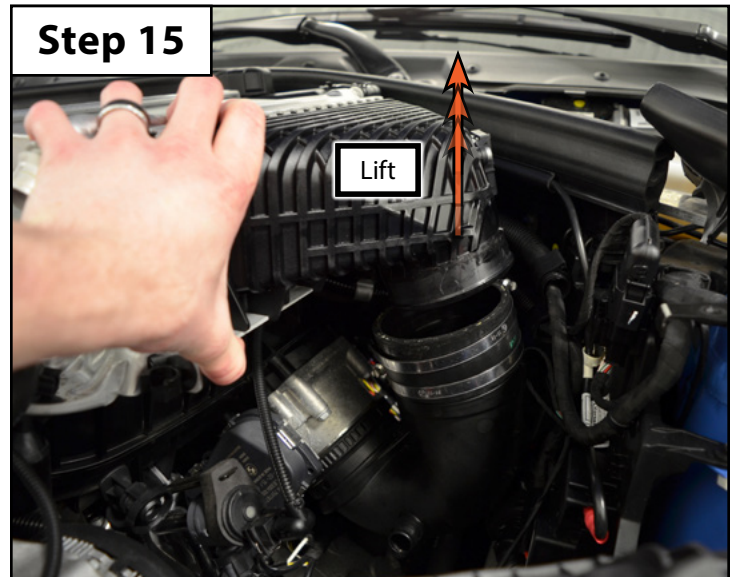
- Step 13**
- Remove the two E8 Torx bolts which secure the coolant pipe to the engine.
    - This will give us the flexibility we need to swing the charge air cooler out of the way later on.





## Section 2: Removing the Stock Charge Pipes

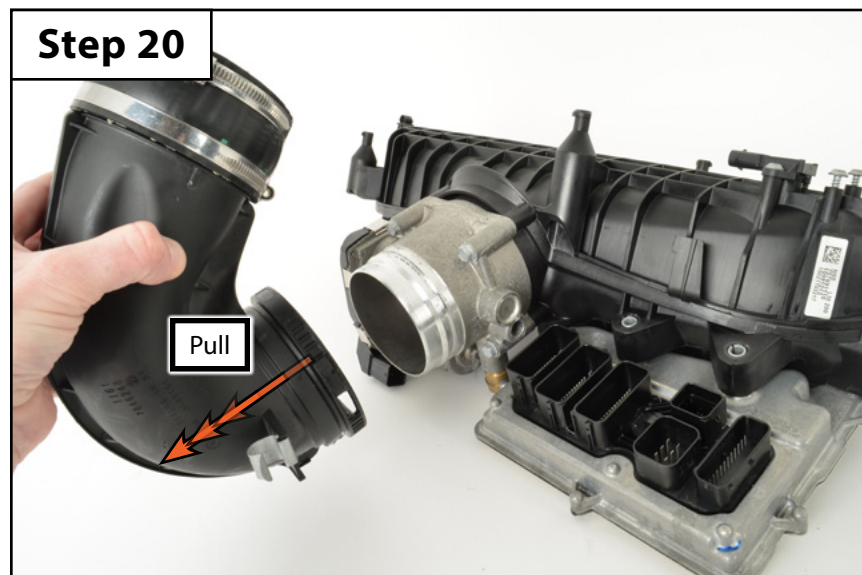
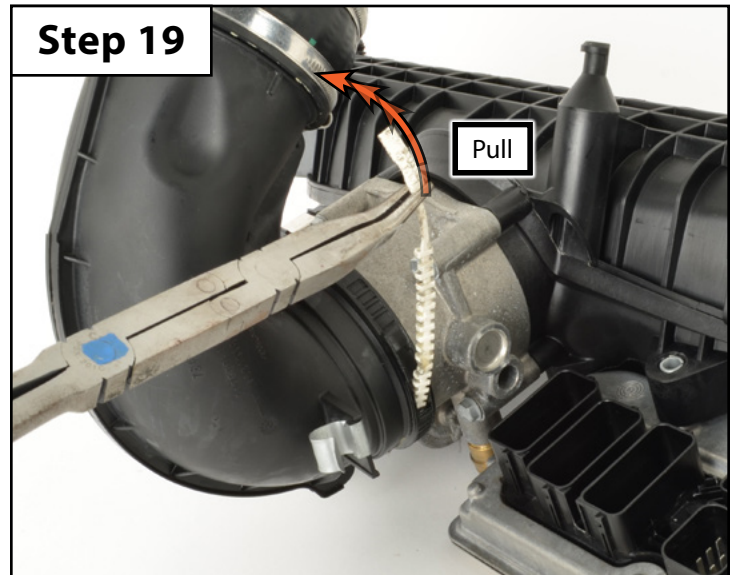
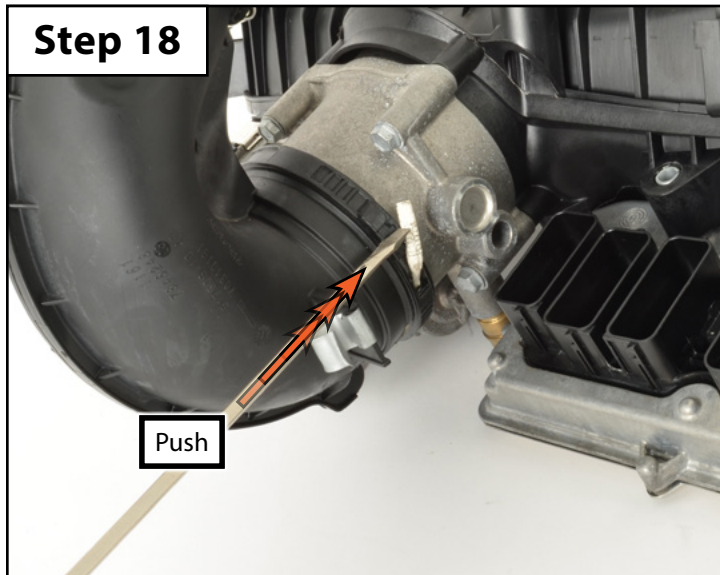
- Step 14** • Lift up on the RH side of the charge air cooler to release it from its mounting grommets.
- Step 15** • Lift upwards on the LH side of the charge air cooler to release it from the TB coupler.
- Step 16** • Swing the charge air cooler out of the way.  
– Be careful not to strain or stretch the coolant hoses or pipe during this step.
- Step 17** • Rotate the TB coupler toward the front of the vehicle slightly.  
• Release the wiring harness from the side TB coupler.  
• Locate the white zip clip which secures the TB coupler onto the throttle body (**YELLOW** arrow).



## Section 2: Removing the Stock Charge Pipes

- Step 18**
- Use a suitable pick or screwdriver to push the end of the zip clip out of its cavity.
    - A gentle push towards the throttle body should be enough to release it.
- Step 19**
- **GENTLY** grab a hold of the zip clip and pull it out of the TB coupler as shown in the photo. **We will be reusing this zip clip during reassembly, use caution to not break or deform it.**
    - If you find it difficult to get the zip clip to slide out of the TB coupler, try wiggling the TB coupler on the throttle body. The zip clip travels through small slots in both parts, if one part is twisted or crooked it can cause the zip clip to bind up.
- Step 20**
- Once the zip clip has been removed, pull the TB coupler off of the throttle body.

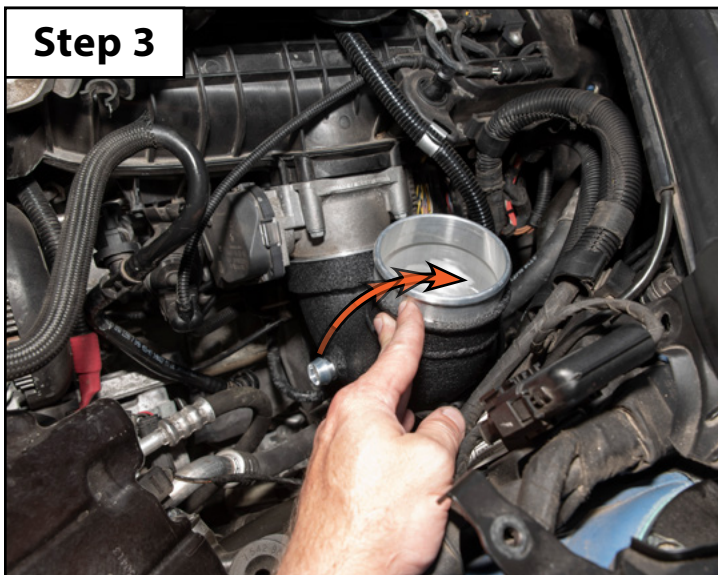
**\*\*Note:** These photos were taken with the intake plenum removed from the vehicle for maximum visibility.\*\*





## Section 3: Installing the New Charge Pipes

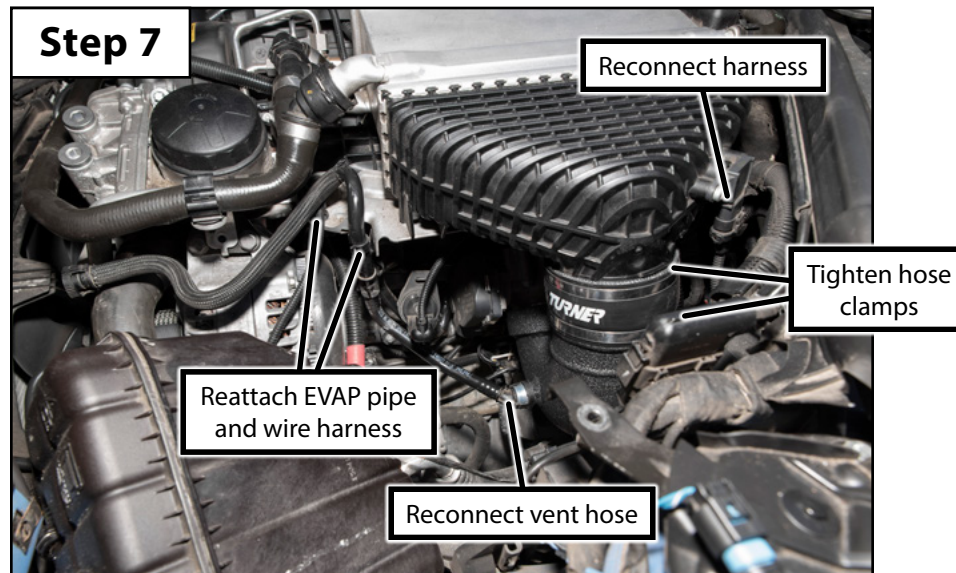
- Step 1**
- Install the provided seal into the ends of the new aluminum throttle pipe.
- Step 2**
- Install the new throttle pipe onto the intake plenum.
  - Secure it in place using the zip clip we removed on [Page 8](#).
- Step 3**
- Rotate the new throttle pipe back so it sits vertically in the engine bay.
- Step 4**
- Install the silicone coupler onto the end of the new throttle pipe.
  - Transfer the hose clamps from the stock coupler, but leave them loose for now.





## Section 3: Installing the New Charge Pipes

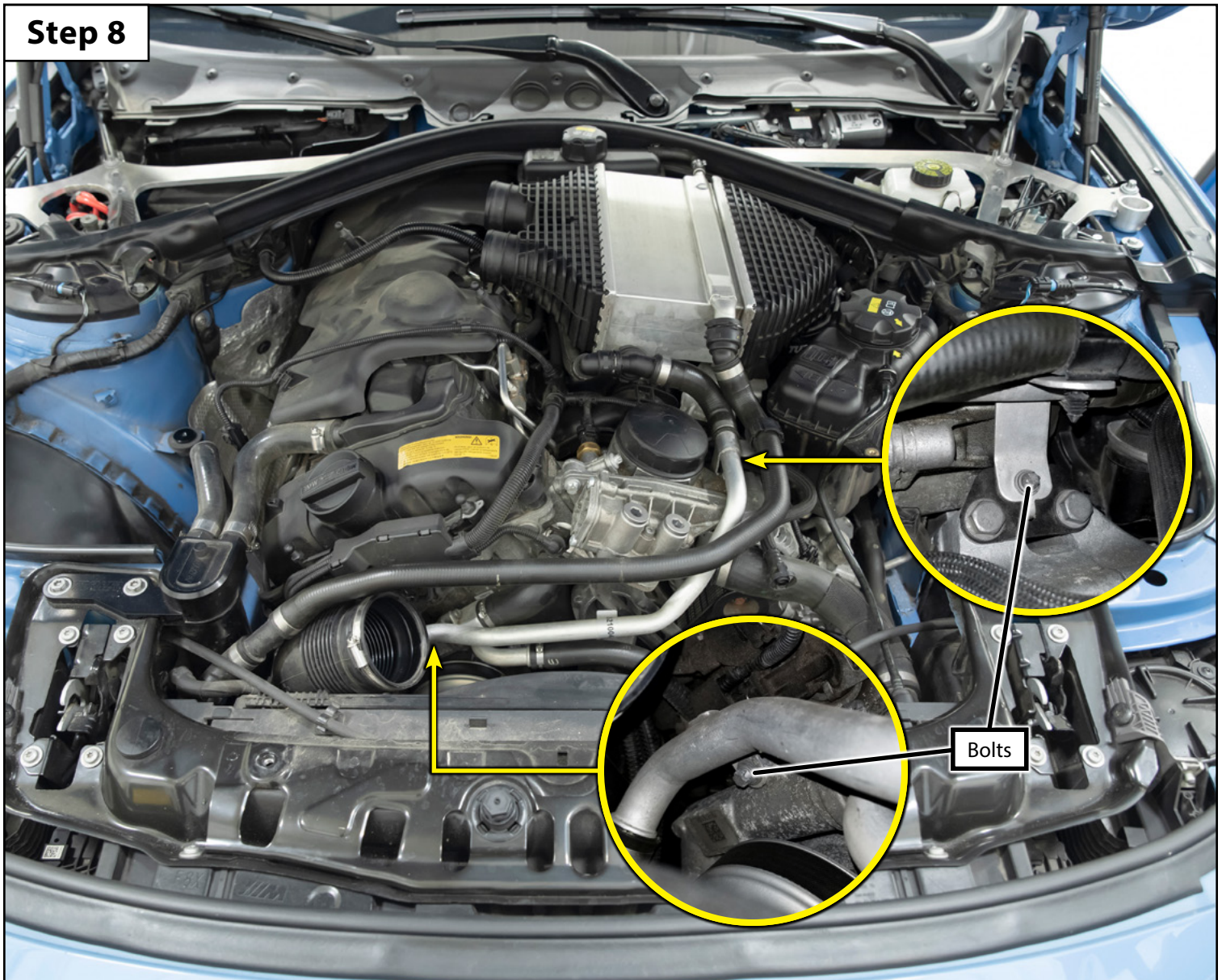
- Step 5**
- Swing the charge air cooler back into position.
  - Push the LH side of the charge air cooler down into the new silicone coupler.
- Step 6**
- Push the RH side of the charge air cooler down to seat it into its mounting grommets.
- Step 7**
- Reattach the EVAP pipe and wire harness to the clips on the LH front corner of the charge air cooler.
  - Connect the vent hose onto the new throttle pipe.
  - Tighten the hose clamps on the new silicone coupler.
  - Reconnect the electrical connector on the charge air cooler near the throttle body (TB) coupler.





## Section 3: Installing the New Charge Pipes

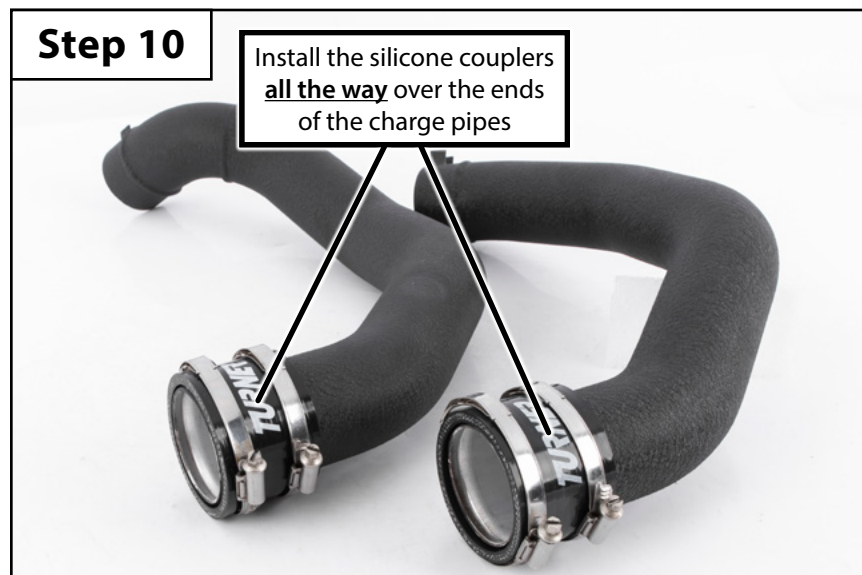
- Step 8** • Reinstall the two E8 Torx bolts which secure the coolant pipe to the engine.





## Section 3: Installing the New Charge Pipes

- Step 9**
- Install the provided seals into the ends of the hot side charge pipes.
- Step 10**
- Install the silicone couplers **all the way** over the ends of the hot side charge pipes.
    - This will give us the clearance we need to guide the pipes into place later on.
  - Transfer the hose clamps from the stock charge pipes.





## Section 3: Installing the New Charge Pipes

- Step 11**
- Guide the rear charge pipe into position, followed by the front pipe.
  - Secure the pipes to the turbo outlets using the original hardware.
    - There is very little clearance around these bolts, we've found it easiest to use an 8mm box-end wrench to tighten them (**YELLOW** inset photo).
  - Push the silicone couplers onto the charge air cooler, then tighten the clamps (**RED** inset photo).
  - Reinstall all remaining components in the reverse order of removal.


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