

# FSWERKS.com

**FSWERKS Intercooler Kit - Ford Focus ST 2013-2018 Part#FS096**

## **PARTS LIST**

1	Intercooler	6	8mm Flange Bolts
2	Lower Brackets	2	8mm Locknuts
1	Upper Left Bracket	2	8mm Large Washers
1	Upper Right Bracket	2	6mm Flange Bolts
2	Ninety Degree Silicone Hoses	2	6mm Flange Nuts
2	2.5" Aluminum Bead-Rolled Tubes	1	4mm Bolt
4	58-75mm Heavy Duty Hose Clamps	1	4mm Washer

**WARNING: NEVER WORK UNDER A VEHICLE SUPPORTED ONLY WITH A HYDRAULIC JACK!  
ALWAYS SUPPORT A RAISED VEHICLE WITH JACK STANDS.**

**FOR BEST FIT AND PERFORMANCE WE RECOMMEND HAVING THE FSWERKS  
INTERCOOLER KIT INSTALLED BY A QUALIFIED TECHNICIAN.**

## **INSTALLATION INSTRUCTIONS**



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- 1.** Start off by getting the vehicle up on a lift or placing jack stands under the front of the vehicle to get it up in the air to give you some room to work. Make sure the emergency brake is set firmly and you've blocked the rear wheels if you're using jack stands.
- 2.** Remove all T-30 Torx screws securing the two engine covers and air deflector, also using a small flat screwdriver pry and remove the plastic snap clips. Remove the two covers and plastic air deflector from the underside of the vehicle.



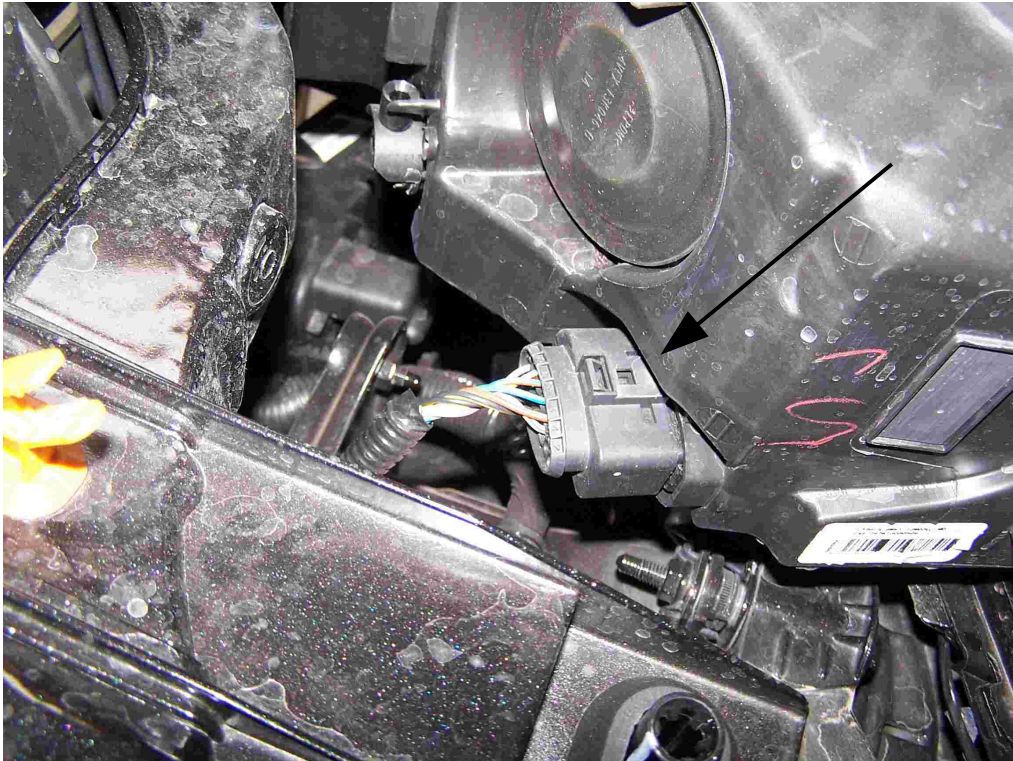
- 3.** Remove the three T-30 Torx fender liner screws and one plastic clip from the bumper, pull back fender liner to expose the plastic bumper to fender guide.



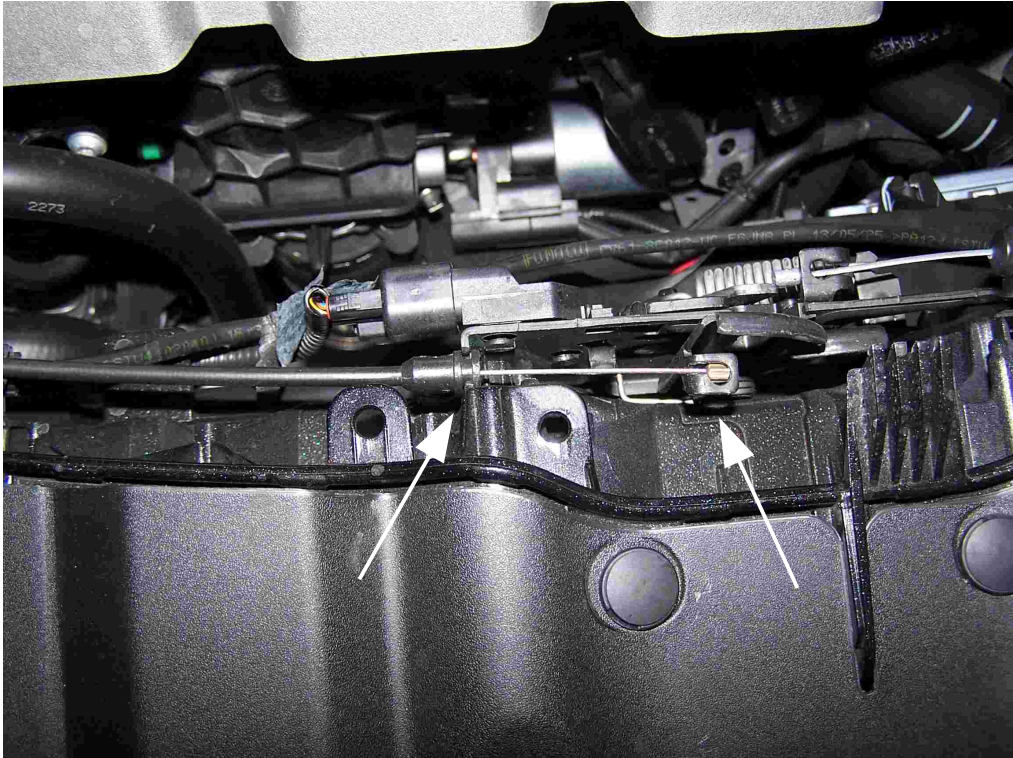
**4.** Disconnect the foglight main harness.



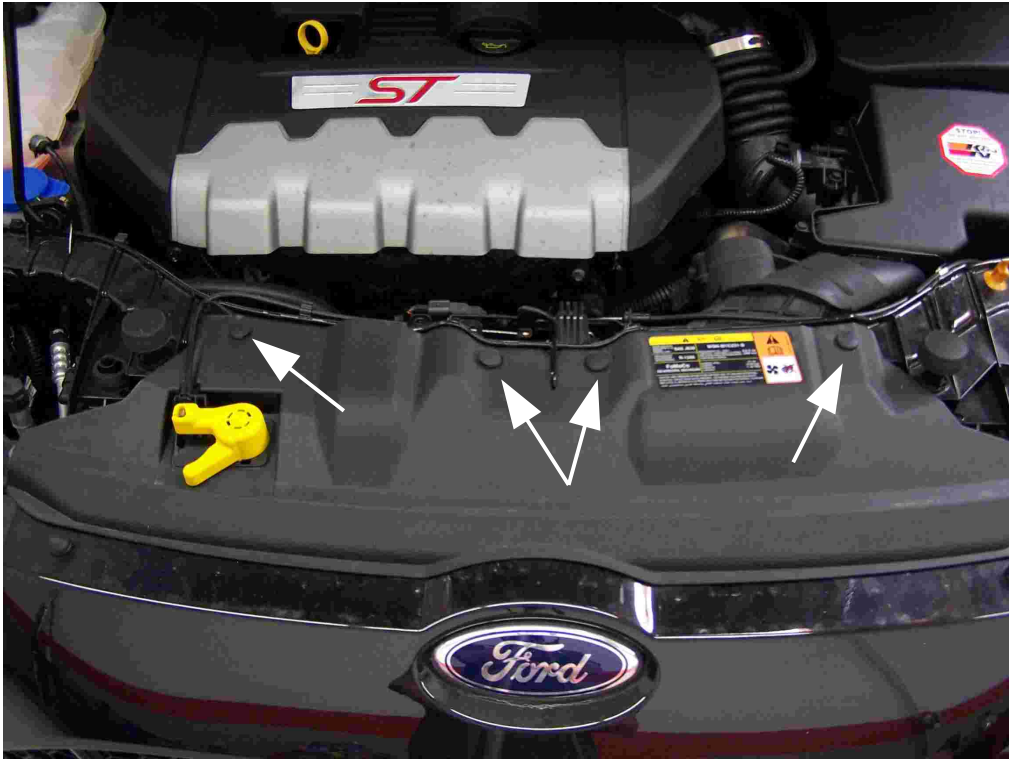
**5.** Locate and remove the two T-30 Torx screws securing the two front headlights, pull lights upward and forward to remove. Also remove the other two T-30 Torx screws securing the grill.



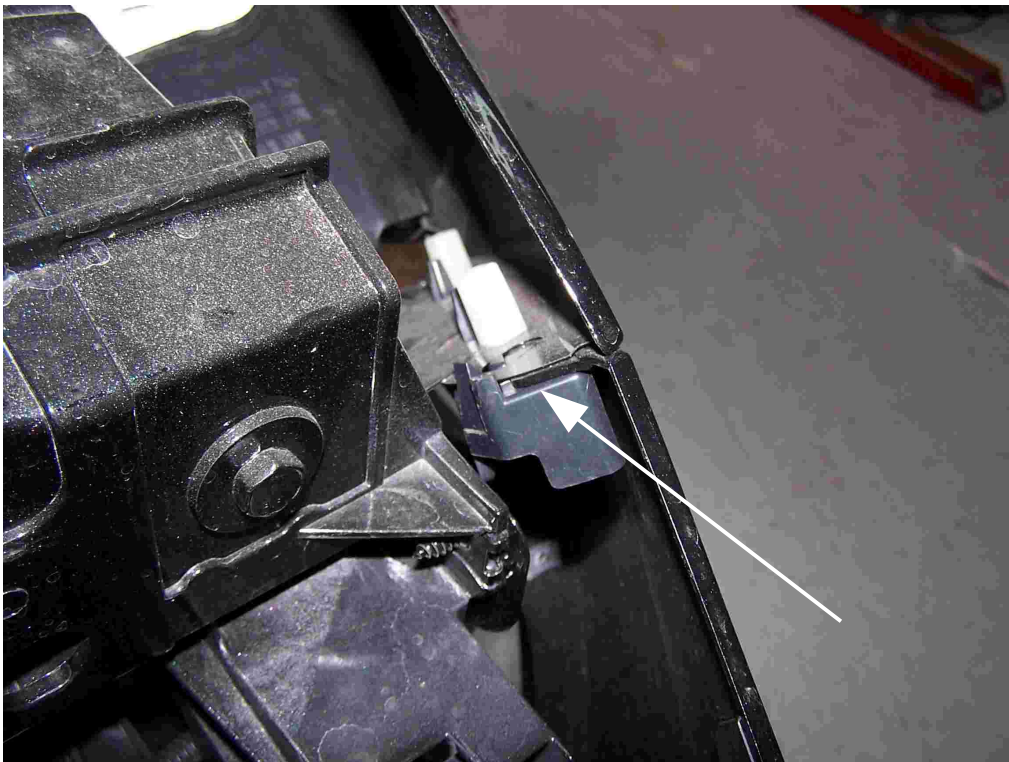
**6.** Disconnect the electric plug behind both headlights.



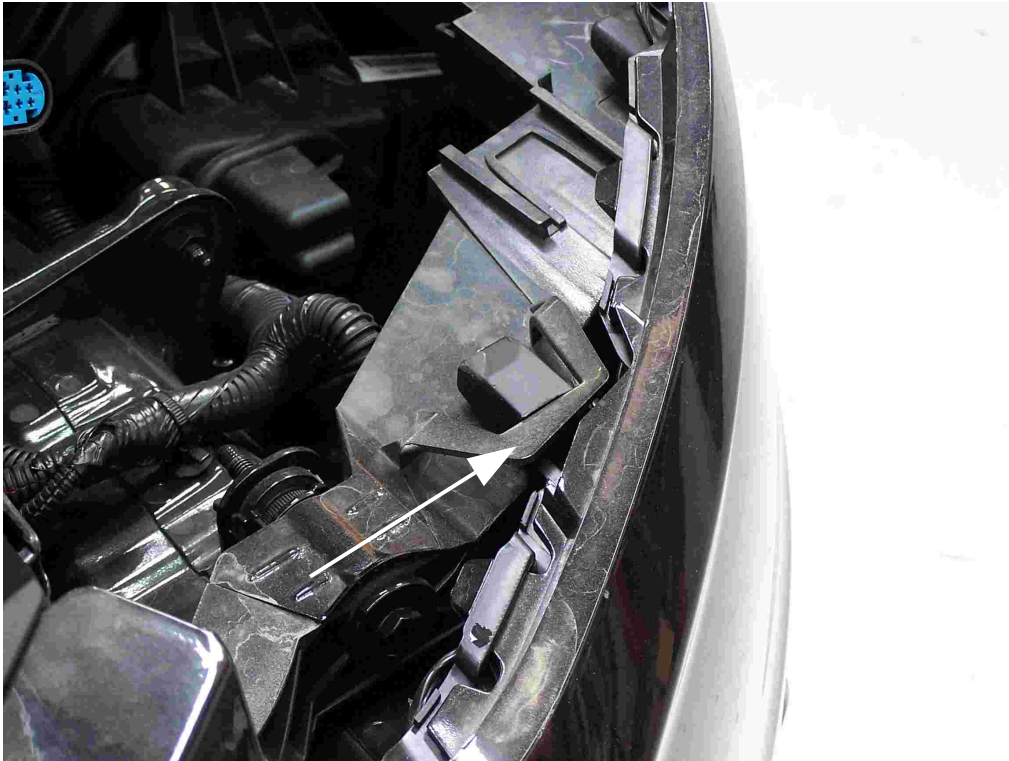
**7.** Pry out the hood latch cable from the latch assembly using a screw driver or pliers.



**8.** Using a small flat screwdriver remove the four plastic snap clips above the grill.



**9.** Loosen the two bolts on the bumper to fender guide approximately one turn, then using a small flat screwdriver gently pry where the arrow illustrates, this will allow the bumper to pull out and away from the fender.



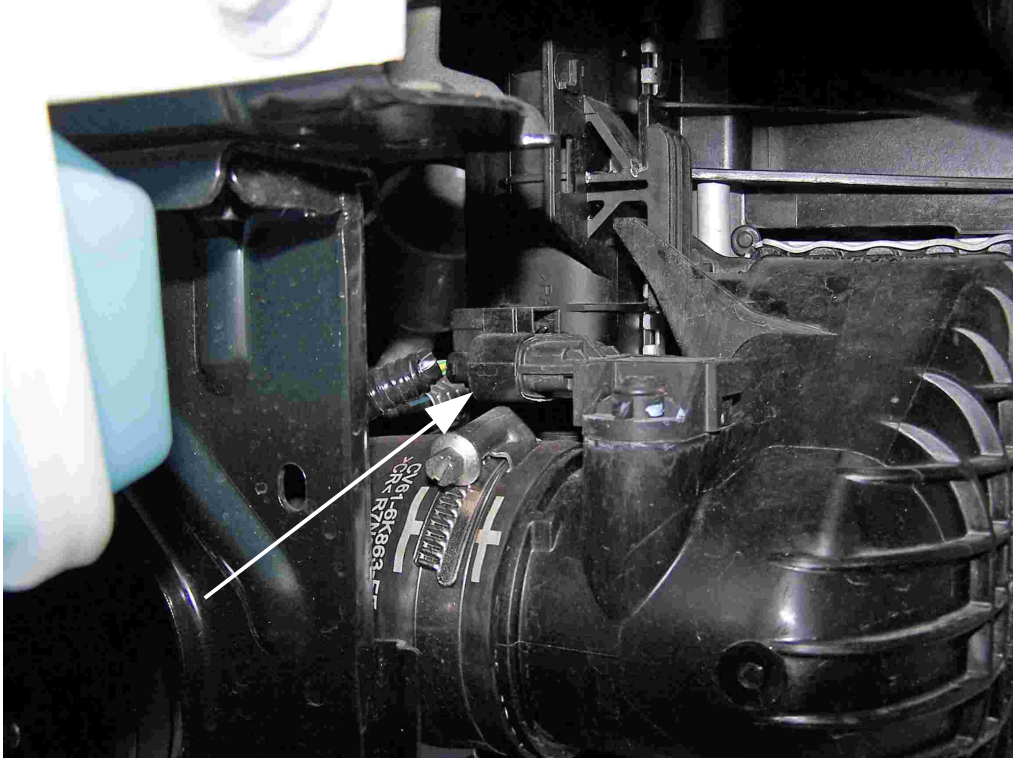
**10.** Pry plastic tab where arrow illustrates to release the bumper cover and gently remove bumper cover.



**11.** Bumper cover properly removed. **Note:** Sometimes the front plastic license plate holder will be riveted through the bumper and into the plastic bumper beam, if that's the case you must drill out the rivets for the bumper to release.



**12.** Remove the upper and lower rubber shrouds, the upper one simply pulls off two tabs, the lower one is held in place with two T-30 Torx screws. Next remove the plastic bumper beam which needs the release tabs to be squeezed.



**13.** Next locate the MAP sensor connector on the right side and disconnect it.



**14.** Next loosen both hose clamps for the intercooler hoses and pull them off on both sides.

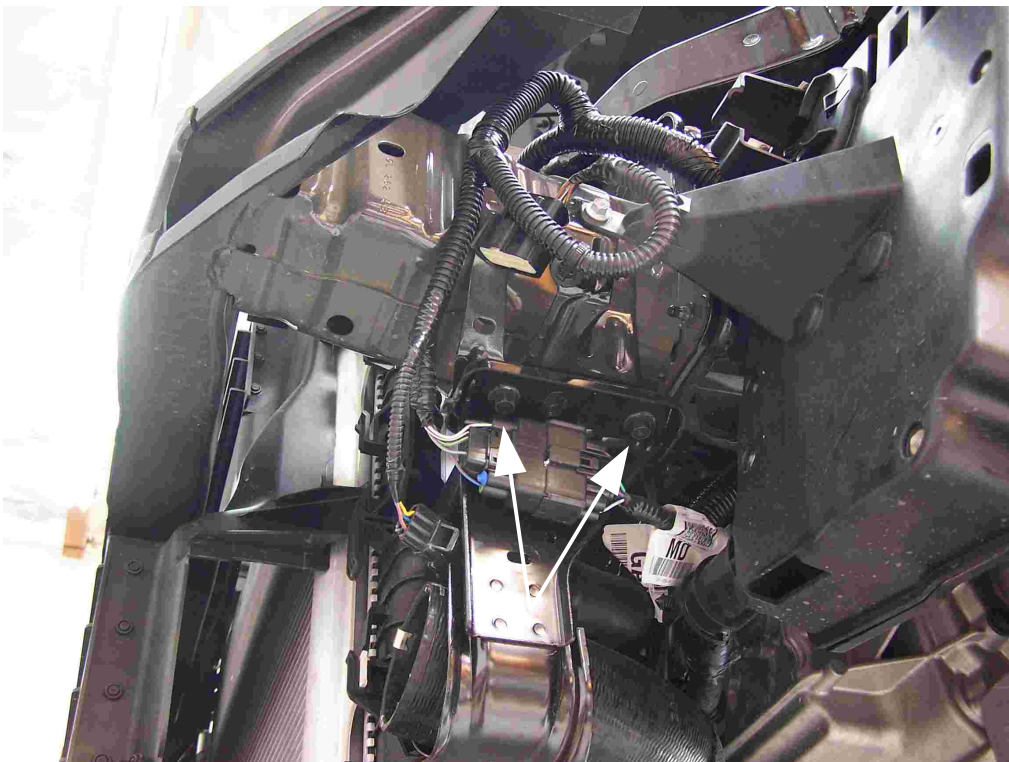


**15.** Next locate and remove the two bolts securing the intercooler to the radiator, one on each side. Once you've done that you can remove the intercooler by simply rotating it forward and slipping it downward and out.

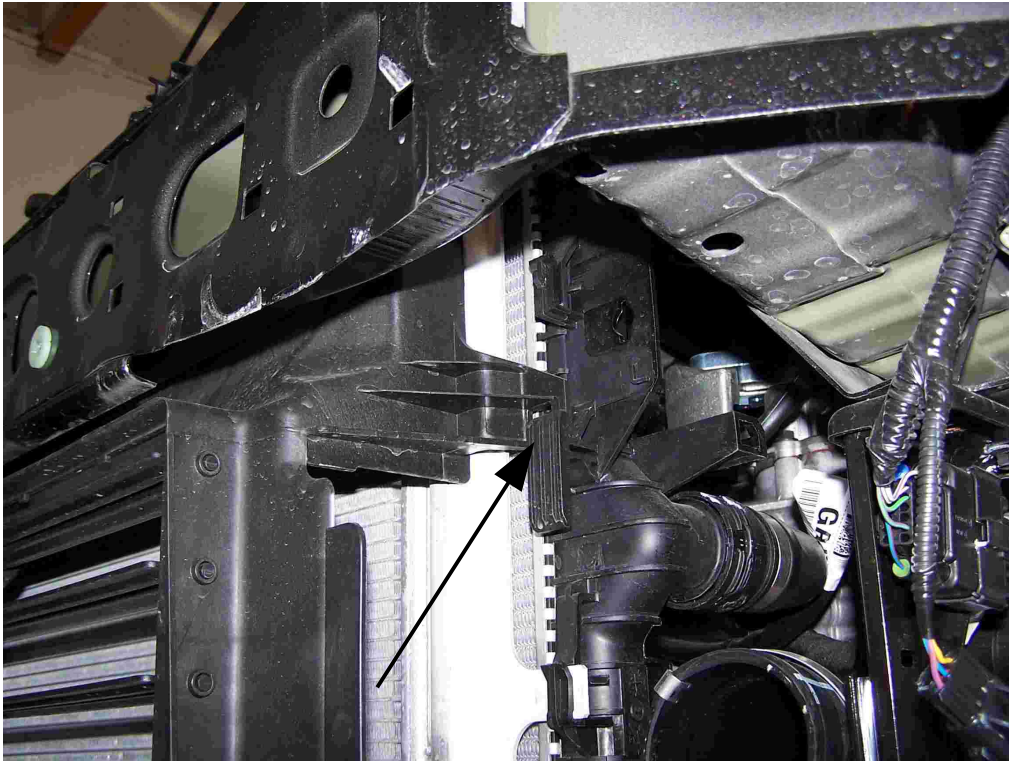




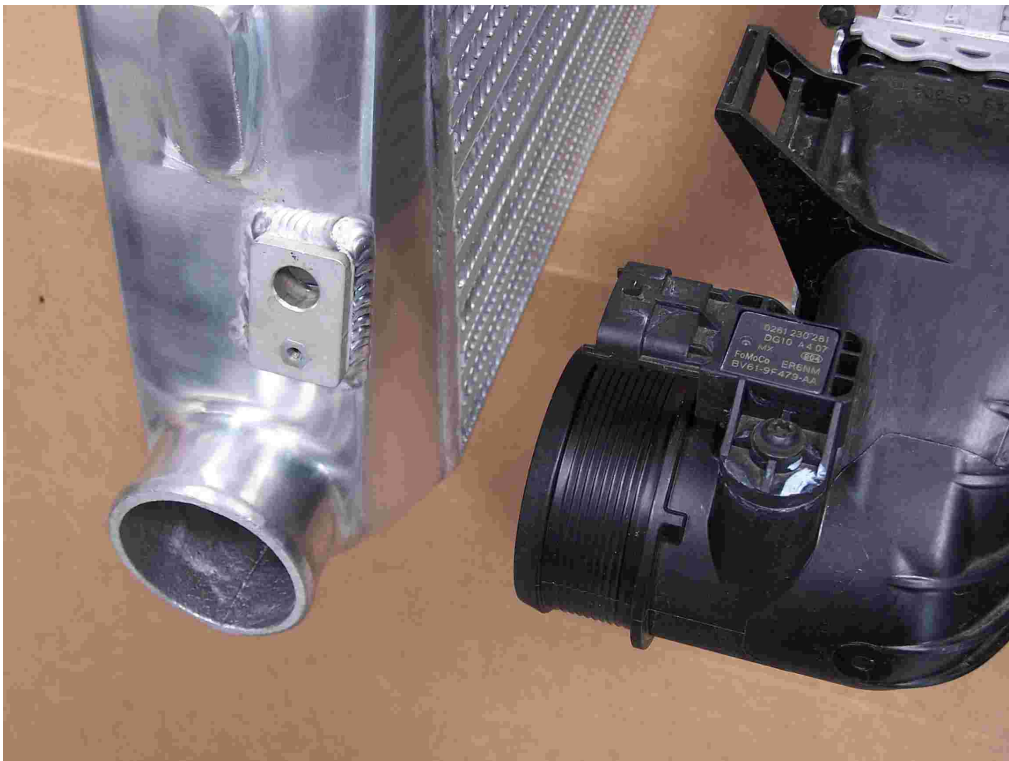
**16.** Locate the active grill shutter electrical connector and disconnect it, also remove it from the radiator support so it can be removed in the next few steps.



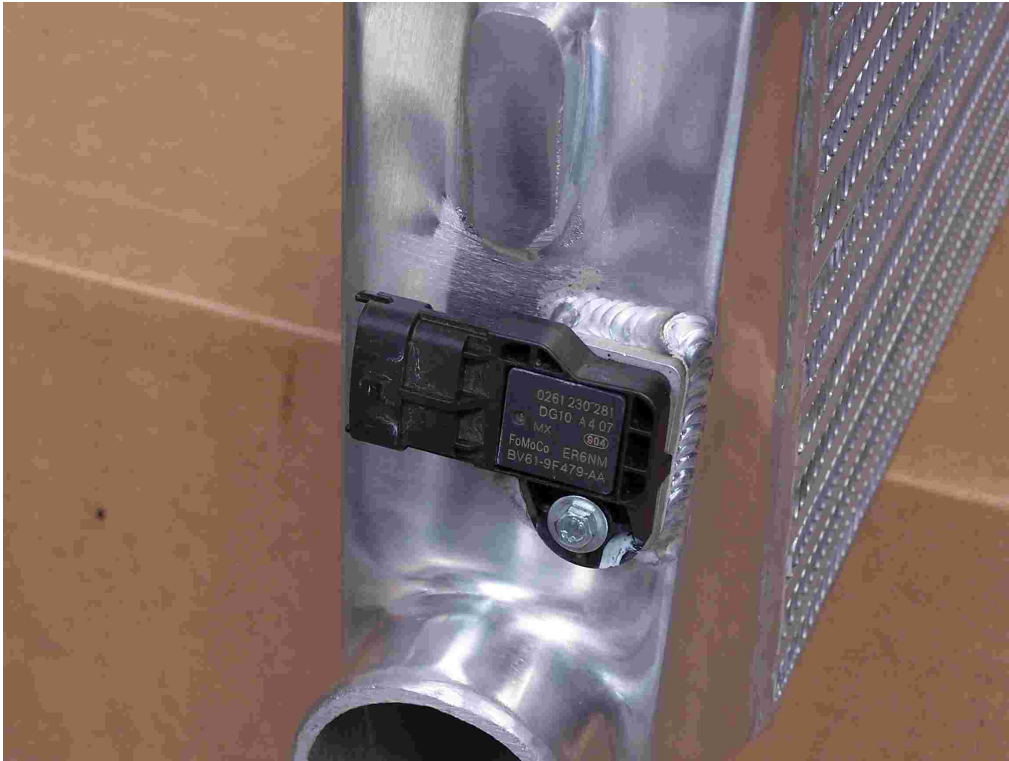
**17.** Next prepare to remove the active grill shutter system by loosening the two radiator support bracket bolts (**do not remove them completely**). This will allow the radiator to drop down just enough to lift the active grill shutter system upward and out of its tabs. Once the grill shutter is removed tighten the radiator support bolts back to 15ft lbs.



**18.** Lift the active grill shutter system up and out of its rail and remove it completely, there's two mounting points on each side.



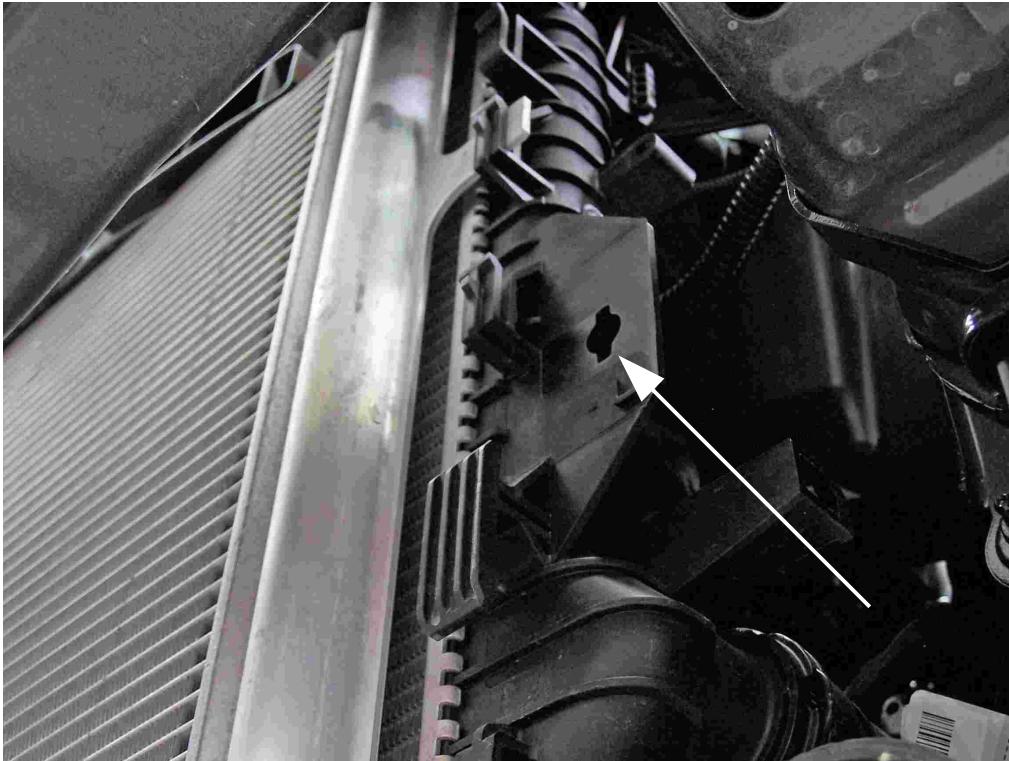
**19.** Remove and reinstall the MAP sensor from the stock intercooler into the FSWERKS intercooler using the supplied hardware. Using a small amount of lube on the o-ring before assembly is recommended.



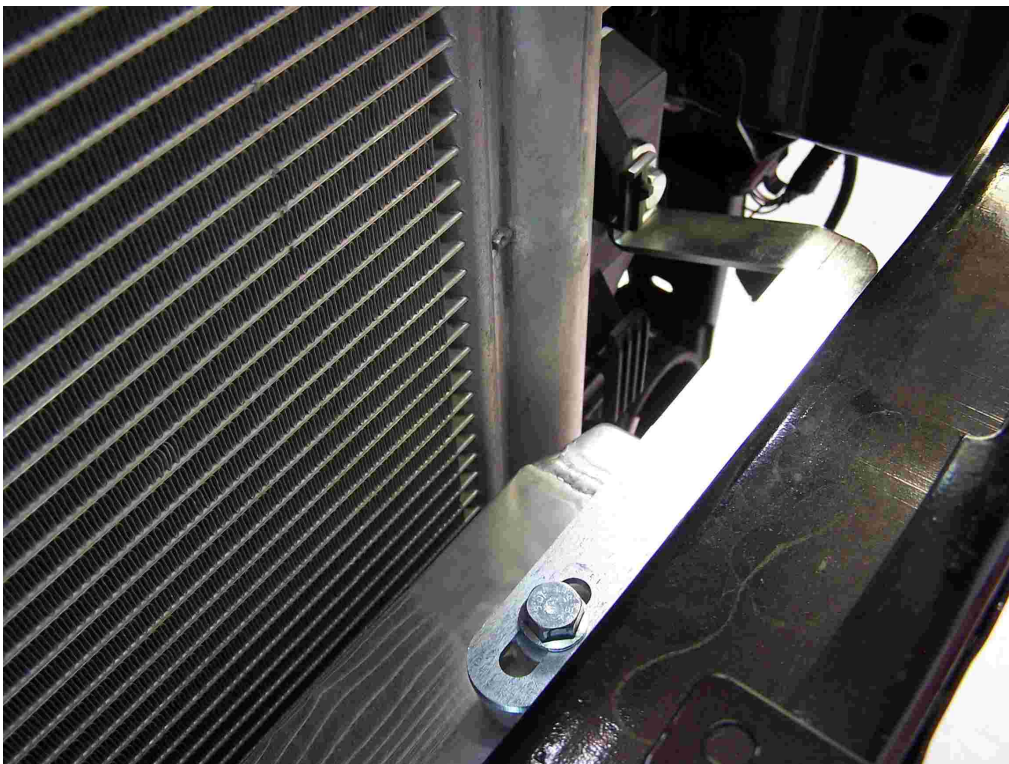
**20.** MAP sensor installed correctly using the supplied hardware.



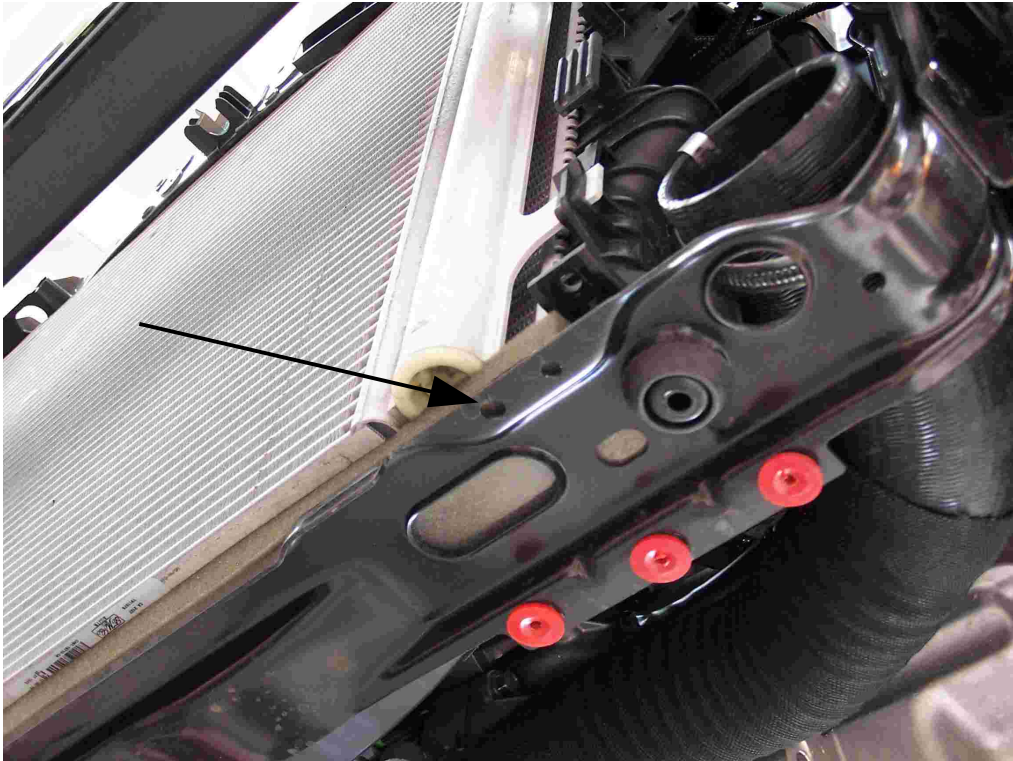
**21.** Next install the supplied upper two brackets on the intercooler as shown, do not tighten the hardware as they will need further adjustment later. Do this on both sides.



**22.** Locate this hole on the radiator, this is where the two upper intercooler brackets will fit with the supplied hardware.



**23.** Using a hydraulic jack to aid in holding the intercooler, center the intercooler on the radiator with the brackets and install using the supplied hardware as shown. The large washer and locknut fit on the backside of the radiator, snug the hardware but do not tighten fully for final adjustment.



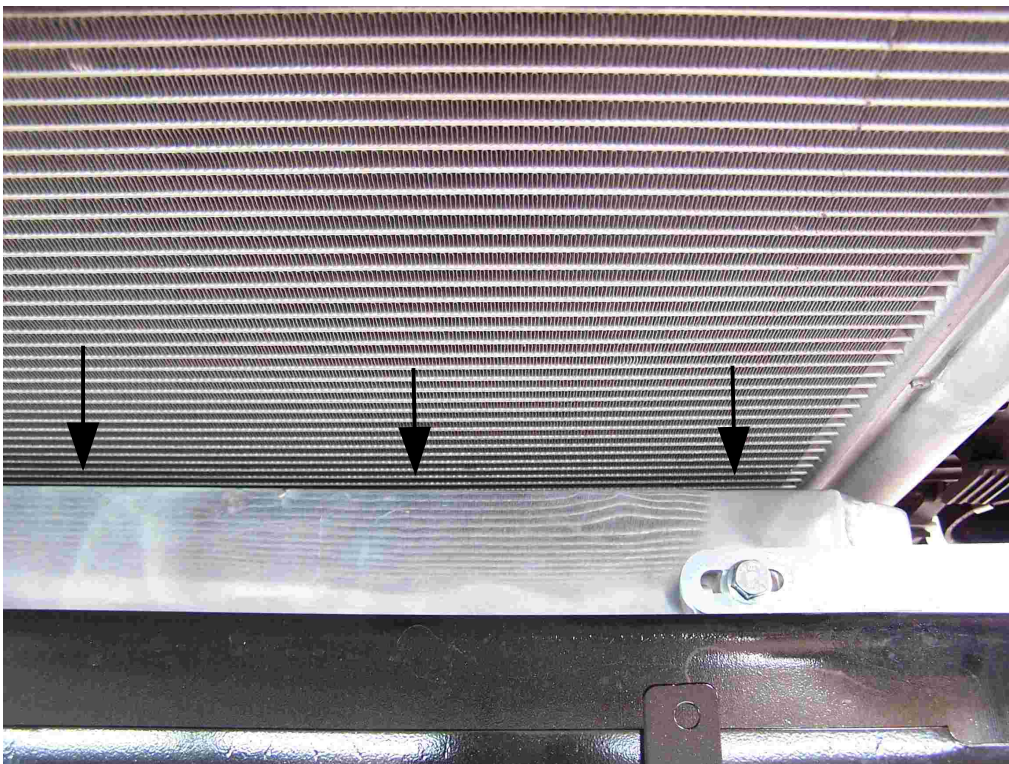
**24.** Next locate the two holes on the radiator support, this is where the lower bracket will attach with the supplied hardware, **(only the larger of the two holes will be used)**, see arrow.



**25.** Install the two lower brackets as shown with the supplied hardware, again do not fully tighten.



**26.** At this point measure out the center point on the intercooler and make a mark as shown, using the FORD logo which is stamped into the metal bumper beam as a center point align the intercooler from left to right.



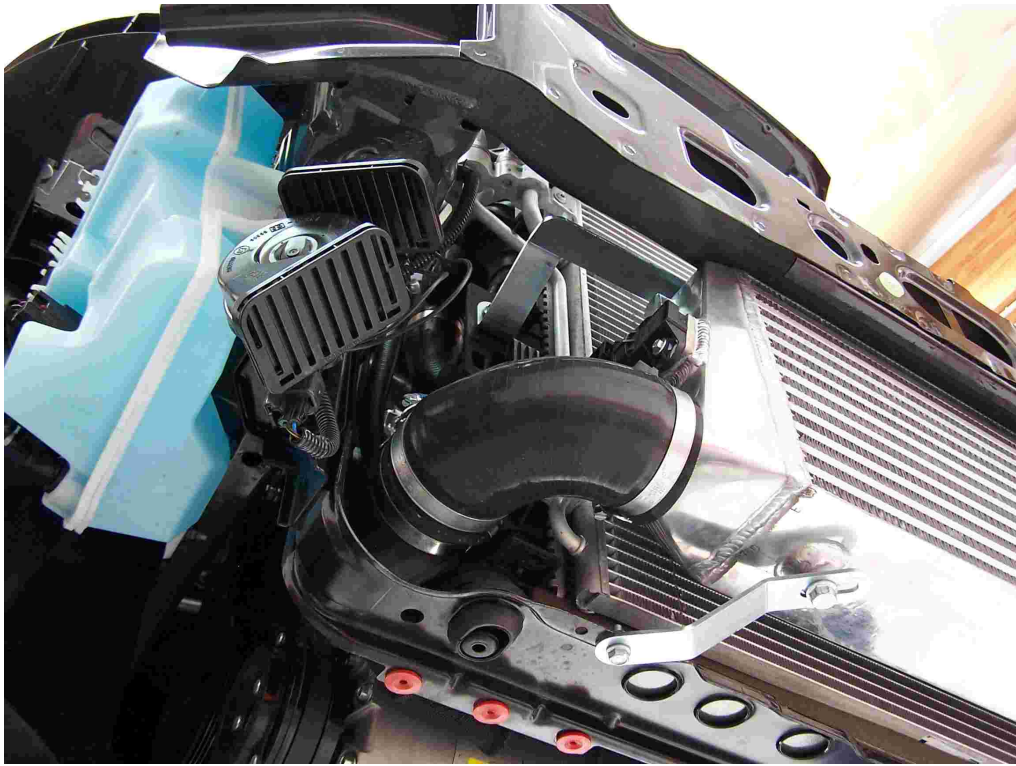
**27.** Be mindful of the space between the condenser and the intercooler and make sure it's straight from left to right on both the top and bottom. There should be approximately 1/2" or more clearance on both top and bottom.



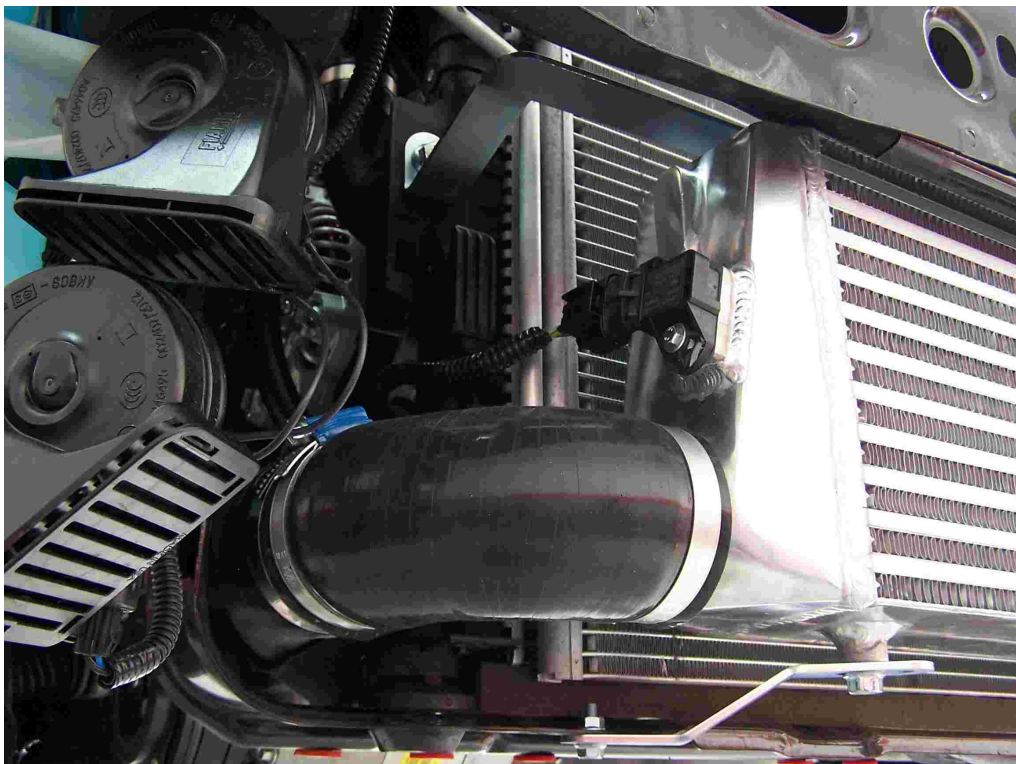
**28.** Once the intercooler is aligned torque the four bolts into the intercooler and the two bolts going through the radiator to 15ft lbs. Next torque the smaller 6mm bolts on the lower bracket to 7ft lbs.



**29.** At this point you can start installing the silicone into the aluminum tubing as shown. **Note:** The ninety degree silicone is short on one end and longer on the other, ensure that the short end connects to the aluminum tube as shown.

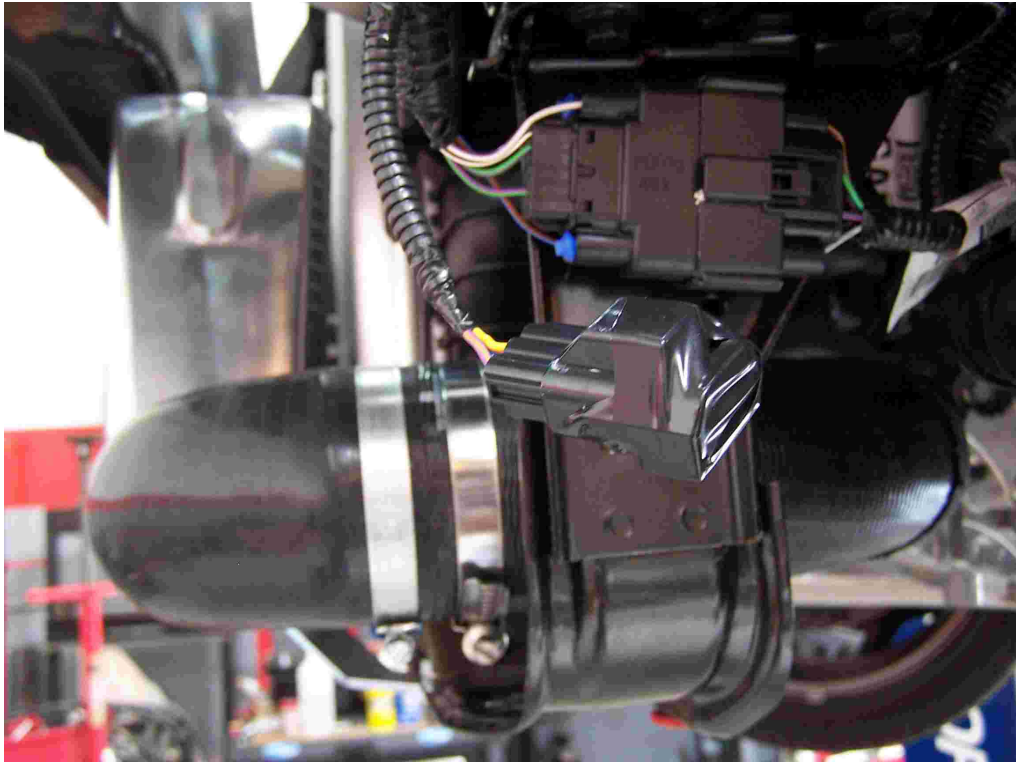


**30.** Next using the supplied hose clamps install both ninety degree silicone hoses into the factory rubber hose and onto the intercooler as shown, (the stock hose clamps will be reused from the factory rubber hoses). Ensure that there's proper clearance for the silicone and rubber hoses between the radiator and radiator support bracket, any rubbing can cause damage in the long run, adjust as necessary. Tighten all six hose clamps.



**31.** Reconnect the MAP sensor wiring harness, you'll have to remove the plastic clip which is connected to the A/C hose otherwise the harness will not reach.

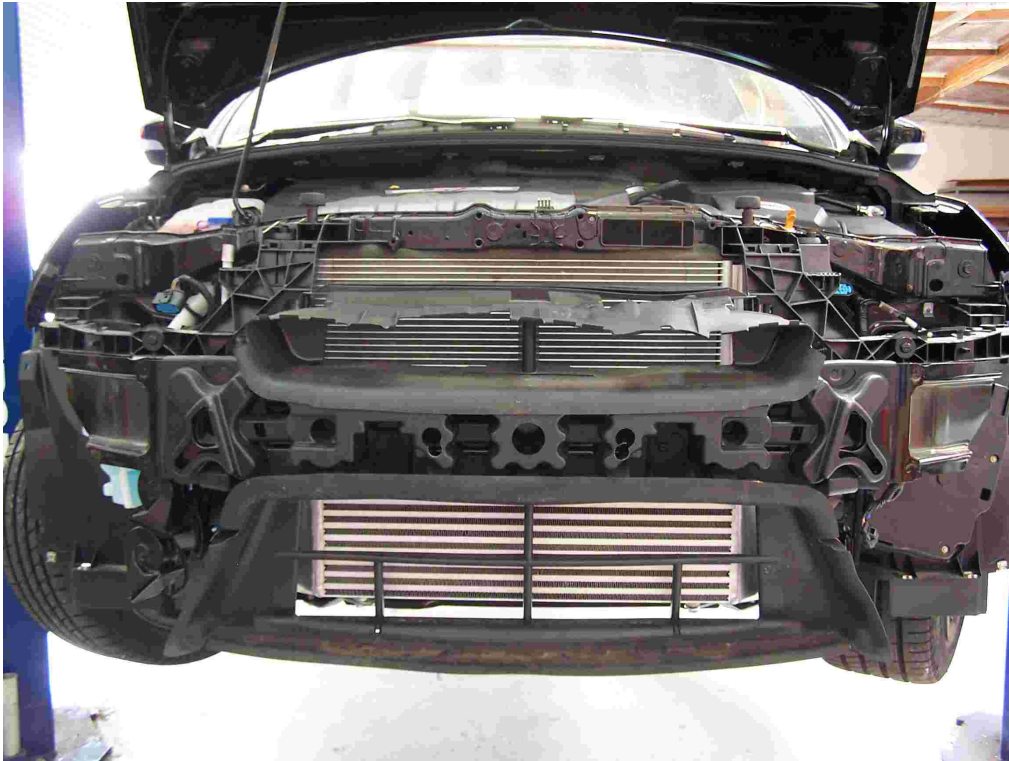




**32.** Use some electrical tape to cover up the connector which will stay open from the active grill shutter system, you can use a ziptie as well to keep it from hanging.



**33.** Next install the plastic bumper beam in reverse of removal.



**34.** Next install the upper and lower rubber shrouds in reverse of removal. **Note:** While we recommend using the lower rubber shroud it's not required. If you desire, keeping it out will show more of the intercooler once the bumper is installed.



**35.** Reinstall the front bumper, headlights and all other components in reverse of removal to complete your installation.