

## 2012 FOCUS NA & 2013+ FOCUS ST OIL COOLER INSTALLATION INSTRUCTIONS

## **Tooling:**

- ✓ Jack, jack stands or a lift
- ✓ Ratchet wrench
- ✓ 2 large crescent wrenches
- ✓ 8mm, 10mm & 27mm sockets
- ✓ 3/8" socket
- ✓ 10mm wrench
- ✓ T-30 Torx Socket
- √ Medium/large crescent wrench
- ✓ Flat head screw driver
- ✓ Philips head screw driver

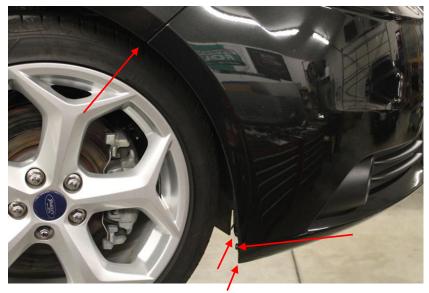
## Included:

- ✓ 1 Oil cooler core
- ✓ 2 Stainless braided hoses (1 long, 1 short)
- ✓ 1 Sandwich plate & 2, 1/8" NPT Plugs
- ✓ 2 Application specific core mounting brackets
- ✓ 2 Aluminized fiber glass heat shield sleeves
- ✓ Stainless steel mounting hardware

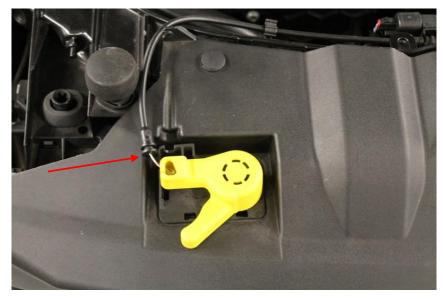
<sup>\*\*</sup>Please be sure to read and understand the instructions thoroughly before beginning.

- **Begin by parking on a smooth level surface with the emergency brake engaged. Jack up the front of the vehicle and position jack stands underneath both sides.** 
  - Refer to your vehicle's owner's manual for proper jack placement and supporting procedures.

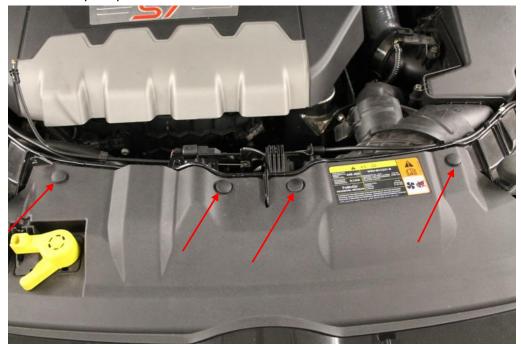
    Never get under a vehicle without the proper support in place.
- 1. Using and philips head screw driver and T-30 torx socket, remove the screw at the fender and the 1 screws at the bottom and 2 screws beneath the bumper cover securing it to the inner fender well. This is to be done on both sides.



2. Using a flat head screw driver, remove the hood release cable and disconnect it from the yellow arm.



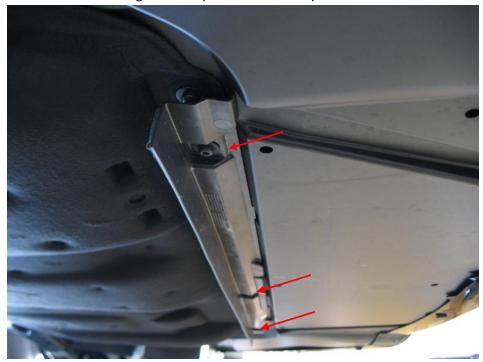
3. Remove the 4 push pin fasteners.

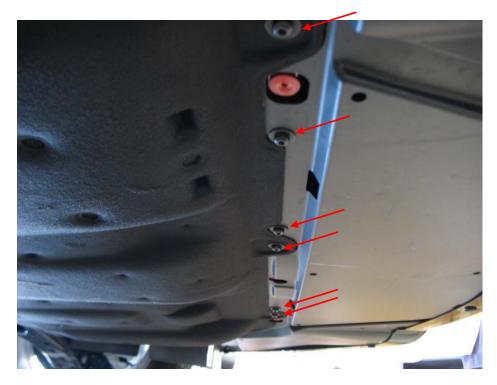


4. Using a T-30 torx, remove the 3 screws on both sides. Remove the headlights.



5. Remove the screws holding the front portion of the belly.





6. Pull the bumper cover away from the fender on both sides.



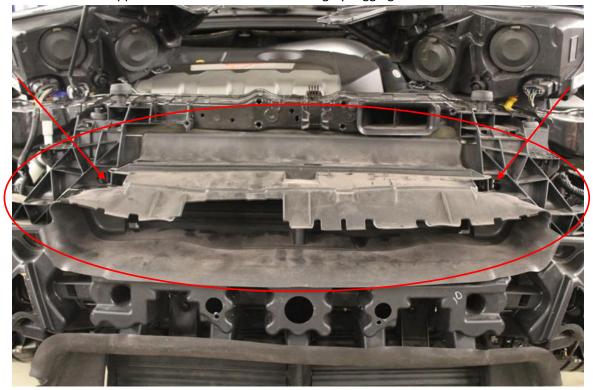
7. Press down to release the 2 clips found below where each headlight was. Then, begin slowly pulling the bumper cover away from the front of the vehicle.



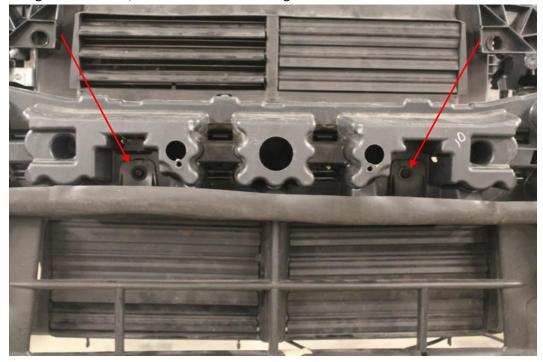
8. With the bumper cover pulled away, remove the fog light electrical connection on the driver's side.



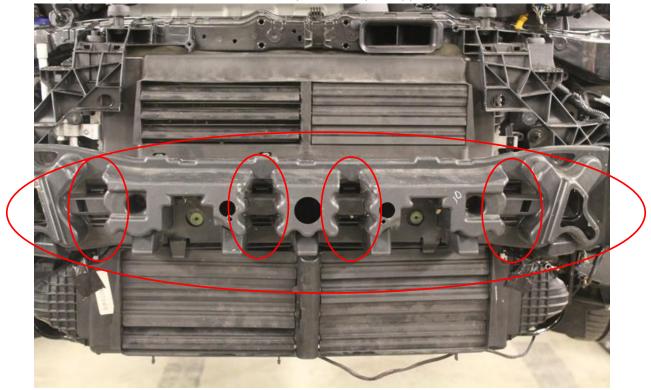
9. Remove the upper section of the radiator ducting by tugging on each side.



10. Using a T-30 torx bit, remove the lower ducting.

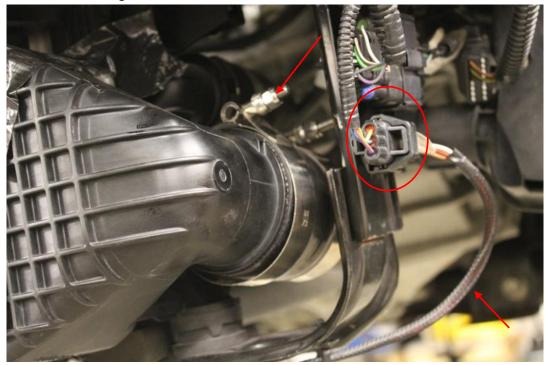


11. Squeeze the tabs and remove the inner plastic bumper support.

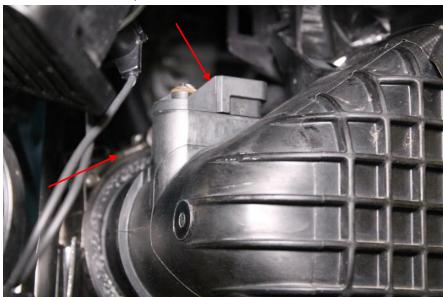


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12. Using a philips head screw driver, remove the clamp securing the hot side charge pipe. Pull the pipe off the intercooler. Then, disconnect the electrical connector and all fasteners securing the wire to the active grill shutter motor.



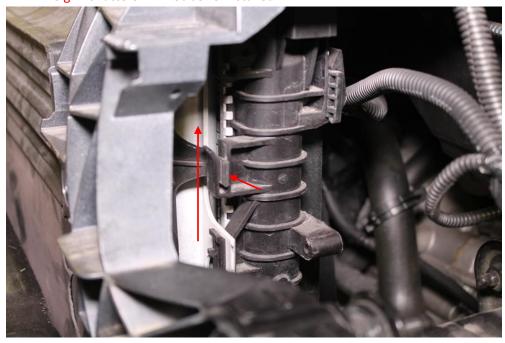
13. Using a philips head screw driver, remove the clamp securing the cold side charge pipe. Pull the pipe off the intercooler. Then, remove the electrical connector at the MAP sensor.



14. Using an 8mm socket. Remove the 2 bolts on either side of the intercooler. Pull the lower portion of the active grill shutters forward, raise and remove the intercooler.



- 15. Carefully lift the active grill shutter assembly out of the clips on either side that hold it in place, and remove it from the bottom side of the vehicle.
  - > This can be very challenging and will take patience and time.
  - The grill shutters will not be re-installed.



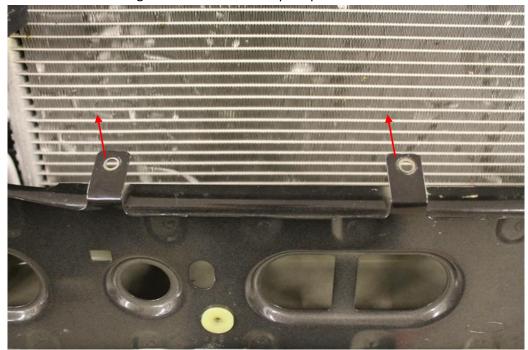
- 16. Assemble the core mounting brackets as shown using a 10mm socket, a 10 mm wrench along with the 8 bolts, 8 nuts and 8 washers provided in your kit.
  - > There is no front or back to the core.



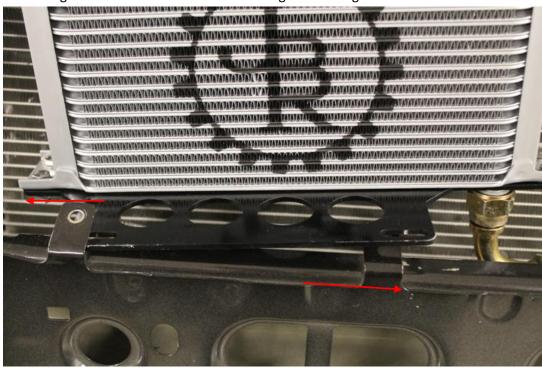
- 17. Using 2 large crescent wrenches, install and tighten the braided lines on to the core. The lines must be tightened parallel to the core as shown with the longer of the two on the left.
  - The second wrench must be used to prevent internal twisting of the core. Leaks in the lower left and or right corners will result if only a single wrench is used and they are not covered under warranty.



18. Bend the two mounting tabs on the inner bumper up a bit.



19. Install the core and hose assembly into the front of the vehicle. Slide the left side of the core mounting bracket beneath the left mounting tab sliding it over far enough to allow the mounting bracket to be slid back below the right mounting tab.



20. Using a 3/8 socket, secure the upper core mounting bracket to the radiator core support with the flat washer and self-tapping sheet metal screw provided.



21. Secure the lower core mounting bracket to the tabs in the bumper support.



- 22. Remove the oil filter and install the sandwich plate adapter using the male/female bolt provided. Leave loose.
  - Apply some oil to the adapter o-ring.
- 23. Slip the heat shielding covers over the braided lines in the area where they will pass over the lower radiator hose.



24. Route the hoses around the radiator core support and over the top of the lower radiator hose.



- 25. Install the braided lines on to the adapter and tighten with a crescent wrench.
  - ➤ Be sure to tighten the 2, 1/8" NPT plugs if they're not going to be used before install the sandwich plate.
  - Install the longer braided line closest to the motor first and tighten; then the other.
- 26. Orient the sandwich plate adapter so the braided lines are not touching the motor or the radiator fan and tighten the male/female bolt to 35 ft/lbs using a 27mm socket.



- 27. Re-install the oil filter.
  - Apply some oil to the filter o-ring.



- 28. Re-assemble the vehicle checking your work along the way.
- 29. Add a ½ qt of oil, start the vehicle, let it run to full operating temperature and check for leaks.
- 30. Check the oil again and add more if necessary.
- 31. Put a few hundred miles on the vehicle and check again for leaks.

## Congratulations!! You've completed the installation of your new JBR Oil Cooler Kit!!