



## advanced FLOW engineering Instruction Manual P/N: 46-20141

BladeRunner - GT Series Intercooler Make: Ford Model: F-250/350 Year: 11-16 Engine: V8 – 6.7L (td)

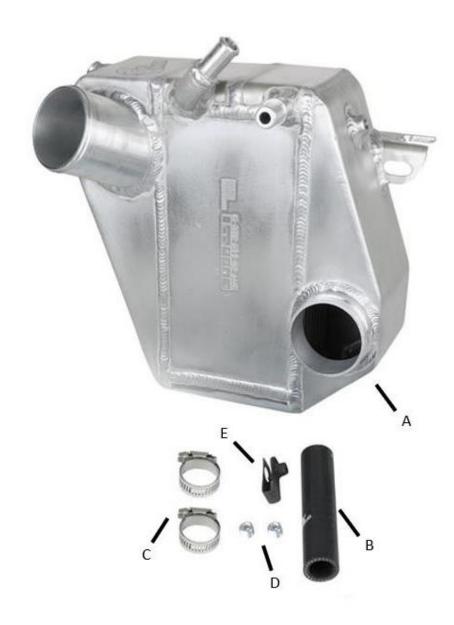


- Please read the entire instruction manual before proceeding.
- Ensure all components listed are present.
- If you are missing any of the components, call customer support at 951-493-7100.
- Ensure you have all necessary tools before proceeding.
- Do not attempt to work on your vehicle when the engine is hot.
- Disconnect the negative battery terminal before proceeding.
- Retain factory parts for future use.

Label	Qty.	Description	Part Number
А	1	Intercooler	05-60892
В	1	Coolant Hose, Upper	05-61029
С	2	Clamp, No. 012 (11/16" - 1-1/4")	03-50632
D	2	Plug, Hex Hd Socket: 1/8" NPT	03-50029
Е	1	Nut, Clip: M8 x 1.25	05-60104

**Tools Needed:** 7mm, 8mm, 10mm, 13mm, 7/16" sockets, 3/16" allen wrench, 4mm Allen wrench, 3/8" drive ratchet, 6" extension, pick, flat blade screwdriver, thread sealant, grease, 5 gallon drain pan.

<u>Note: Legal in California for use on race vehicles only. The use of this device on vehicles used on public</u> <u>streets or highways is strictly prohibited in California and others states that have adopted California</u> <u>emission regulations</u>

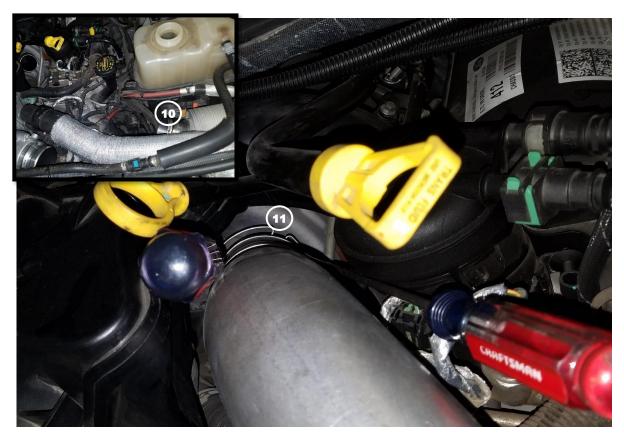




- 1. Park vehicle on level ground and engage the parking brake.
- 2. Let vehicle cool down for at least 3 hours.
- 3. Disconnect both negative battery cables.
- 4. Remove the cap from the primary coolant tank (1)
- 5. Drain the coolant from the primary cooling system into a large drain pan. The petcock is located on the driver side right behind the front bumper, on the outside of the frame rail 2
- 6. Remove the cap from the secondary coolant tank (3)
- Drain the coolant from the secondary cooling system into a large drain pan. The petcock is located on the passenger side right behind the front bumper, on the outside of the frame rail 4



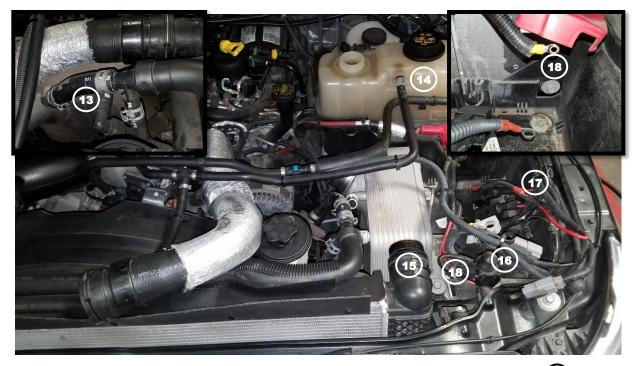
- 8. Loosen the clamp securing the cold side intercooler tube coupling to the plastic adapter connected to the engine (5)
- 9. Loosen the clamp securing the cold side intercooler tube to the intercooler 6
- 10. Disconnect the cold side intercooler tube from the intercooler.
- 11. Disconnect the electrical connection  $\bigcirc$  from the temperature sensor on the cold side intercooler tube.
- 12. Disconnect the wire harness (8) from the intercooler tube then remove the cold side intercooler tube from the vehicle.
- 13. Remove retaining clip from the plastic adapter then remove the plastic adapter from the engine inlet (9)



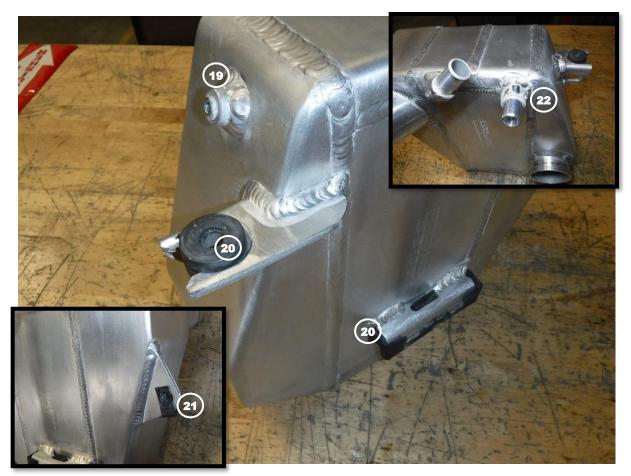
14. Loosen the clamp securing the hot side intercooler tube coupling to the intercooler 14.

## Note: It may be necessary to use a pick to break the connection between the intercooler tube coupling and the intercooler inlet in order to slide the coupling off

- 15. Disconnect the hot side intercooler tube coupling from the intercooler.
- 16. Lift both sides of the retaining clip that secures the intercooler tube to the turbo using two flat head screwdrivers and disconnect it from the turbo (11)
- 17. Remove the hot side intercooler tube from the vehicle.



- 18. Disconnect the two (2) coolant lines for the intercooler from the vehicle (13)
- 19. Disconnect the coolant overflow hose from the coolant tank (14)
- 20. Disconnect the upper radiator hose from the radiator (15) by removing the retaining clip and pulling the hose connection apart.
- 21. Disconnect the hood switch connection and remove the switch from the vehicle
- 22. Remove the driver side battery from the vehicle (17)
- 23. Remove the two (2) screws securing the intercooler to the vehicle (18) and set aside for reuse with the aFe intercooler.
- 24. Remove the intercooler from the vehicle.

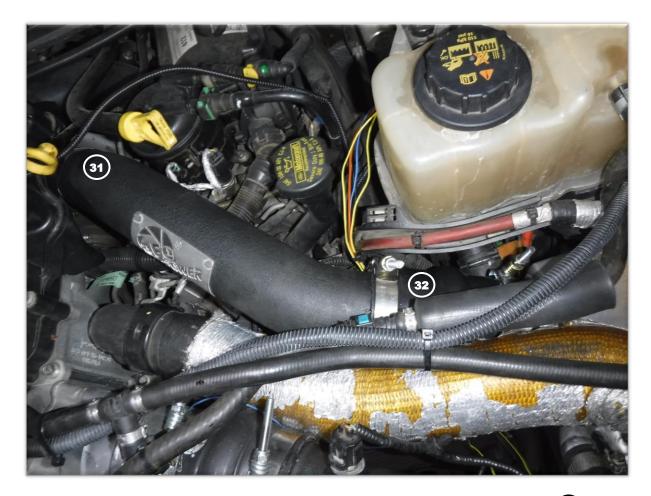


Note: Be sure to use thread sealant on the plugs or sensors to prevent any leaking

- 25. If you are not using any aftermarket sensors, install two (2) supplied 1/8" NPT plugs into the fittings on the sides of the supplied aFe intercooler (19) then tighten.
- 26. Transfer the two (2) rubber grommets from the factory intercooler (20) to the aFe intercooler.
- 27. Install the supplied M8x1.25 clip nut onto the aFe intercooler 21
- 28. Transfer the plastic coolant hose retainer clip from the factory intercooler (22) to the aFe intercooler.



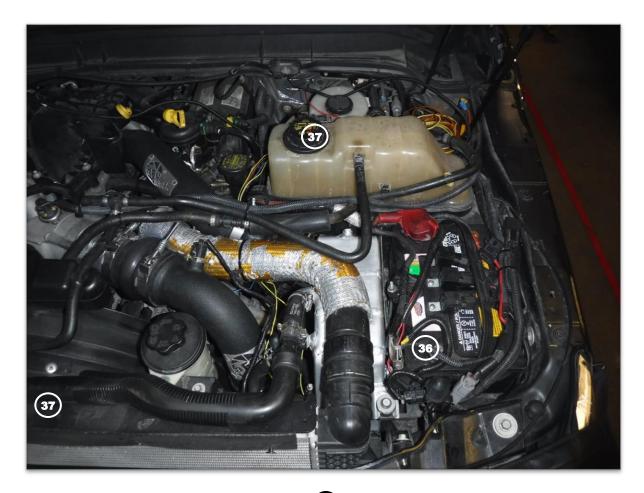
- 29. Install the aFe intercooler into the vehicle 23
- 30. Secure the aFe intercooler (24) to the vehicle using the factory mounting screws from Step 23.
- 31. Connect quick connect coolant hose 25 to the intercooler fitting from Step 28
- 32. Install the supplied aFe coolant hose into the vehicle, along with the supplied No. 012 clamps on each end of the hose 26 and tighten the clamps.
- 33. Reconnect the upper radiator hose and secure it with the factory retaining clip (27)
- 34. Reinstall the driver side battery and connect the positive battery cable (28)
- 35. Reconnect the overflow hose to the coolant tank (29)
- 36. Reinstall the hood switch and reconnect the connector (30)



- 37. Reinstall the hot side intercooler tube with coupling onto the turbo outlet, (31) be sure the clip goes into the groove on the turbo outlet all the way around.
- 38. Once connected, give it a little pull to be sure it is connected all the way.
- 39. Connect the coupling on the end of the tube onto the intercooler inlet 32
- 40. Ensure the tube is not touching anything then tighten the clamps.



- 41. Reinstall the factory retaining clip into the adaptor.
- 42. Install the cold side intercooler tube with the engine inlet adaptor into the vehicle, by first connecting the intercooler tube to the aFe intercooler 33 and then to the engine inlet 34
- 43. Reconnect the connector to the temperature sensor (35) in the cold side intercooler tube.
- 44. Ensure the tube is not touching anything then tighten the clamps.



- 45. Reconnect the negative battery cables 36
- 46. Use the proper coolant refill procedure to be sure that all of the air gets out of the system when refilling both cooling systems.
- 47. Install the radiator caps (37)
- 48. Test drive vehicle.
- 49. Let vehicle cool down then check coolant levels, top off if needed.

Install is now complete!

## Note: Be sure to check all connection after 50-100 miles