

Garrett- Advancing Motion Direct Fit Performance Intercooler 2015+ 3.5L / 2.7L Ford F150 EcoBoost

Bill of Materials and Precautions

Application: 2015+ Ford F150 3.5L / 2.7L Eco Boost

Part Number: 870702-6001

Part List:			Tools Needed
Item	Description	QTY	<ul style="list-style-type: none"> • Ratchet and metric sockets: 7, 8, 13 • Socket extensions, various sizes • Screwdrivers and pick tools: flat blade and Phillips, various sizes • Floor jack and 2 jack stands rated for weight of vehicle, or vehicle lift
1	Intercooler	1	
2	Blow off valve screw	1	
3	CARB Sticker	1	

IMPORTANT INFORMATION - PLEASE READ CAREFULLY



We recommend that this Garrett product be installed by a qualified automotive technician. If you have any doubts as to your ability to install this product, consult with a local automotive repair company. Please be sure to carefully read all of the attached instructions prior to starting the installation process. If you have any questions about the enclosed parts or the instructions, call the distributor that you purchased the kit from for clarification. Prior to the Garrett product installation, be sure that the vehicle is parked on a level surface and the engine is cool. Engine fluids and components can be extremely hot following normal vehicle operation. Avoid direct contact of engine fluids or components with your skin which may cause personal injury.

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Import Information – Please Read Carefully

Return Policy Only unused and complete merchandise will be accepted for return subject to inspection and acceptance by Garrett - Advancing Motion Turbo Technologies. No goods will be accepted without prior return authorization from Garrett - Advancing Motion Turbo Technologies. No returns are accepted after thirty (30) days from original ship date from Honeywell. All accepted returns are subject to a 20% restocking charge - NO EXCEPTIONS.

Damaged Shipments The customer must file a claim with the shipping company if goods arrive in a damaged condition. The customer must also notify the distributor from which the goods were purchased with pertinent information.

Refused Shipments Sending a shipment back to The Garrett Garage (or Garrett) does not automatically give rise to a complete refund or credit. Garrett Turbo Technologies may, at its sole discretion require different payment means for any shipment refused and then reshipped. It is the customer's responsibility to make all arrangements with Garrett Turbo Technologies for disposition of refused shipments.

Shortage or Discrepancy Claim Shortage or Discrepancy claims must be reported within forty-eight (48) hours of receipt of goods to the distributor from which the goods were purchased. The Garrett distributor will determine the best solution on how to address shortages or discrepancies.

Limited Warranty Garrett Turbo Technologies warrants to the original purchaser of its Turbocharger Products that such Turbocharger Products will, for a period of 1 year from date of shipment and subject to the Limitations on Warranty, be free from defects in materials and workmanship. For approved warranty claims Garrett Turbo Technologies will, at its sole discretion, either credit the original purchaser in an amount equal to the original purchase price, or replace the applicable product free of charge, within 60 days of Garrett Turbo Technologies' approval. This is purchaser's sole and exclusive remedy and provides the complete financial responsibility of Garrett Turbo Technologies for a warranty claim. To be eligible for reimbursement, Customer must (a) submit all warranty claims to Garrett Turbo Technologies within 30 days of the discovery of the alleged product defect; and (b) complete and return a Returned Material Authorization Form. Consumers are required to work through Honeywell's distributors in order to process any warranty claims. When Garrett Turbo Technologies requires the examination of a failed part, Garrett Turbo Technologies will promptly notify Customer and will await receipt of the failed part before further processing the warranty claim. If Garrett Turbo Technologies ultimately determines that the failed part is covered under the Limited Warranty, Garrett Turbo Technologies will reimburse Customer for the actual cost of ground shipment for any part found to be defective.

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Limitations on Warranty The Limited Warranty does not apply to any parts: (a) not used in accordance with Garrett Turbo Technologies' written instructions (b) for which no fault is found; (c) that have been modified in any manner not specifically approved by Garrett Turbo Technologies; (d) for which an inspection indicates that reasonable and proper installation and/or preventative care and maintenance has not occurred; (e) that have been subject to damage attributable to or caused by misuse, abuse or vandalism; mishandling, improper shipping or other transit related damage; acts of god or insurrection; foreign object entry; any part not supplied by Garrett Turbo Technologies; any repair, maintenance or service by anyone other than Garrett Turbo Technologies; or any other acts that are beyond Garrett Turbo Technologies' reasonable control; or (f) attributable to parts not supplied by Garrett Turbo Technologies. Garrett Turbo Technologies expressly disclaims any and all warranties relative to the foregoing circumstances.

Garrett Turbo Technologies shall not be liable to Customer under any circumstances for any special, incidental or consequential damages, including without limitation, damage to or loss of property other than for Thermal Products; damages incurred in installation, repair or replacement; lost profits, revenue or opportunity; loss of use; losses resulting from or related to downtime of Thermal Products; the cost of replacement transportation, power, or compression; the cost of substitute products; or claims of third parties for such damages, howsoever caused, and whether based on warranty, contract, and/or tort (including negligence, strict liability or otherwise).

The Limited Warranty is the only warranty made by Garrett Turbo Technologies for any of its thermal related parts and/or services, and is in lieu of and excludes all other warranties, expressed or implied, including warranties of merchantability or fitness for a particular purpose. Garrett Turbo Technologies hereby disclaims all other warranties not expressly set forth. Some jurisdictions do not allow for the exclusion of implied warranties, so the above exclusions may not apply to you, however if implied warranties do apply they are limited to the original purchaser and for a period of one (1) year from the date of shipment.

Diagnosing Your Vehicle Do not rely on diagnostic software without seeking the advice of an ASE certified mechanic. Diagnostic software should only be used as a general guideline to help you facilitate the repair of your car. If you experience or suspect any malfunction of vital safety equipment, such as your brakes, exhaust, motor, transmission, fuel delivery system, your car's structural integrity or any other potentially life threatening malfunction, cease use immediately.

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Other Precautions Observe all safety precautions and warnings contained in the installation instructions. Wear eye and ear protection and appropriate protective clothing. When working under or around the vehicle support it securely with jack stands. Use only the proper tools. Exercise extreme caution when working with flammable, corrosive, and hazardous liquids and materials.

Legal Information You are responsible for ensuring that the use of this product complies with all applicable federal, state or local laws, regulations and ordinances. This product may also be used on racing vehicles that will never be driven on public roads or highways.

Contact Information for Questions Please contact the Garrett distributor from which the equipment was purchased for any questions regarding this Shipping/Returns/Cancellation Policy, for notifications to Garrett Turbo Technologies, and for instructions on processing damaged shipments and authorized returns.

Important Product Information: Garrett Vehicle Specific Intercoolers are professional aftermarket products only designed for certain vehicles. Any vehicle modifications using Garrett Vehicle Specific Intercoolers are AT YOUR OWN RESPONSIBILITY and AT YOUR OWN RISK. Only use Garrett Vehicle Specific Intercoolers in compliance with all applicable laws, regulations and ordinances (including but not limited to emission, noise, operating license, performance, safety and type-approval aspects). A vehicle modification using Garrett Vehicle Specific Intercoolers may particularly affect or void a vehicle's warranty, operating license or type-approval. You should particularly consult the owner's manual and service manual of your vehicle. You should also contact your vehicle's manufacturer to determine what effects modifications may have on important aspects such as safety, warranty, performance etc.

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Installation Instructions

Raptor Only: skid plate removal

1. Use prop to support skid plate
2. Remove (4) 15mm bolts at the front of the skid plate. (Fig 1)
3. Remove (2) 15mm bolts at the rear of the skid plate (Fig 2)
4. Lower skid plate and move to the side (Fig 3)

Fig 1



Fig 2



Fig 3

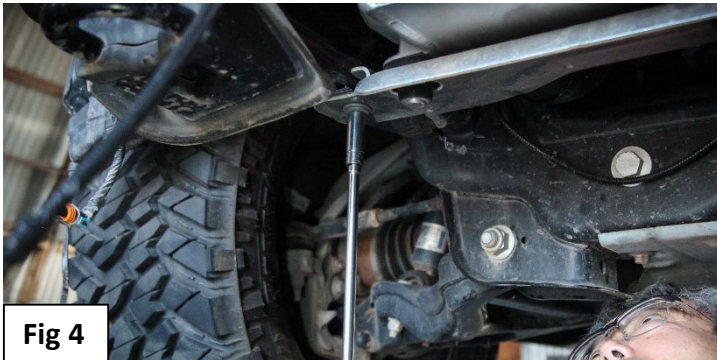
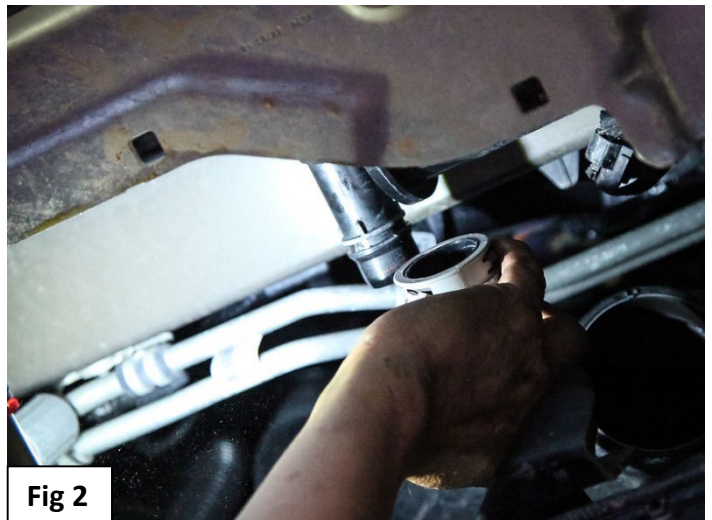


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Installation Instructions

Remove factory Intercooler:

1. Remove the blue rubber boots from the intercooler inlets. (4) 7mm worm gear clamps. (Fig 1)
2. Disconnect the recirculation tube from the blow off valve (Fig 2)
3. Disconnect intercooler outlet tube by removing the clip ring on the cold side. Separate the connection (Fig 3)
4. Remove bolts securing the lower intercooler bracket (2) 13mm bolts (Fig 4)
5. Remove intercooler (Fig 5)
6. **For Raptor owners:** unclip the intercooler fan harness and pop clips before removing intercooler



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Installation Instructions

Remove factory intercooler grill shutters:

1. Remove license plate frame
2. Remove front bumper trim panel using trim panel removal tool (fig 1)
3. Remove (6) 21mm frame horn nuts. 4 front and 2 inner. (fig 2)
4. Use trim panel removal tool to remove clips securing plastic diffuser and wiring harness to top of bumper (fig 3)
5. Remove bumper (fig 4)
6. Remove (4) 8mm bolts from intercooler grill shutters and remove shutters (fig 5)
7. Use trim panel removal tool to remove clips attaching the wiring harness and set wiring harness aside

Fig 1



Fig 2



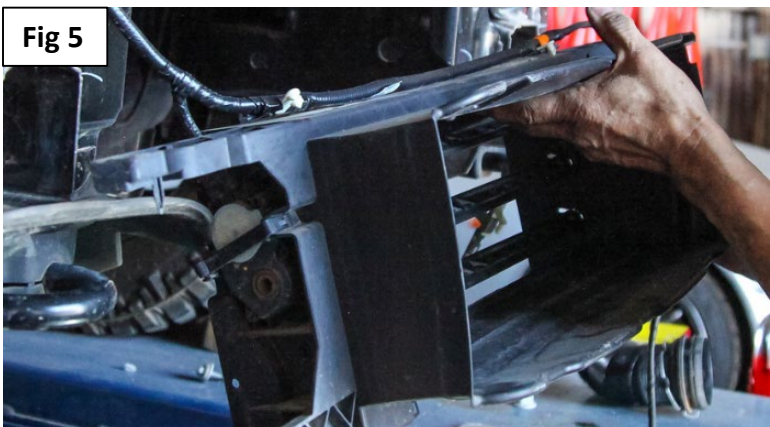
Fig 4



Fig 3



Fig 5



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Installation Instructions

Prep core and engine compartment for installation:

1. Remove rubber bushings from the stock intercooler and place on corresponding posts of Garrett intercooler. (4) bushings (Fig 1)
2. Remove and discard the bolt that secures the blow off valve to the stock intercooler. Rotate the BOV counter clockwise to release it from the port. (1) 8mm bolt (Fig 2)
3. Lubricate the BOV o-ring, then insert into the intercooler valve port with the guides aligned. Rotate clockwise until tab is aligned with the bolt bracket. Install the supplied (1) 6mm bolt (Fig 3)

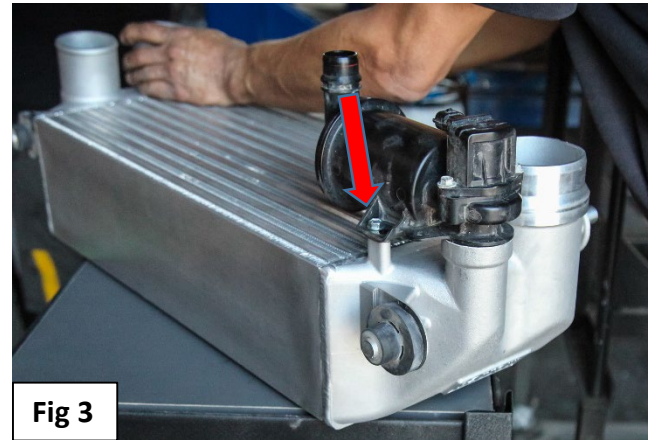


Fig 3

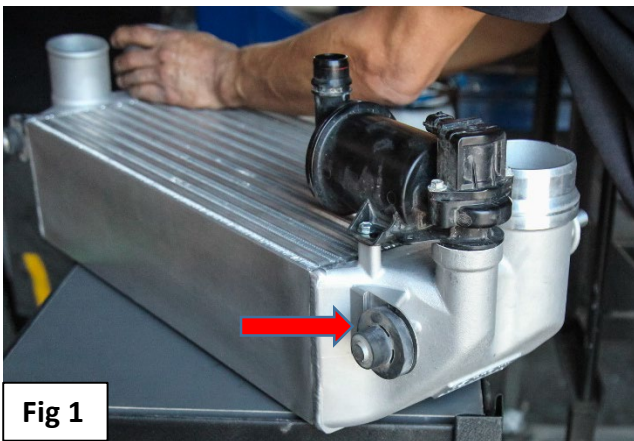


Fig 1

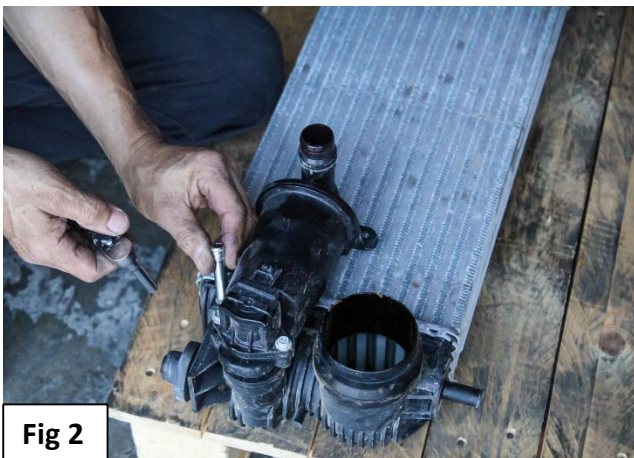


Fig 2

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Installation Instructions

Install Garrett performance intercooler core:

1. Place Garrett core on lower intercooler bracket and insert assembly between the frame rails into the stock location. Ensure the upper bushings are inserted into the correct locations. (Fig 1)
2. Tighten (2) 13mm bolts to secure lower intercooler bracket to the frame. (Fig 2)
3. Lubricate o-ring then attach recirculation tube to the blow off valve. (Fig 3)
4. Lubricate o-ring then attach intercooler outlet hose to the intercooler outlet flange and secure the clip ring. (Fig 4)
5. Attach the blue rubber boots to the intercooler inlet ports. (4) 7mm worm gear clamps. (Fig 5)
6. **Raptor Owners:** reattach intercooler fan and reconnect wiring harness



Fig 1

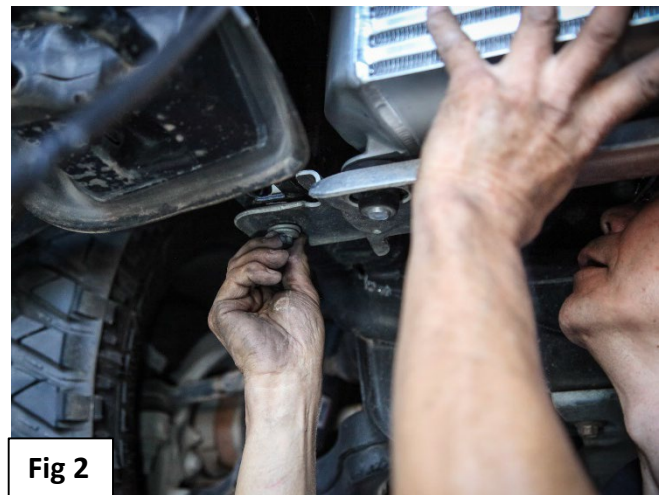


Fig 2

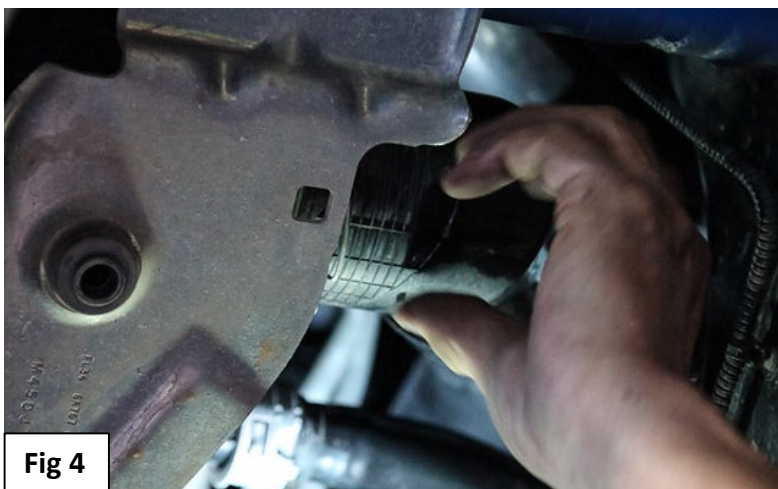


Fig 4



Fig 3



Fig 5

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Installation Instructions

Inspection and Drain Plug feature:

1. Double check all connection points to ensure tight air seal. Leaks can affect the performance of the vehicle. With the engine on, and at idle, and the truck in park, use your hand to check for any air leaks at both inlet ports, recirculation tube, outlet tube and the blow off valve connection to the intercooler.
2. This intercooler is outfitted with a drain plug at the bottom of the outlet side end tank. This drain plug can be removed to relieve any condensation buildup in the intercooler. This is a common problem with the F150 vehicle in some regions of the country. To remove bolt use 3/8 open ended wrench. (Fig 1)
3. Test for condensation:
 1. Remove drain plug.
 2. Turn engine on, leave at idle, and the truck in park. Place a catch can under the opening and monitor for fluid. If fluid is present, gently rev the engine several times to dispel the liquid. Be sure to dispose of the fluid with your local waste management facility.

