




BD Ford 1999½-2003 7.3L Power Stroke *CRANKCASE VENTILATION KIT*****

P/N#: 1032170

PLEASE READ ALL INSTRUCTIONS BEFORE INSTALLATION

K I T C O N T E N T S :

*Please check to make sure that you have all the parts listed in this kit **before** you start the disassembly your truck.*

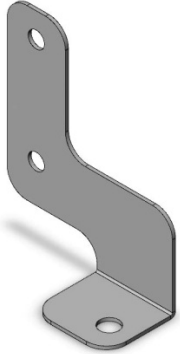


1302170		1302175	
			
<i>CCV Unit</i>		<i>CCV Bracket</i>	
Qty: 1		Qty: 1	
1302176-Z	1302177	1302178-A	1302172
			
<i>Plated Bolt</i>	<i>Outlet Hose</i>	<i>Inlet Hose</i>	<i>CCV Catch Can</i>
Qty: 2	Qty: 1	Qty: 1	Qty: 1
1400104	1400112	1130056	1401556
			
<i>Barb Fitting</i> <i>1/2" hose – 1/4 NPT</i>	<i>1/2" Drain Hose</i>	<i>Nyloc Nut (8mm)</i>	<i>Washer (8mm)</i>
Qty: 1	Qty: 16"	Qty: 2	Qty: 2

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1302195	1302196	1302197	1302184
			
<i>Oil Drain Spring Clamp #19</i>	<i>CCV Piping Spring Clamp #24</i>	<i>CCV Piping Spring Clamp #32</i>	<i>CCV Catch Can Bracket</i>
Qty: 2	Qty: 2	Qty: 2	Qty: 1
1604104	1110033	1110032	1110031
			
<i>5/16x1 NC Bolt</i>	<i>5/16 NC Nut</i>	<i>Lock Washer 5/16"</i>	<i>Flat Washer 5/16"</i>
Qty: 3	Qty: 3	Qty: 3	Qty: 6
1302186	1302187	1100111	1604124
			
<i>O-Ring 5/16 x 7/16</i>	<i>O-Ring 1.5 x 1.25"</i>	<i>Flat Washer – 1/4"</i>	<i>1/4NCx5/8 Bolt</i>
Qty: 2	Qty: 2	Qty: 2	Qty: 2

1100112

<i>Lock Washer – 1/4"</i>
Qty: 2

Welcome

Thank you for purchasing the Ford 7.3L Power Stroke CCV kit. This manual is divided into different areas to assist you with your installation and maintenance of your CCV system.

This product is designed specifically for the 7.3L Power Stroke to aid in reducing the amount of oil found in the Charge Air Cooler, and the chance of having a boot blow off. The system will help to increase boot life and charge air cooler effectiveness. Better filtration of the crankcase gas reduces the amount of oil that will be returned to the intake system, which in turn will reduce emissions.

Installation should occur on a vehicle properly secured to prevent rolling. Draining of the oil retention canister at regular oil change intervals will help to optimize the oil removal ability of the system.

Required Tools

- 1/4" wrench
- 7/16" wrench
- 1/2" wrench
- 9/16" wrench
- #2 Phillips screw driver bit.

Maintenance

- Drain oil retention canister at regular oil change intervals.
- Change the filter (**#1302171**) every 30,000 miles or 1 year.

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INSTALLATION

1. Remove the Air Intake Hose, and the Air Box lid.



2. Remove the Turbo Inlet hose and snorkel.

Disconnect the breather hose at the breather box.

Remove the breather hose from the snorkel.



3. Remove two Phillips screws on the top of the driver side valve cover.

Lift off the breather vent and replace large O-rings.

Rotate breather vent box 180° and reinstall.

Install new hex bolts with ½ socket. Be sure to install the two O rings over the base of the bolts.



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Do not over tighten bolts, or you will crush the breather box. Snug is fine.



4. Install inlet hose (#1302178) onto breather vent. Use the #24 spring clamp (#1302196) to secure this connection.



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5. Assemble the CCV onto the large stainless bracket with drain hose.

You will utilize the two 5/16" bolts, washers, lock washers and nuts to secure the CCV canister to the bracket.

Install the 1/2" hose to the bottom of the CCV canister. Secure this connection with the #19 spring clamp (#1302195).



6. Install complete assembly onto the two hex breather studs.

Use the two Nyloc nuts and washers to secure it.

Connect rubber breather hose to upper port on bottle. Secure this connection with the #32 spring clamp (#1302197).



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6. Install second hose (#**1302177**) onto snorkel. Secure this connection with spring clamp #24.

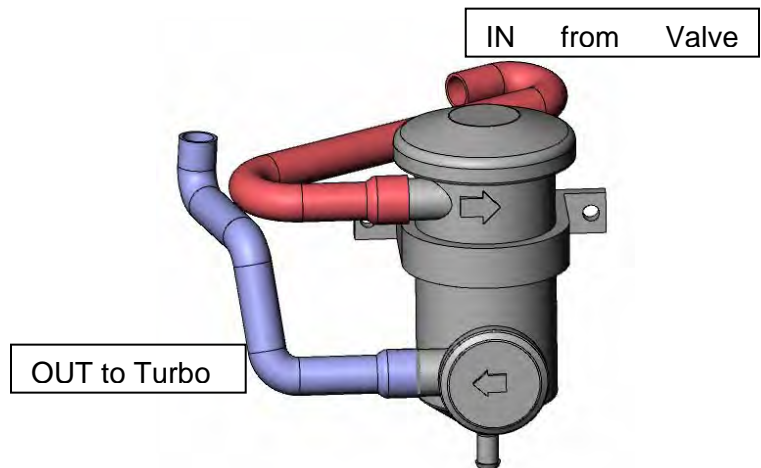


Install other end of hose onto the lower port of CCV canister. Secure this connection with spring clamp #32.



Install turbo inlet and snorkel back onto the engine.

The flow of air should travel out of the valve cover into the top port of the CCV canister. The clean air should leave the lower port of the CCV canister and return into the intake system.



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7. Reinstall the intake hose and air box lid.

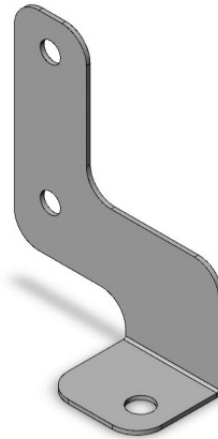


8. Install barbed fitting into the top of the catch bottle. The fitting will thread itself into the bottle. You will have to use a 9/16" wrench for this. You should bottom the fitting into bottle.



9. Mount the catch bottle on the bracket to the driver's side frame rail. Use the existing hole in the frame just towards the rear of the vehicle from the cross member.

You will use the 1/4" bolts, washers, and lock washers to secure the catch can to the bracket.



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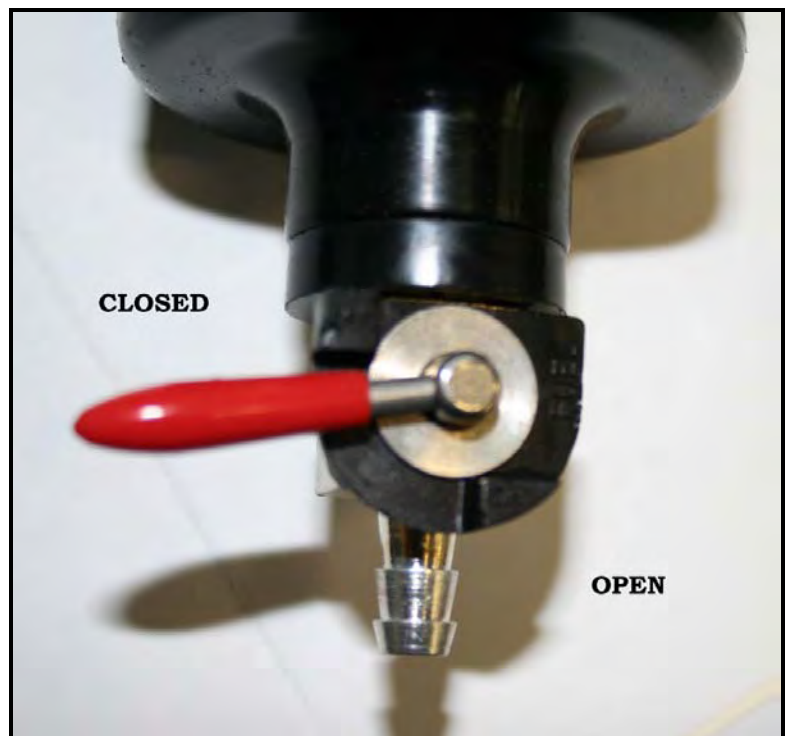
Use a 5/16" bolt, lock washer, nut and two flat washers to secure the catch can assembly to the frame rail.

Connect the 1/2" drain hose from above to the top of the catch can barb fitting. Be sure to cut to length. Secure the connection with a #19 spring clamp.



To drain the oil catch can turn the lever to the open position.

This catch can, should be drained ever oil change.



NOTE THAT IF THERE ARE ANY KINKS IN THE HOSES OR THE FILTER BECOMES PLUGGED, YOU MAY DEVELOP THE FOLLOWING SYMPTOMS: BLOWN OIL GASKETS, INCREASED CONSUMPTION OF OIL OR TURBOCHARGER OIL LEAKS.

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Troubleshooting

If you have any technical difficulties, concerns, comments, or complaints, please phone our Technical Support hotline at (800) 887-5030 between 8:30am-5:00pm PST (Pacific Standard Time) Monday to Friday, or post a message on the BD Discussion Forums located at:

<http://forum.bd-power.com/>



Visit our Internet forums at <http://www.dieselperformance.com> and share your comments or technical support questions with some of the industry's leading experts in the diesel field.

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LIMITED WARRANTY STATEMENT

BD Engine Brake, Inc., Valley Fuel Injection Ltd., BD Diesel Performance, Turbocharger.net (the "Seller") warrants the following product(s):

All products manufactured or rebuilt by the Seller are to be free from defects in material or workmanship which includes but is not limited to Turbochargers, Exhaust and Intake manifolds, Exhaust brakes, Intercoolers, Flex Plates, Transmissions, Torque Converters, Oil pans, Fuel pumps and systems, Electronic monitors and control systems. The Seller warrants to the original buyer of the product (the "Buyer") that it will repair or replace, free of charge, any product which has a defect in material or workmanship within the warranty period described below. Copy of original invoice is required to qualify for warranty.

A defect is defined as a condition within the product that would render the product inoperable under normal conditions of use and service. The Seller's responsibility under this Warranty is limited to the repair or replacement, at the Seller's option, of any warrantable product returned prepaid with a complete service history and proof of purchase. A valid proof of purchase is a dated bill of sale or receipt.

A Return Material Authorization (RMA) number, obtained in advance from a customer service representative of the Seller and the dated bill of sale or receipt, must accompany any product returned by the Buyer for warranty determination. The Seller will be the final authority on the approval of all warranty claims hereunder. The issuance of a RMA number does not represent an approval of a warranty claim. All repaired or replaced products will be returned to the Buyer freight collect. Accepted warranty products, which have been replaced, will become the sole property of the Seller.

Until the Seller has approved a warranty claim, the Buyer will be responsible for all costs. Replacement parts and the labor costs incurred by the removal and replacement of the product while performing warranty work will be the responsibility of the Buyer. In no case does the obligation of the Seller exceed the original purchase price of the product as indicated on the original bill of sale or receipt. Under no circumstances will the Seller be liable for any travel time incurred in diagnosis for defects, or any other contingent expenses.

Once the claim is approved and within a 1 year period of original purchase Labor costs incurred will be considered for the removal and replacement of an eligible part while performing warranty work, at a rate of 55.00 per hour at authorized centers with prior approval of the Seller. Freight is FOB Abbotsford, B.C. Canada.

To the extent permitted by law, the Buyer hereby waives all rights other than those expressly set out herein and acknowledges that this warranty sets out the Buyer's exclusive remedies with respect to products covered by it. This warranty shall not be extended, amended or varied except by written instrument signed by the Seller and the Buyer.

The Seller will administer warranty requests on products sold by the Seller and not manufactured by the Seller by forwarding claims made by a Buyer under the manufacturer's warranty to the manufacturer. The final disposition of such claims will be made by the manufacturer and ruled by the laws of British Columbia, Canada.

Customer assumes risk in purchasing product with in 30 days may return the product for exchange of other BD products or services only. No cash refunds are available.

Please refer to Warranty time limitation per product.

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NOT COVERED UNDER THIS WARRANTY

This warranty is limited to the original purchaser of the product and is not transferable to subsequent owners. Specifically excluded from this warranty are failures of products caused by misuse, misapplication, negligence of the Buyer, accidents, modification, abuse, improper storage, installation, repair or operation, use of unauthorized parts or other mistreatment of the Buyer or his agent. Any competitive use, sled pulling, drag racing will void warranty on product. A sheared or twisted shaft, broken planetary gear sets, burned clutches, broken drive hubs, sun gear damage, cracked housings is not covered. Fluids and filters or damage caused from fuel or air contamination, BioDiesel, low fluid levels. This warranty does not cover deterioration of plating, paint or any other coating, linings or parts that are subject to normal wear and tear, such as light bulbs, fuses, bearing wear, seal wear, etc.

If product is not installed by a trained and authorized BD dealer, installation facility must prove it is properly tooled and has certified training to have installed or to carry out repair of product.

The Seller also disclaims any liability for incidental or consequential damages including but not limited to, repair labor, rental vehicles, hotel cost or any other inconvenience cost. To the extent permitted by law, this warranty is in lieu of all other warranties or guaranties, either expressed or implied, included the implied warranties of merchantability and fitness for a particular purpose and shall not extend to any Buyer or to any person other than the original purchaser residing within the boundaries of the continental U.S. or Canada. As well the seller is not responsible or obligated to update previously manufactured parts that are currently under the above warranty.

NOTE THAT THIS GUARANTEE WILL BE VOID IF THE USER BREACHES THE CONDITIONS IN THE SECTION LABELED "NOT COVERED UNDER THIS WARRANTY" AND IS ONLY APPLICABLE ON THE PRODUCTS THE SELLER MANUFACTURES.

DISCLAIMER OF LIABILITY

Other than as expressly set forth herein, the Seller, together with its distributors, jobbers and dealers shall in no way be responsible for the product's proper use and service. In no event shall the Seller be liable for any special, incidental, indirect or consequential damages of any kind or nature, whether or not the Buyer was advised of the possibility of damage, arising or resulting from the use or performance of the product, and the Buyer hereby waives any and all such claims.

The Buyer acknowledges that he/she/it is not relying on the Seller's skill or judgment to select or furnish goods suitable for any particular purpose and that the Seller has no liability that will extend beyond the scope of the limited warranty contained herein, and the Buyer hereby waives all remedies or liabilities, expressed or implied, arising by operation of law or otherwise, (including, without limitation, any obligations of the Seller with respect to fitness for any particular purpose; merchantability; and special, incidental, indirect or consequential damages) or whether or not occasioned by the Seller's negligence.

The Seller disclaims any warranty and expressly disclaims any liability for personal injury or damages related to the Buyer's use of the product. The Buyer acknowledges and agrees that the disclaimer of any liability for personal injury is a material term for this Agreement and the Buyer agrees to indemnify the Seller and hold the Seller harmless from any claim related to the product and its use or performance. Under no circumstances will the Seller be liable for any damages, liabilities, costs or expenses incurred as a result of by reason of the use, performance or sale of the product, including without limitation, any damages, liabilities, costs or expenses incurred by reason of the Buyer's negligence related to those uses of the product as a result of the removal of the speed limiter.

The Seller assumes no liability regarding the improper installation or misapplication of the product. It is the installer's responsibility to check for proper installation, and, if in doubt, contact the manufacturer.

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Limited Warranty Details			
Product Name	Parts	Labour	Notes
	(Months/Miles)¹	(Months/Miles)^{1, 2}	
Torque Converters (Dodge)	36/ 150,000	12/12,000	No Race abuse covered
Torque Converters (Ford & Allison)	36/ 150,000	12/ 12,000	No Race abuse covered
Transmissions	36/ 150,000	12/ 24,000	No Race abuse covered
Race Transmissions	12/ 24,000	Not Eligible	
Valve / Accumulators Bodies	12/ 24,000	12/ 24,000	
Transmission Pans	36/ 150,000	Not Eligible	
Auto / Torq / Towloc's	12 / 24,000	Not Eligible	
Flex Plates	36/ 150,000	Not Eligible	
Injectors & Injection Pumps	12 / 24,000	12/ 24,000	Race Pumps 90 days parts/No labour
Tuners and Chips	Manufacturer ³	Not Eligible	
X-Monitor / Cool Down Timers	12/ 24,000	Not Eligible	
Intake / Exhaust Manifolds	36/ 75,000	Not Eligible	
Exhaust Kits	24 Months	Not Eligible	Surface rust not eligible
Turbo Guards / Boost Builders / Waste Gate Kits	12/ 24,000	Not Eligible	
Intercoolers / Hoses / Clamps	12/ 24,000	Not Eligible	
Transmission Coolers	Manufacturer ³	Manufacturer ³	
Manual Transmission Clutches	Manufacturer ³	Manufacturer ³	
Short Shifters	12/ 24,000	Not Eligible	
Engine / Head Stud kits	Manufacturer ³	Manufacturer ³	
Engine Brakes	24/ 24,000	12/ 24,000	
Steering Stabilizers / Sway bars	12/ 24,000	Not Eligible	
Boost Coolers	Manufacturer ³	Manufacturer ³	
Gauges and Mounts	Manufacturer ³	Manufacturer ³	
Performance Turbos	12/ 12,000	Not Eligible	
FlowMAX Fuel Pumps	60/ 75,000	Not Eligible	
Auxiliary Fuel Pumps	12/ 12,000	Not Eligible	

A Return Material Authorization (RMA) number, obtained in advance from a customer service representative of the Seller and the dated bill of sale or receipt, must accompany any product returned by the Buyer for warranty determination.

¹ Warranty is based on whichever occurs first (Months or Mileage).

² Prior approvals must be given to qualify for labour reimbursement.

³ As per Manufacturer's warranty

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