

SUNCENT

2011-2025 Ford 6.7L Powerstroke


PCV CCV Reroute/Delete Kit

with Catch Can - Installation Manual

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Warning Regarding Emissions Laws

Not legal for sale or use on pollution-controlled motor vehicles anywhere in the United States. Legal ONLY for off-road competition racing vehicles and cannot be used on vehicles that are operated on public streets, roads, or highways.



Disclaimer

(1) Assumption of Responsibility

By installing this product on your vehicle, you assume all risks and legal liabilities associated with the use of this product.

(2) Regulatory Compliance Obligations

- You are responsible for ensuring that your vehicle fully complies with federal, state and local emission regulations. (Federal and certain local laws prohibit the removal, modification or disabling of any component that affects vehicle emissions or safety design.)
- Fine penalties or fines resulting from the removal of vehicle emission equipment shall be borne by the end user.
- Use on public roads or highways is prohibited. Violators may face fines.
- All civil penalties or fines resulting from the removal of vehicle emission equipment shall be borne by the end user.

(3) Impact of Factory Warranty

Due to the high performance characteristics of this product, the factory warranty provided by the vehicle manufacturer may be affected and invalidated.

(4) Product Misuse Disclaimer

SuncentAuto assumes no liability for improper use or installation of the product. By installing this product, you are deemed to have released SuncentAuto from any and all legal liability related to its use.

(5) Regional Legal Restrictions

The installation or use of this product may be restricted according to local regulations. Please check all applicable laws before operation.

(6) Legal Liability Exemption

The purchaser and end user agree to release SuncentAuto from any claims, damages, lawsuits, injuries or expenses caused by the following actions, including but not limited to:

- Breaking the terms of this statement, product disclaimer or installation instructions;
- Direct, indirect, incidental, punitive, statutory or special damages or penalties arising from the installation or use of this product.



Installation Precautions

(1) Never Work on a Hot Vehicle

If the vehicle is in use, severe burns may occur. Allow the vehicle to cool before installation. Always wear goggles when working on or under any vehicle.

(2) Remove Rust/Lubricate Fully Before Disassembly

Older vehicles have more rust on the bolts. Before disassembly, spray rust remover (WD-40) and wait for 10 minutes. Remove rust/lubricate fully before disassembly to prevent damage to the screws. (We have received many cases of damage, so we would like to remind you of this.)

STEP 1

Release the fuel system pressure.



Note: The fuel system cannot be relieved of pressure manually, the high-pressure fuel system loses pressure as the engine cools down. When working on the high-pressure fuel system, wait until the engine is cool or 5 minutes, whichever is longer, to allow the high-pressure fuel system pressure to bleed off and the fuel to cool. With the key in the OFF position make sure the fuel pump and sender unit is not running. Wait two minutes after the pump has shut off for the low-pressure system to bleed off pressure.

STEP 2

Disconnect batteries.

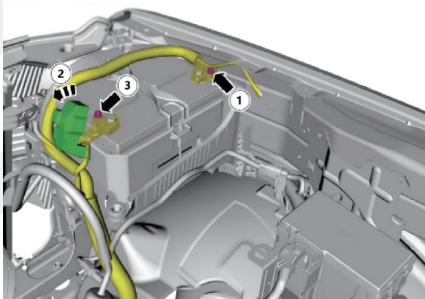


Image 1

STEP 3

Remove the Charge Air Cooler(CAC) intake pipe.



Note: The turbocharger compressor vanes can be damaged by even the smallest particles. When removing any turbocharger or engine air intake system component, ensure that no debris enters the system. Failure to do so may result in damage to the turbocharger.

(1) Pull the spring clip until the end of the clip is in the detent of the quick connect coupling.

(2) Loosen the clamp and remove the CAC intake pipe.

Torque: 106 in-lb.

STEP 4

Remove the fuel filter outlet tube.

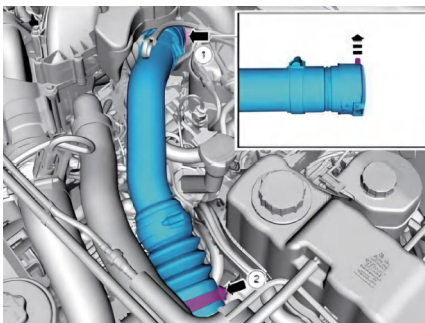


Image 2

STEP 5

Disconnect the fuel filter inlet tube.

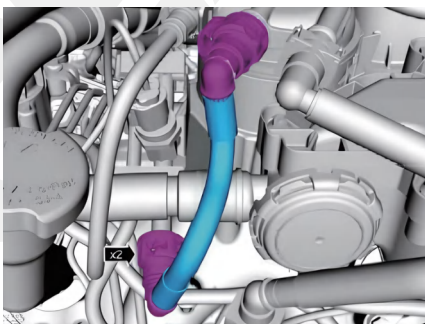


Image 3

STEP 6

Disconnect the fuel filter injector return tube.

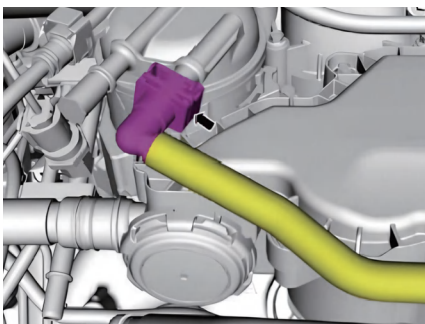


Image 4

STEP 7

Remove and discard the left fuel supply tube bolts.

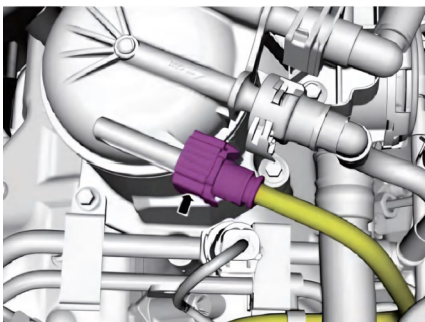


Image 5

STEP 8

Remove and discard the fuel injection pump supply tube assembly bracket bolt and position the fuel tube out of the way.

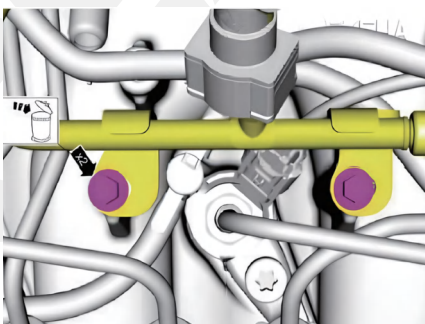


Image 6

STEP 9

Remove the fuel filter and bracket assembly bolts and then remove the fuel filter and bracket assembly.

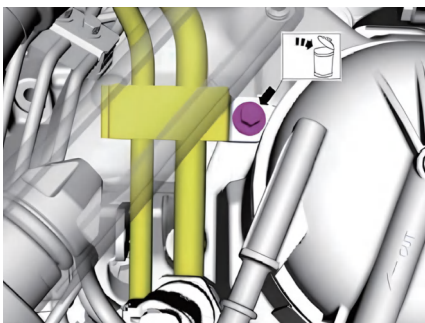


Image 7

STEP 10

If you have this style hose cut the heat shrink tubing.

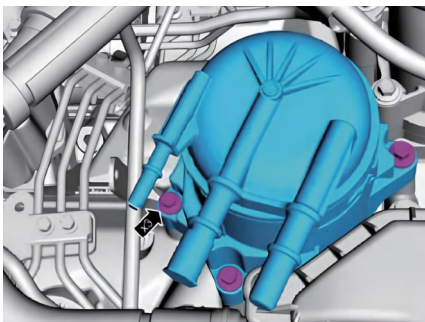


Image 8

STEP 11

Release the crankcase vent oil separator outlet hose retainer tabs, break the retaining tabs as needed. Disconnect the crankcase vent oil separator outlet hose from the lower intake manifold.

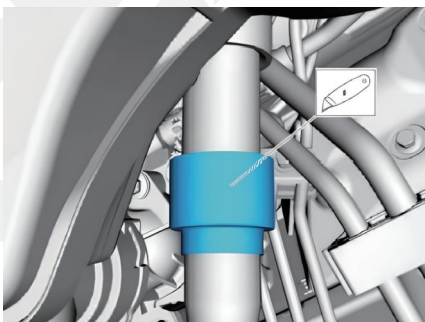



Image 9

STEP 12

 Note: Place a shop towel under the oil separator to catch any oil that may leak from the oil separator when removed. Remove the crankcase vent oil separator bolts and then remove the crankcase vent oil separator.

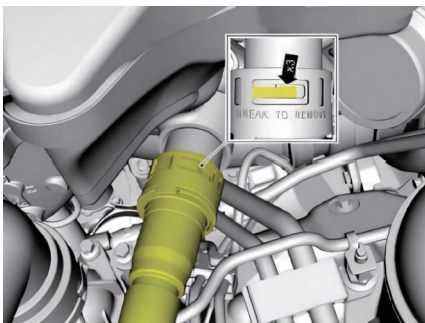


Image 10

STEP 13

Now install the unit on to the breather port on the rear of the engine where you removed the stock unit. Be sure to clean any old oil residue. Now torque 2 bolts evenly to 96 in-lb.

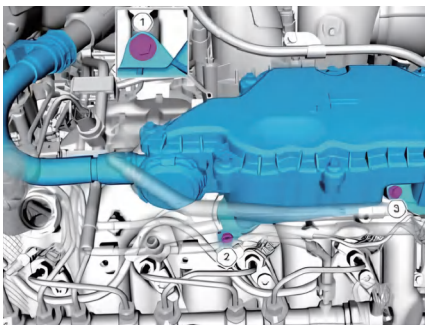


Image 11



Note: After removing the original pipes, cover the connections to prevent foreign matter from entering and damaging the engine and turbine.

STEP 14

Correct installation as shown in the figure (slightly different from our style).



Image 12

**PLEASE REFER TO THE FOLLOWING FIGURE TO
INSTALL IN ORDER.**

STEP 15

Install provided cap onto the port on the stock intake where you removed the factory breather hose earlier on in the process.

"No need to clamp or zip tie as this has no pressure behind it"

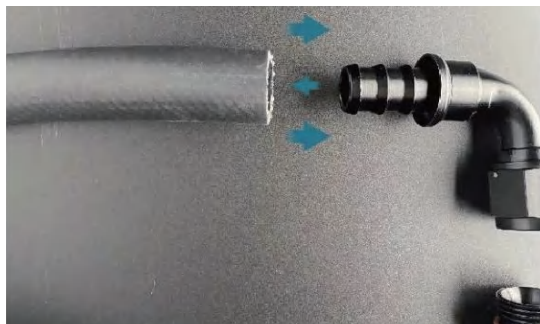


Image 13



Image 14

STEP 16

Install the fuel filter and bracket assembly, then install and tighten the fuel filter and bracket assembly bolts too. (Torque: 85 in-lb)



Image 13



Image 14

STEP 17

Install and tighten the new fuel injection pump supply tube assembly bracket bolt too. (Torque: 96 in-lb)

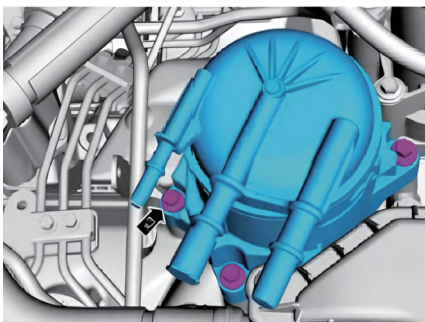


Image 15

STEP 18

Install and tighten the new left fuel supply tube bolts too. (Torque: 96 in-lb)



Image 16

STEP 19

Connect the fuel filter injector return tube.

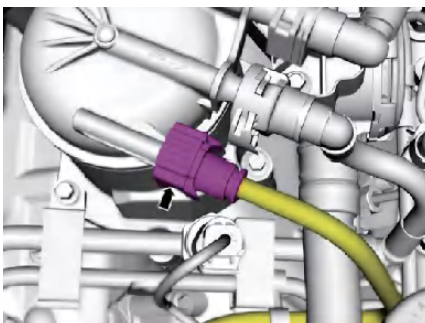


Image 17

STEP 20

Connect the fuel filter inlet tube.

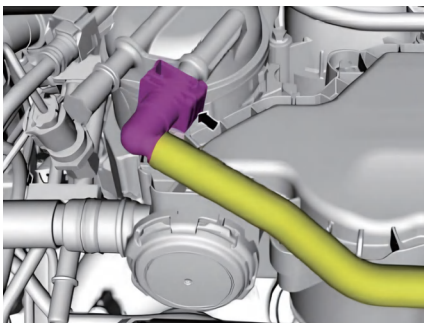


Image 18

STEP 21

Install the fuel filter outlet tube.

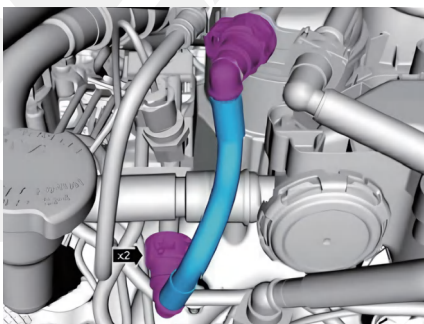


Image 19

STEP 22

Install the Charge Air Cooler(CAC) intake pipe.
"Inspect the turbocharger or engine air intake system components and clean, if necessary."

Torque: 106 in-lb.

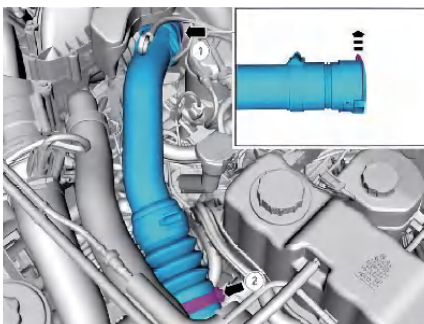


Image 20

STEP 23

Re-Connect the batteries.

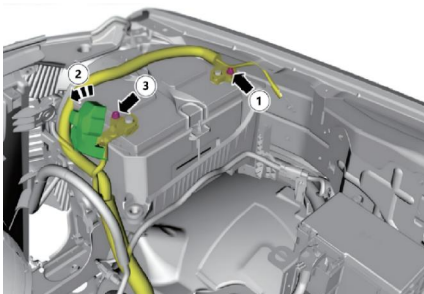


Image 21

STEP 24

Bleed the fuel system. Refer to: Fuel System Bleeding.

BLEED THE FUEL SYSTEM BY CYCLING THE IGNITION 3 TIMES IN THE FOLLOWING SEQUENCE:

- Turn the ignition key ON without cranking the engine.
- Wait 30 seconds for the fuel pump and sender unit to run.
- Turn the ignition key OFF.
- Repeat 3 times.



Note: Fuel injection equipment is manufactured to very precise tolerances and fine clearances. To prevent fuel system damage, it is essential that absolute cleanliness is observed when working with these components.

**POWER STROKE
DIESEL**



CCV Internal Catch Can

STEP 1

Remove your current CCV outlet 2 bolt hose flange.

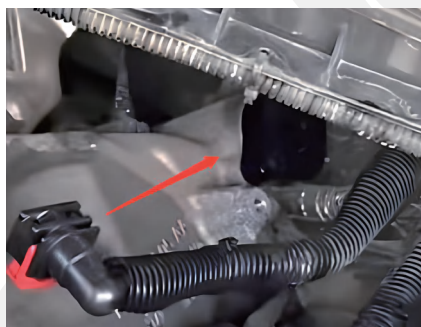


Image 22

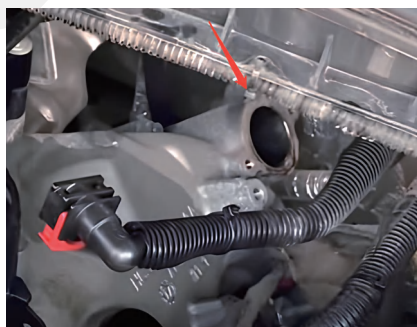


Image 23

STEP 2

Install the internal catch can below the 2 bolt flange. Install the O-ring and use the supplied longer hardware. Push the ICC towards the front of the vehicle and tighten the bolts.

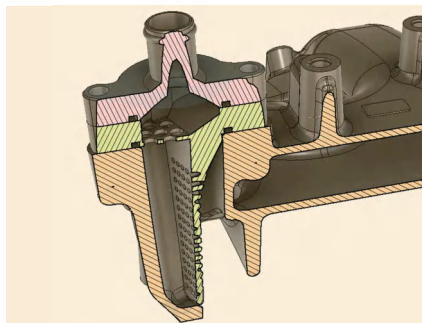


Image 24



Image 25



Note: It may be necessary to file or sand the edges to get the baffle to drop all the way in. This is due to casting irregularities from Ford. It's usually not necessary to remove much material if anywhere the rubbing is occurring. Remember to take small amounts off at a time.