CCS TURBO INLET OIL CATCH CAN KIT FOR GEN 6 FORD EXPLORER ECO-BOOST 3.0L TT V6 ST / PLATINUM

PART NO. CCS-FR-102

MADE IN USA



Important: Read these instructions in their entirety prior to installation.

For contact information, visit www.improvedracing.com

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Rev 240326

APPLICATION & PARTS CHECK

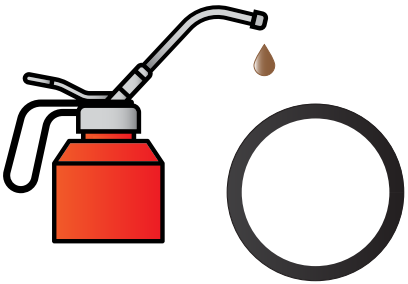
- Visit the website product page to confirm vehicle application and confirm all parts have arrived by checking the images:

BEFORE YOU BEGIN

⚠ **WARNING: This product should be installed by a qualified mechanic.**

⚠ **WARNING: Improper installation could result in severe engine damage.**

- Lubricate all quick connect fitting barbs before connecting the hoses.
- Lubricate all visible O-rings prior to installation to prevent damage and ensure a leak-free seal.
- Use aluminum tools to avoid damaging the aluminum fittings.



- This kit is supplied with a custom bracket pad, 3D printed from robust, carbon-fiber-infused nylon plastic. This polymer withstands temperatures up to 293 °F (145 °C) and is more than suitable for engine bays.

INSTALLATION INSTRUCTIONS

⚠ **WARNING: Confirm the car is not hot prior to installation.**

REMOVING THE FORD TURBO TUBE

1. Open the hood to access the engine compartment.
2. Locate the charge pipe tube connections on the driver side of the engine shown in Figure 1 and Figure 2.

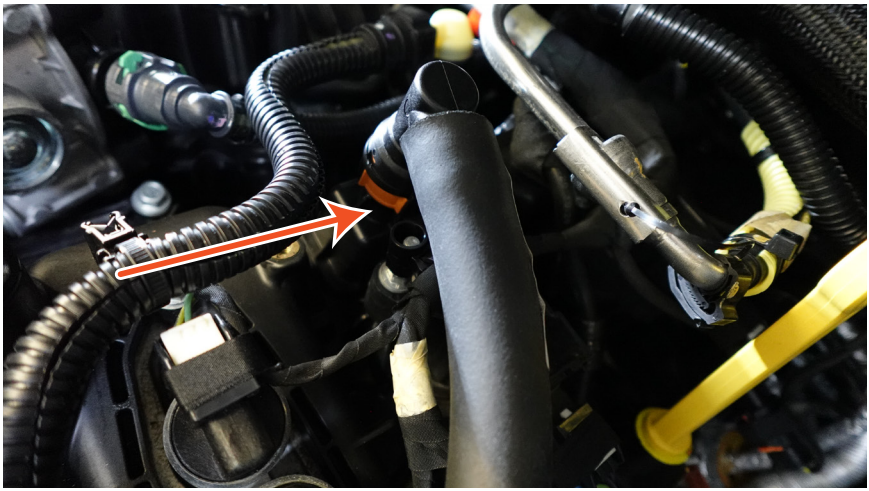


Figure 1 - Charge Pipe Tube Valve Cover Connection

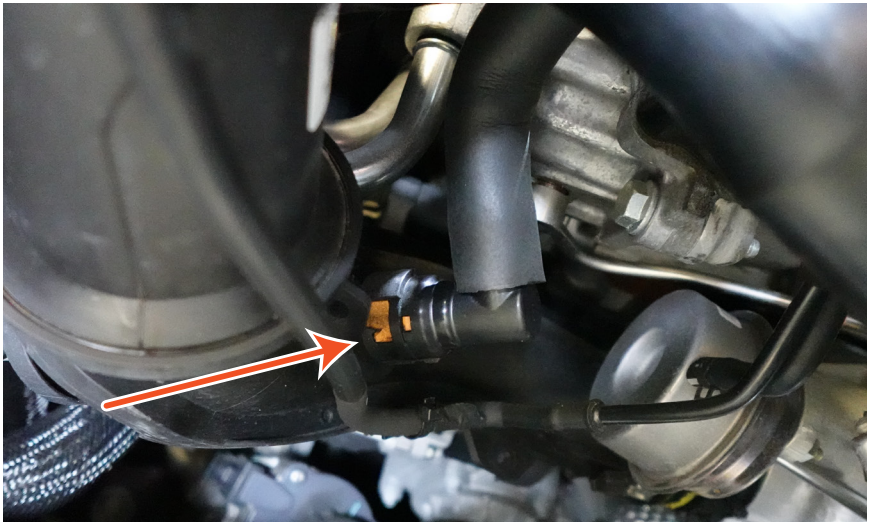


Figure 2 - Charge Pipe Tube Connection

3. Remove the charge pipe tube at both ends by one of these methods:
   a. Use a ⅝” quick connect removal tool to release three tabs shown in Figure 3.

   We found this to be extremely challenging because this vehicle does not have proper clearance to insert the common tools purchased online. The four support ribs around the fitting on the valve cover block tool insertion. The fitting on the boost pipe has the same design limitation. Removing the boost pipe might help, but we did not believe this was realistic for this installation.

   b. Pull each fitting as if trying to remove it, then use gasket picks to depress each of the locking tabs shown in Figure 3.

   We also found this to be difficult because the support ribs around the valve cover fitting interfere again. The work space around the boost pipe fitting is also tight.

   c. Use gasket picks to disassemble the fitting pieces by releasing the two tabs shown in Figure 4.

   We found this to be practical on the valve cover fitting only. The boost pipe fitting work space is too tight.

   d. Break the fittings where shown in Figure 5 twisting a flat screw driver between the parts.

   Typically we avoid steps that require breaking OEM parts. The space limitations on this vehicle proved this was the easiest method. Reuse the line from this kit with two 90° fittings should this kit be removed in the future.



Figure 3 - Charge Pipe Tube Release Tabs

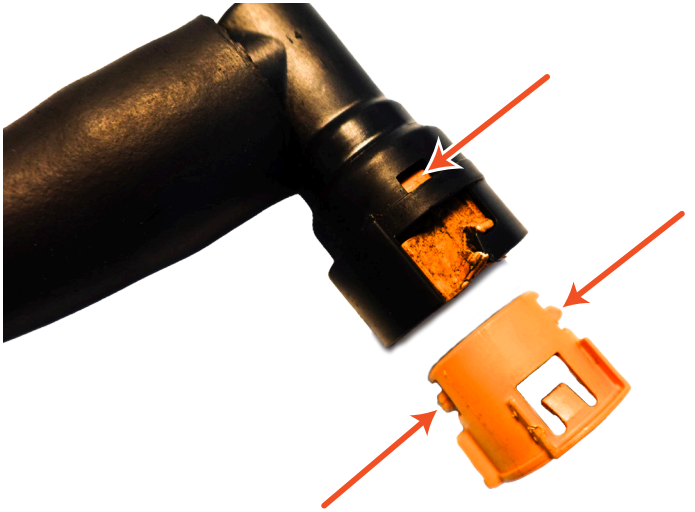


Figure 4 - Alternate Charge Pipe Tube Release Tabs



Figure 5 - Where to Break Charge Pipe Tube Release Tabs

4. Set the charge pipe tube aside: This part will no longer be used.

MOUNTING THE CATCH CAN BRACKET

1. Locate the hole on the radiator core support, and install the bracket pad with aluminum insert, flat bracket and hardware as shown in Figure 6.

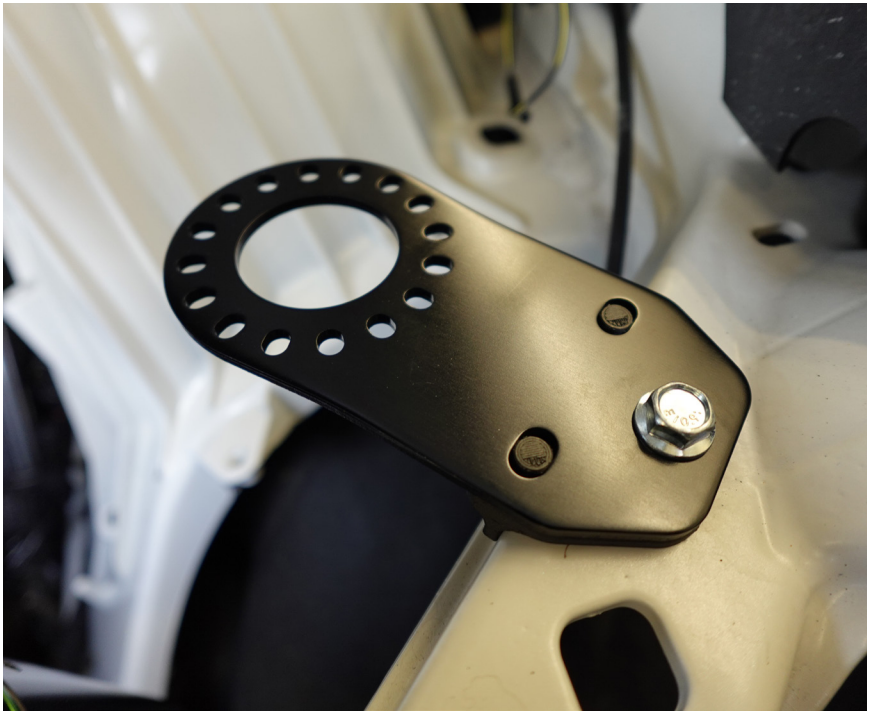


Figure 6 - Mounted Bracket on Core Support

2. Use 10mm tools to torque the hardware to 80 lb-in (9 N-m).

MOUNTING THE CATCH CAN

1. Remove the nut from the catch can.
2. Insert the catch can through the large hole in the mounting bracket.
3. Position the pin into the bracket hole shown in Figure 7.

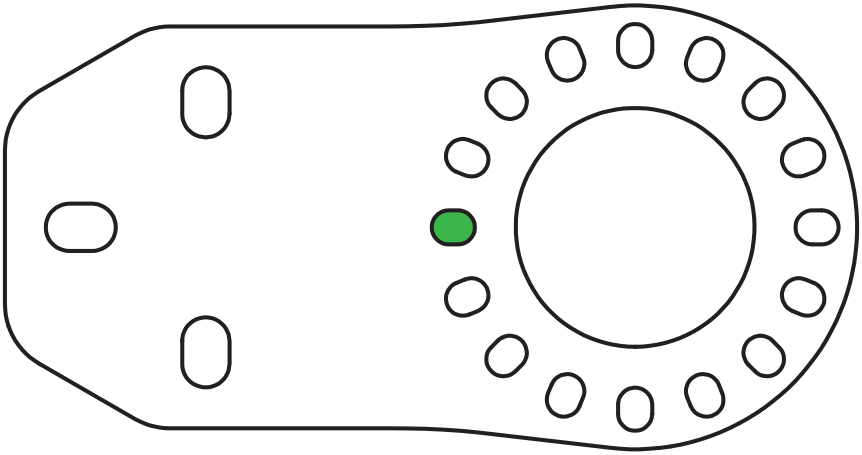


Figure 7 - Correct Bracket Hole for Pin on Top of Catch Can

4. Thread the nut onto the catch can and tighten with a $^{5}/_{8}$" wrench.

When hand tightening, smear a dab of anti-seize around the threads to guarantee the nut is properly tightened.

CONNECTING THE LINES

1. Install the straight adapter into the IN port on the catch can.
1. Torque the fitting between 13 to 16 lb-ft (17 to 22 N-m).
2. Install the 90° adapter fitting into the OUT port of the catch can:
   a. Confirm the O-ring is on the smooth part of the fitting.
   b. Turn the free spinning nut down flush to the O-ring.
   c. Install the fitting into the OUT port, confirming the nut remains flush and forces the O-ring completely inside the gland.
   d. Position as shown in Figure 8
   e. Tighten the nut between 13 to 16 lb-ft (17 to 22 N-m).



Figure 8 - OUT Adapter Fitting Placement

3. Attach the hose with the 45° fitting to the valve cover fitting.
4. Connect the straight fitting on the same hose to the catch can IN port.
5. Attach the remaining hose to the boost pipe and catch can OUT port.

COMPLETING THE INSTALL

1. Confirm all mounting hardware is properly fastened.
2. Confirm all hoses are properly connected.
3. Start the vehicle and check for signs of a vacuum leak.
   a. Troubleshoot and check connections if necessary.
4. Confirm the safety lock clip is installed in the can before closing the hood.

Installation is now complete. Thank you for purchasing an Improved Racing product!