CCS OIL CATCH CAN KIT FOR DODGE CHARGER & CHALLENGER 6.2L HEMI HELLCAT, REDEYE, DEMON

PART NO. CCS-CH-100

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 240312

APPLICATIONS & PARTS CHECK

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

BEFORE YOU BEGIN

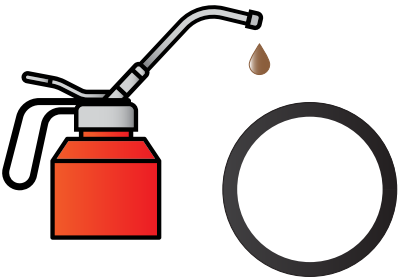
WARNING: This product should be installed by a qualified mechanic.

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.



INSTALLATION INSTRUCTIONS

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

PREPARING THE CATCH CAN

1. Open the hood to access the engine compartment.
2. If not using a remote drain line:
   a. Install the drain plug included with this kit.
   b. Torque the drain plug 13 to 16 lb-ft (17 to 22 N-m).
3. If using a remote drain line:
   a. Install your preference of -6 ORB adapter fitting.
   b. Torque the fitting between 13 to 16 lb-ft (17 to 22 N-m).
4. Insert the catch can through the large hole in the mounting bracket.
5. Position the catch can pin into the bracket hole shown in Figure 1.

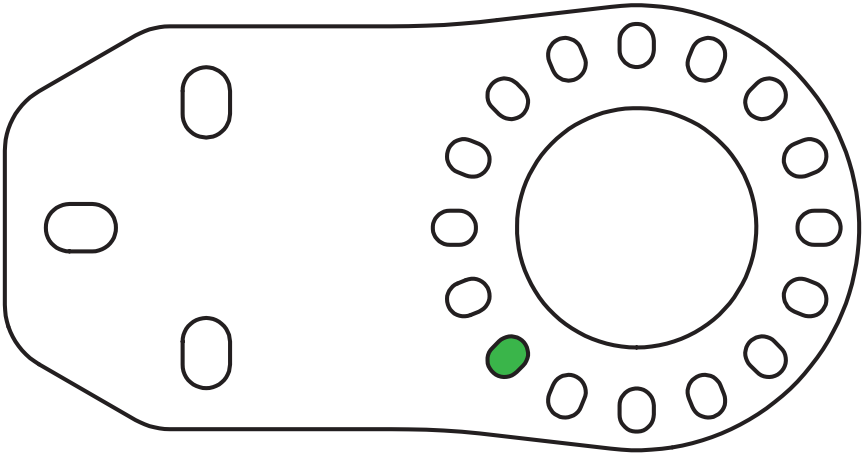


Figure 1 - Bracket Hole for Can Pin

6. Thread the nut onto the catch can and tighten with a ⅝" wrench.

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

7. Install the safety lock clip (refer to CCS manual for more information).
8. Install the 90° adapter fittings into 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 2.

e. Tighten the nut between 13 to 16 lb-ft (17 to 22 N-m).

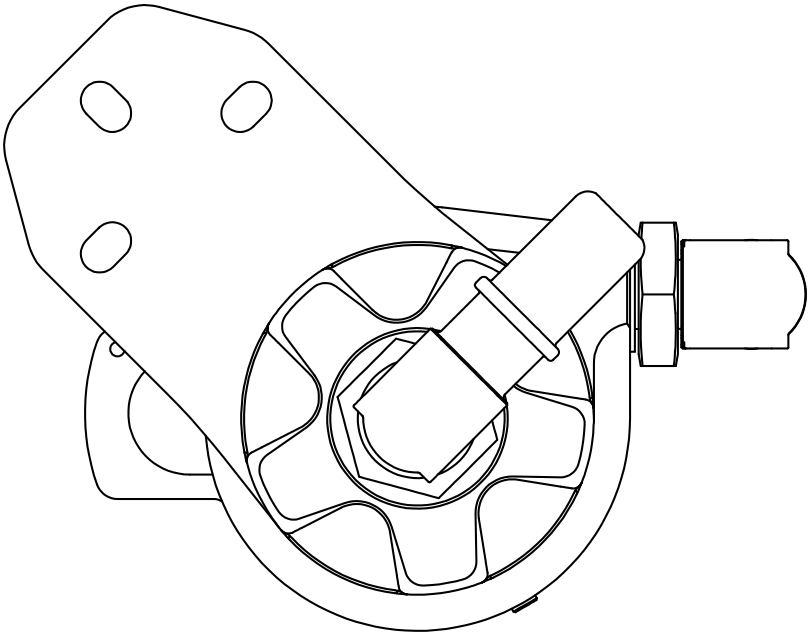


Figure 2 - Preparing the Adapter Fittings

REMOVING THE FACTORY PCV HOSE

1. Remove the factory PCV hose highlighted in Figure 3.
   a. Depress the button on the intake manifold fitting and remove the fitting from the intake manifold.
   b. Lift the front of the plastic engine cover to gain better access to the factory PCV hose.
   c. Rotate the hose and locate the release lever on the valve cover fitting.
   d. Pull the lever clockwise then slide up to remove the fitting from the valve cover.

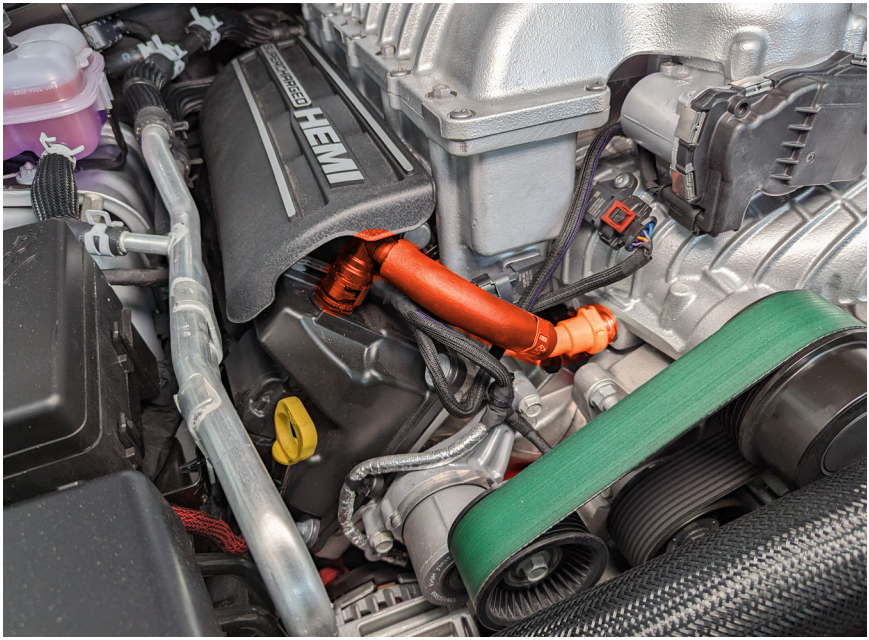


Figure 3 - Removing the Factory PCV Hose

INSTALLING THE CATCH CAN

1. Loosely install the adapter bracket onto the tab shown in Figure 4 using the included hardware.

The included silicone washers are placed between the adapter bracket, tab and flange screw to protect the paint.

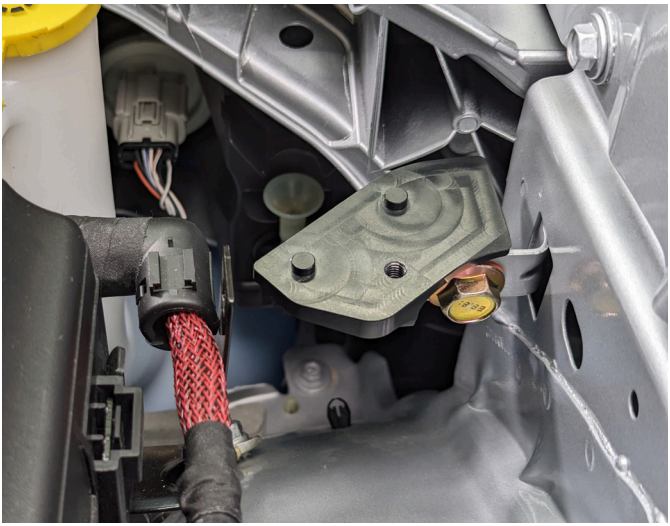


Figure 4 - Adapter Bracket Installed

2. Route the 45° fitting on the inlet hose between the two black boxes in the engine bay shown in Figure 5.

Leave the hose disconnected from the valve cover.

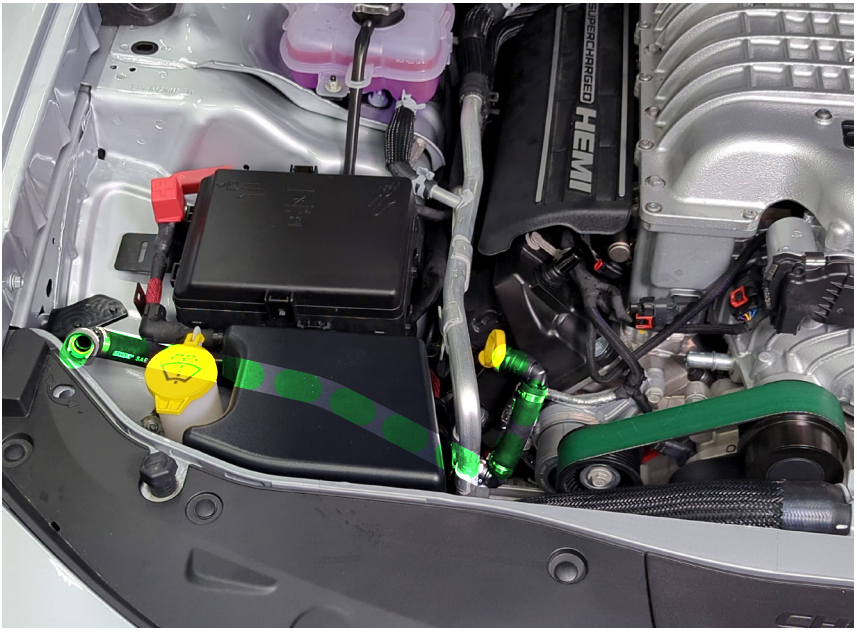


Figure 5 - Inlet Hose Routing: Leave Disconnected

3. If using our optional drain kit, insert the drain hose through the opening next to the windshield washer fluid reservoir as shown in Figure 6.

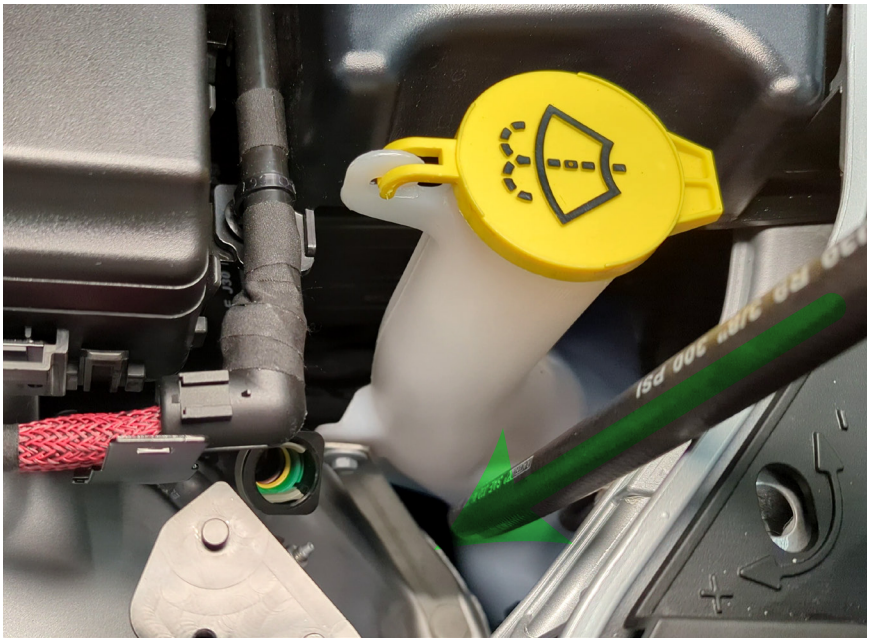


Figure 6 - Drain Hose Routing

4. Install the catch can onto the tab bracket as shown in Figure 7:

   ⚠ Caution: Tight space makes it easy to scratch parts.

   a. Before securing the assembly to the chassis bracket, connect the 45° fitting on the inlet hose to the catch can “IN” port.

   b. Lightly tighten the assembly using the included thumb screw.

   c. Position the assembly so there is no contact with the vehicle.

5. Use a 15 mm tool and tighten the tab bracket until the silicone washers are lightly compressed.

   ⚠ Do not overtighten.

   💡 Loctite® 243 is recommended for lasting and reliable fastening.



Figure 7 - Installing CCS to the Adapter Bracket

6. Connect the hose with the two 45° fittings to the catch can “OUT” port and intake manifold as shown in Figure 8.
7. Connect the inlet hose to the valve cover as shown in Figure 8.

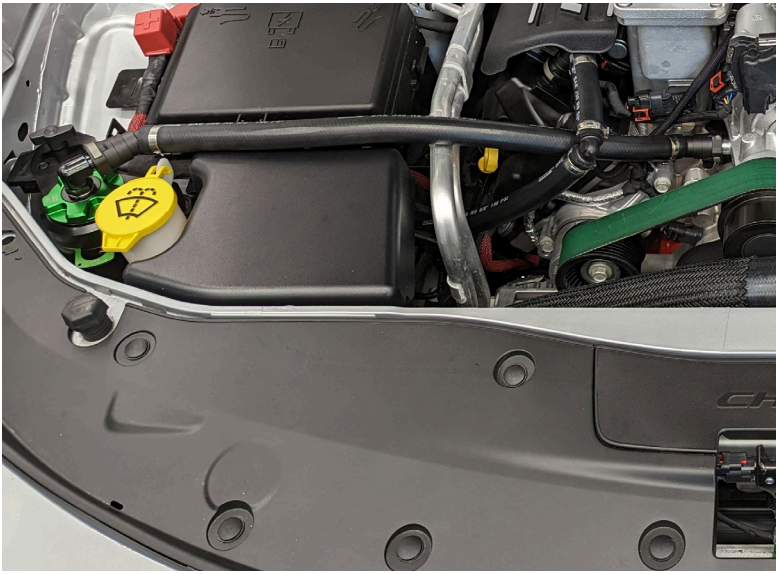


Figure 8 - Connecting the Hoses

COMPLETING OPTIONAL DRAIN KIT INSTALLATION

1. Safely lift the front of the vehicle.
2. Referring to Figure 9, remove the two plastic splash guards:
   a. Use a 10mm tool to remove four screws (orange arrows), then remove the rear splash guard.
   b. Use a 7mm tool to remove ten screws (green arrows).
   c. Use a plastic clip prying tool to remove ten push-clips shown (white arrows), then remove the front splash guard.

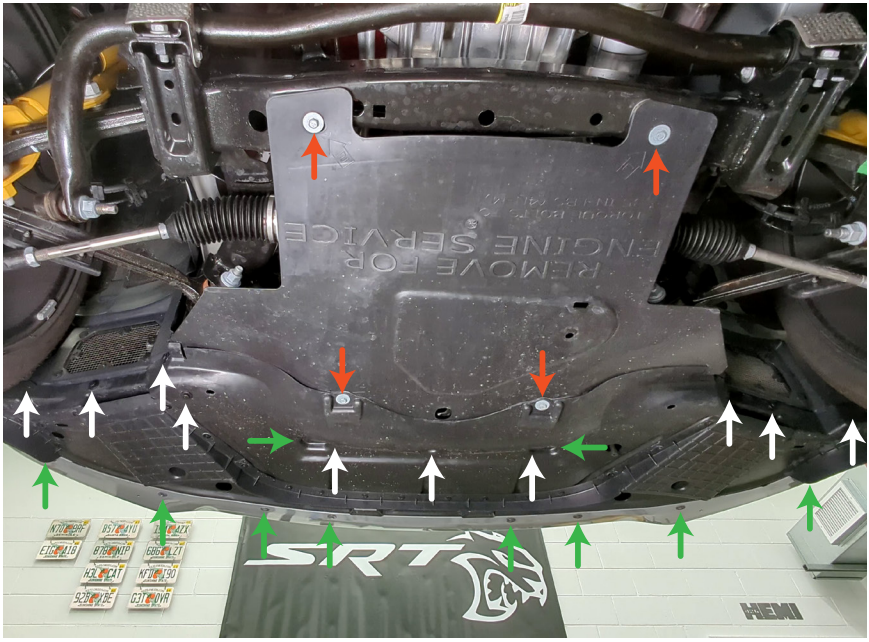


Figure 9 - Splash Guard Hardware Removal

3. Find the catch can drain hose and position it next to the radiator drain hose as shown in Figure 10.

The catch can drain hose passes through the radiator drain hole in the splash guard for easy servicing.

Adjust/trim the catch can drain hose so the ball-valve is on the inter-cooler abrasion sleeve as shown in Figure 10.

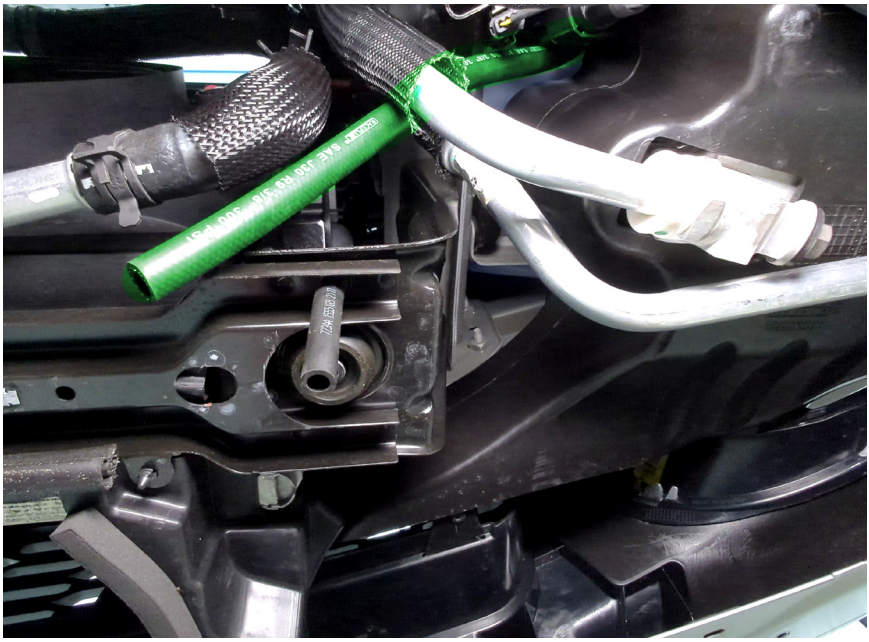


Figure 10 - Finding the Drain Hose

4. Slide one of the included hose clamps over the catch can drain hose and connect the ball-valve to the drain hose.
5. Secure the hose clamp.
6. Using the extra hose, cut a piece to a length of 4.5 in (114 mm).
7. Connect the other side of the ball-valve to the short section of hose.
8. Secure the hose clamp.

This short length of hose passes through the hole in the splash guard.

9. Use two zip-ties to secure the ball-valve to the intercooler hose as shown in Figure 11.
10. Reinstall the splash guards by referring to Figure 9.

Confirm the drain hose inserts through the radiator drain hose hole.

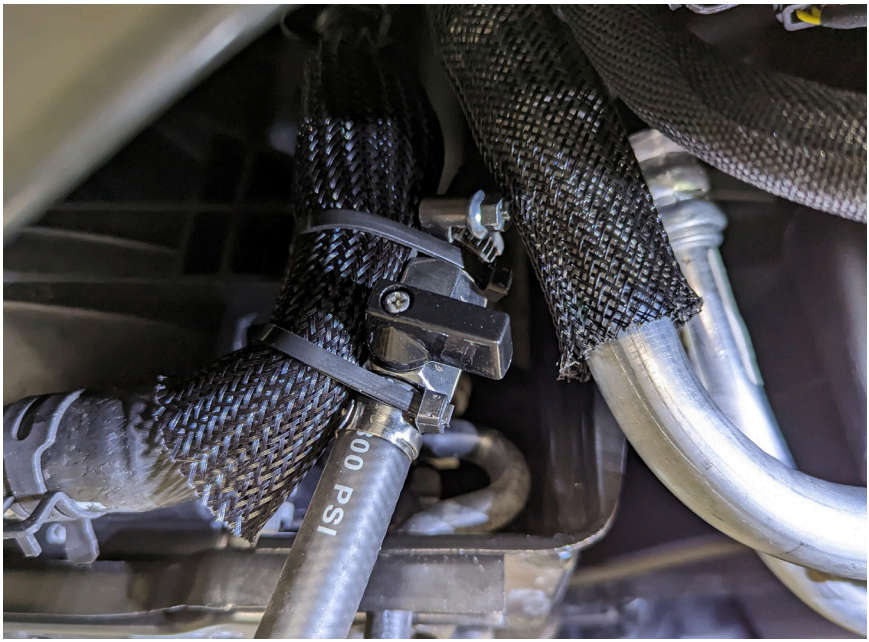


Figure 11 - Securing the Ball Valve

11. Shown in Figure 12, the ball-valve is now accessible during oil changes by removing only the oil pan splash guard.



Figure 12 - Drain Line Passing Thru Splash Guard

COMPLETING THE INSTALL

1. Confirm all mounting hardware is properly fastened.
2. Confirm all hoses are properly connected.
3. Replace the engine cover if necessary.
4. Start the vehicle and check for signs of a vacuum leak.
    a. Troubleshoot and check connections if necessary.

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

DRAINING THE CATCH CAN WITHOUT A DRAIN LINE

Draining the catch can without a drain line only takes about 30 seconds.

1. Remove the thumb screw.
2. Disconnect the “OUT” fitting.
3. Carefully lift the catch can and disconnect the “IN” fitting.
4. Remove the reservoir and drain.
5. Reinstallation is the reverse of removal.

DRAINING THE CATCH CAN WITH A DRAIN LINE KIT

Drain the reservoir when the engine bay is warm to speed up the process.

1. Safely lift the front of the vehicle.
2. Use a 10mm tool to remove the plastic splash guard screws marked with orange arrows in Figure 9.

If necessary, remove a push-clip from the front splash guard for better access.

3. Open the valve and drain the reservoir into an oil drain pan.
4. Close the valve once draining is complete.
5. Spray degreaser into the hose to fully clean the hose.

Performing this step prevents oil stains on garage floors and driveways.

6. Reinstall the oil pan splash guard.