

Installation Instructions for HCT Split System 3.0 Coolant Tank Kit PN: 353010

The HCT Spilt Cooling System 3.0 is Proudly Designed and Manufactured in the USA.

NOTE: Please read the Entire instruction manual prior to beginning work, professional installation is recommended if you are not comfortable with all the steps.

PARTS LIST:

- 1 x Aluminum HCT Split System 3.0 Coolant Tank
- 1 x Thermostat restrictor Plate
- 1 x 90 degree over-flow hose with clamp
- 1 x Billet recirculation line block off plug
- 1 x Coolant tank cap
- 1x Self Tapping Screw
- 2 x Brass ¼" Nipple
- 2x Brass 1/8" NPT plug.



Step 1: With vehicle off and engine cool, you must begin by draining the coolant. To drain coolant remove the bypass hose shown in the photo below, drain into a clean drain pan if you are planning on reusing the factory coolant. After hose is loose, remove radiator reservoir tank cap at the front of the vehicle, this will allow all the coolant to drain. You may want to remove rear skid plate to avoid coolant collecting in the skid plate.



Step 2: Install supplied billet block off plug into the 7/8" coolant bypass hose as shown in the picture below. This is the same hose that was removed in Step 1.



Step 3: Remove the muffler (or aftermarket exhaust if applicable) to allow for access to remove the thermostat housing. This is required to access the outer and inner bolts on the thermostat housing. You can support the exhaust with a bungee cord, strap or any other method to keep secure and out of your way during the thermostat housing removal.



Step 4: Remove the thermostat housing. You will need to remove both coolant lines from the housing, the upper hose was disconnected to drain the coolant in step 1. Next remove both 8mm bolts to the thermostat housing; the passenger side bolt can be accessed from the passenger side of the vehicle with an open-end wrench. The inner thermostat housing bolt must be accessed from the rear of the vehicle using a long extension with a universal or wobble end. **PRO TIP: Put some bearing grease in the socket to keep the bolt from falling out of the socket once removed.** Once both bolts are removed, disconnect the coolant temperature sensor from the housing and remove housing from the vehicle.



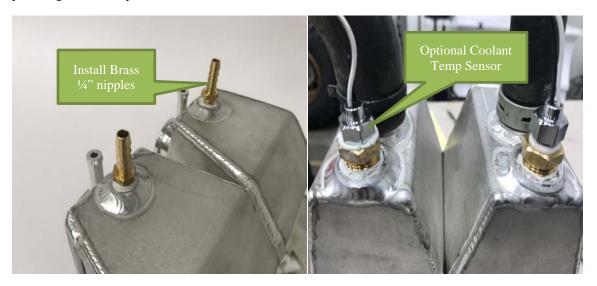
Step 5: Separate the thermostat housing and separate halves by removing the two 8mm bolts holding the housing together. Remove the OEM thermostat and install the supplied restrictor plate. You may discard or keep the thermostat for future use if so desired. The thermostat is not used for the HCT split system application. After O-Ring is installed on the restrictor plate, reinstall in housing as shown below, reassemble the thermostat housing. **NOTE: Make sure the two halves are facing the proper direction.**





Step 6: In reverse of the previous steps, reinstall thermostat housing to engine, reconnect hoses and reinstall the muffler and any heat shields that were removed in previous steps. Leave upper T Stat housing clamp loose as you will burp the system here for air in Step 11. **PRO TIP: Align hose clamps to make access easier, some of the clamps are facing incorrectly from the factory and difficult to remove.**

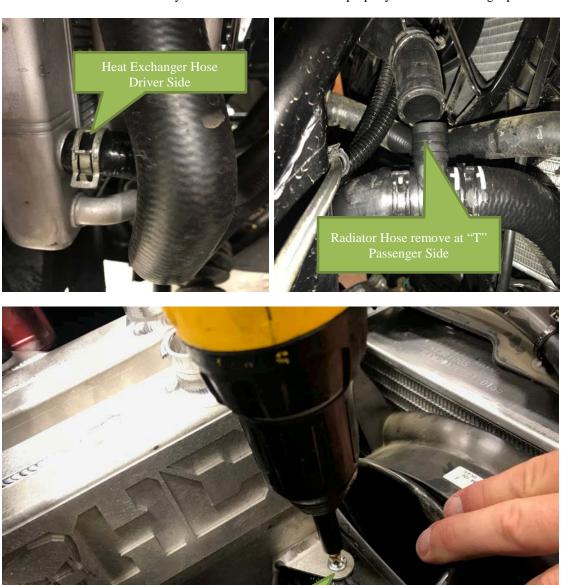
Step 7: Remove the OEM coolant tank. Remove the tank by removing the three T30 torx screws and disconnect the two coolant hoses from the heat exchanger and Radiator, leaving connected to the bottom of the coolant tank. You will reuse the OEM clamps. Once the tank and hoses are removed we must prep the HCT 3.0 tank for installation. Install the two brass ¼" nipples on the top inlet to the tank, then install the lower Brass block off plug or optional temperature sensor gauges. Make sure to use Teflon tape or similar plumbing thread compound.



Step 8: Trim heat exchanger ¾" hose to correct for shorter distance. We have found some differences in the length to trim, start with 1.5" from top of hose to start, we will need to test fit before final installation and check for kinks. Once trimmed install both hoses on the bottom of the coolant tank as shown. **PRO TIP:** Mark your hoses with a sharpie before removal for proper realignment.



Step 9: Install the assembled tank with hoses back into vehicle. You will first need to cut the plastic standoff from the firewall; you will see the small square plastic raised area. This can be trimmed off with a utility knife. Gently set tank into place making sure to properly route the hoses to their original locations. You will reuse two of the original mounting screws on top, and one self-tapping screw on the radiator support. Before installing self-tapping screw, reconnect coolant hoses to the radiator and Heat Exchanger, check for kinks and trim hoses as necessary. Once all hoses are connected properly install screw using a power drill.

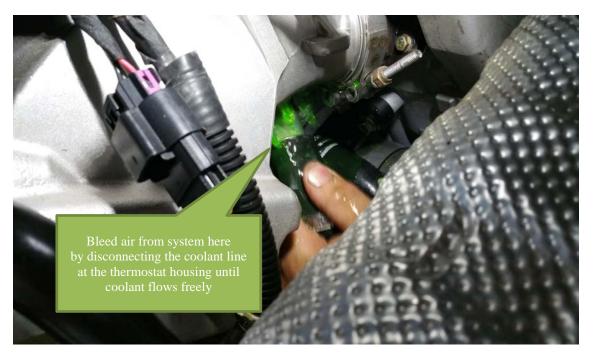


Step 10: Install top two bleeder hoses (**NOTE: 2016 ONLY XPT make sure the radiator hose is connected to the passenger side tank for proper operation see picture below**). Reuse and Install OEM overflow tube on tank and one HCT supplied overflow line with supplied clamp. Can be seen in final installation photo.





Step 11: Fill both coolant tanks with clean reused or OE approved coolant. Once the tanks are full you will need to bleed the system of any air. To bleed system; loosen the top hose on the thermostat housing that was installed in previous steps. Slightly pull hose off the housing until coolant flows from the line. Top off coolant tank and repeat this process one more time or until there is no air in the system. Reuse the OEM and HCT supplied radiator caps to the split system tank after topping off coolant.



Step 12: Make sure all bolts, clamps and hoses are tight and correctly installed. You can now start engine to verify all cooling systems are functioning properly. Let engine idle for several minutes and watch for cooling fans to turn on automatically. This occurs at 204 degrees with stock ECU or 186 degrees with HCT tuned ECU installed. Once the fan turns on, watch the temperature gauge to confirm the engine temperature starts to lower. IF the temperature does not start to lower and keeps increasing, shut down engine, allow to cool, and bleed system again as in the previous steps.

OPTIONAL: Wire and install HCT Split System Coolant Tank temperature gauge kit PN: 3530101. This kit allows you to monitor your temperature differentials and monitor Heat Exchanger Temperature.

