



# INSTALLATION GUIDE

2003–2010 Porsche Cayenne Performance Aluminum Radiator  
SKU: MMRAD-CAY-03

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## RESOURCES & CONTACT



**CALL 1.877.466.4744**

CUSTOMER SERVICE HOURS: MON-FRI 8:30AM-5:00PM EST



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**ENGINEERING BLOG**

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## IMPORTANT SAFETY INFORMATION

- › To avoid potential injury, wait for the vehicle to completely cool off before working in the engine bay.
- › Some of the hardware mentioned in this guide may be missing/different from stock due to the age of the vehicle.
- › Mishimoto recommends you use safety glasses and protective gloves during the installation of our products
- › Raise vehicle only on jack stands or on a vehicle lift
- › Allow vehicle to cool completely prior to attempting installation
- › Do not run the engine or drive the vehicle while overheating; serious damage can occur
- › Please dispose of any liquids properly
- › Mishimoto is not responsible for any vehicle damage or personal injury due to installation errors, misuse, or removal of Mishimoto products
- › If you need any assistance while installing our products, reach out to our Customer Service Team at 1-877-GOMISHI

## REQUIRED TOOLS

4X ZIP TIES	6MM SOCKET
POP CLIP TOOL	10MM SOCKET
PICK TOOL	13MM SOCKET
NEEDLE-NOSE PLIERS	16MM SOCKET
PHILLIPS HEAD SCREWDRIVER	18MM SOCKET OR WRENCH
2.5MM ALLEN WRENCH	T20 TORX
¼" RATCHET	T25 TORX
3/8" RATCHET	T30 TORX

**INSTALL TIME: 7 HOURS**

**INSTALL DIFFICULTY:** 

## INSTALLATION INSTRUCTIONS

**1.** Lifting the vehicle is not required to perform the install but if you will be lifting the vehicle, disable the air suspension leveling by pressing and holding the suspension mode switch forward until you see a confirmation message on the dash.

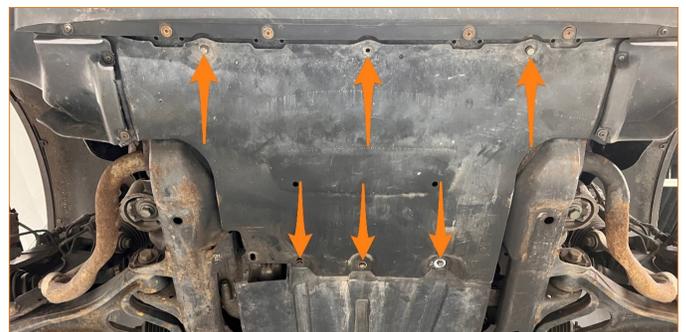
**2.** Remove the small cover in the driver side footwell then, loosen the negative terminal nut (13mm) and disconnect the negative battery cable. Put something between the terminal and battery post to prevent from making contact.



**3.** Under the vehicle, remove the 5x Torx screws (T25) then, remove the passenger side air duct. Repeat for the other side.

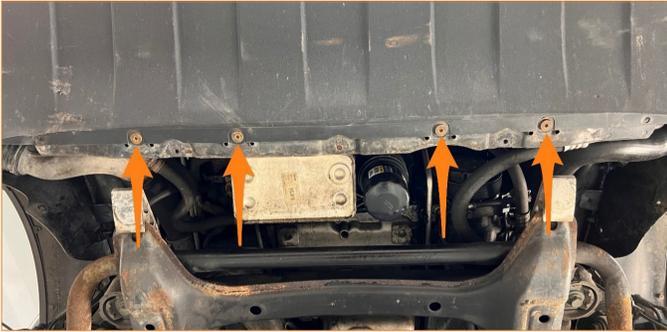


**4.** Remove the 6x bolts (10mm) then, remove the splash guard.

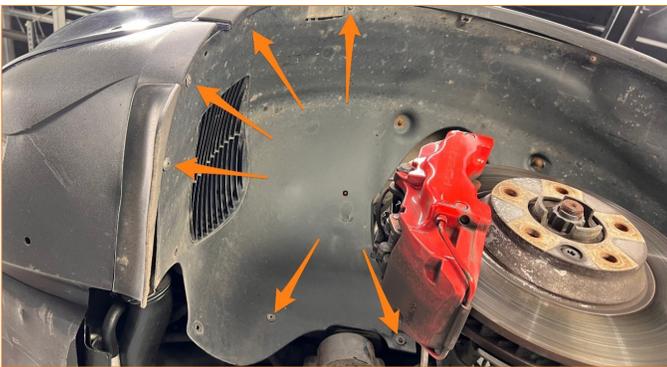


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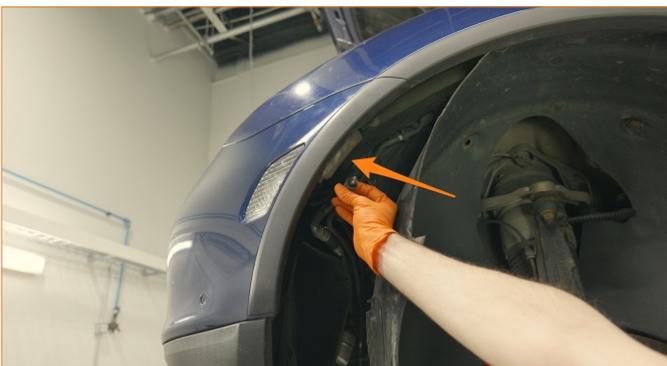
5. Remove the 4x lower bumper Torx bolts (T30).



6. Remove the 6x Torx screws from the wheel liner (T25). Wheel removed for illustration purposes.



7. Pull back the wheel liner and remove the side marker light bulb from the housing. Repeat for the other side.



8. Unplug the electrical connector for the bumper harness on the passenger side.



9. Remove the 2x Torx screws fastening the bumper (T30). Repeat for the other side.



10. Remove the plastic cover by pushing down on the front-facing side.



11. Rotate the hex drive clockwise (6mm socket). This will release the headlight and push it out slightly. The headlight can now be removed straight out the front. Repeat for the other side (rotation will be opposite).

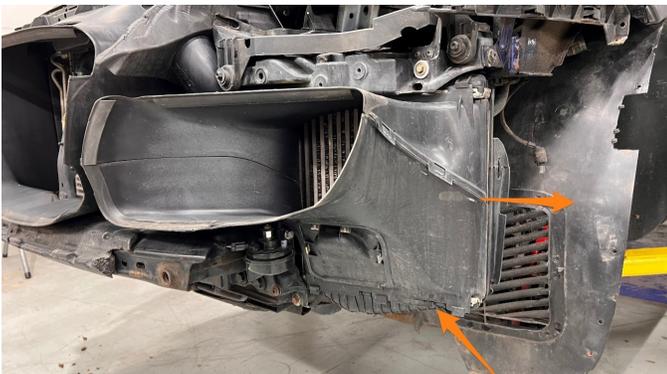
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**12.** Remove the 4x upper bumper Torx bolts (T30) then remove the bumper by pulling toward the front of the vehicle. Note: the sides of the bumper near the fenders slide out toward the front. They do not pull away from the side of the vehicle like most bumpers.



**13.** Remove the intercooler air duct by releasing the catch on the bottom then sliding it out toward the side. Repeat for the other side.



**14.** Remove the 4x bolts (13mm) then remove the brace to gain access to the radiator drain.



**15.** Place a bucket under the drain then, use a Phillips head screwdriver to remove the radiator drain plug and let the coolant drain. Replace the plug to prevent residual coolant from spilling during removal in later steps.



**16.** Disconnect the lower intercooler quick connect fitting by releasing the clip with a pick tool then pulling the charge pipe out. Repeat for the other side.



**17.** Use a pop clip tool to remove the 4x wiring harness clips from the radiator air duct.

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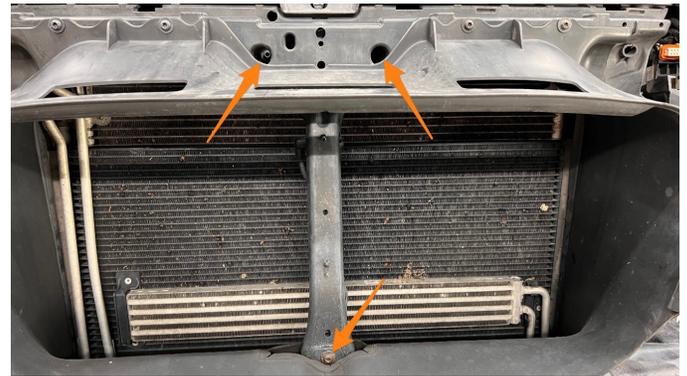
**18.** Pull the piece of foam off the intake pipe then, pull forward and rotate back and forth to release the connection from the airbox. One released, pull the intake pipe out the front. You may need to rotate them to get the pipes around other components. Repeat for the other side.



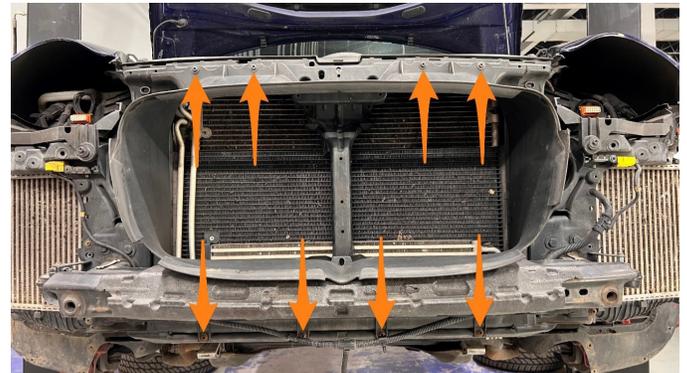
**19.** Disconnect the electrical connector from the hood latch (1), remove air temp sensor from bracket (2), and pull harness off bracket (3). Tuck the harness through the hole in air duct (4).



**20.** Remove the 3x Torx screws fastening the bracket (T30).



**21.** Remove the 8x Torx screws (T30) then pull the radiator air duct out.



**22.** Remove the rubber hood seal and the 4 trim covers.



**23.** Disconnect the MAF sensor plug (1), pull the 2x pins for airbox intake pipe (2) and remove airbox lid (3) by releasing the 2x latches on the top. Remove the air filter and set aside in a clean spot. Repeat for the other side.

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**24.** Loosen the hose clamp (8mm) and remove the top of the intake pipe. Repeat for the other side.



**25.** Remove upper radiator hose quick-connect fitting by releasing the clip with a pick tool then pulling the hose out.



**26.** Remove the 2x Torx bolts for the charge pipes (T30), loosen the 4x hose clamps for the couplers (8mm), and remove couplers.



**27.** Remove the 3x Torx screws for the intercooler (T30) and pull the intercooler/pipe assembly out the side of the vehicle. Repeat for the other side.

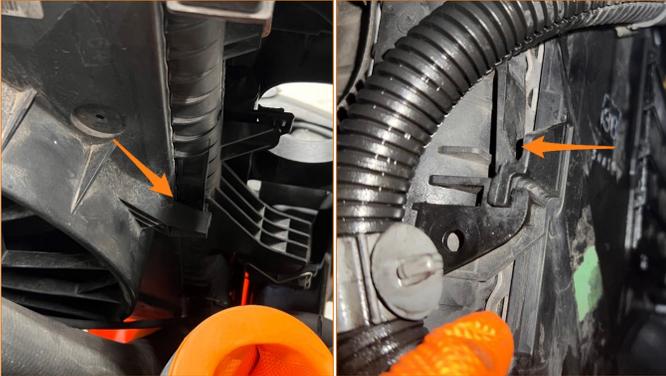


**28.** Disconnect electrical plugs for MAP sensor and throttle body, pull the 2x pins and remove Y pipe.

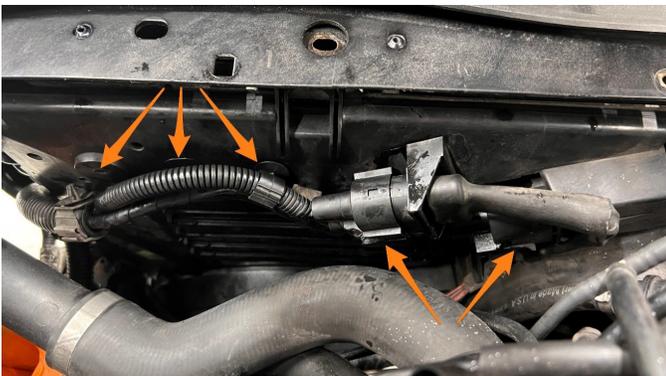


**29.** Release the fan shroud locks by using a screwdriver to push against the lever then lift the fan shroud up slightly out of the slots.

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**30.** Pull the harness clips off the fan shroud, disconnect the 2x rad fan electrical connectors



**31.** Remove lower rad hose quick connect, loosen hose clamp (8mm) and remove hose.



**32.** Loosen hose clamp (8mm) and remove upper hose.



**33.** Pull radiator fan out the top.



**34.** From underneath, remove the 2x Torx screws (T30) fastening the condenser lines to the radiator.



**35.** Remove the Torx screw (T30) fastening the power steering cooler lines to the radiator.

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**36.** Remove the Torx screw (T30) fastening the transmission cooler lines to the radiator (missing on this vehicle).



**37.** Reinstall the lower brace hand tight to support the cooling stack for the next steps.



**38.** Use a pick tool to remove the metal clips from the rad mounts and then remove the black plastic caps.



**39.** Disconnect the electrical plugs for the two horns.



**40.** Remove the 8x bolts (16mm) and 4x Torx screws (T30) from crash bar then remove the crash bar.

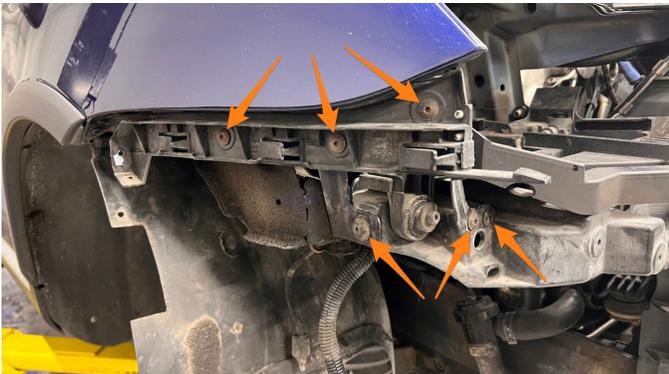


**41.** Remove the 2x upper rad mount Torx screws (T30).

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**42.** Remove the 6x Torx screws (T30) from the bumper bracket then remove the bracket. Repeat for the other side.



**43.** Remove the electrical connector from the headlight bracket by depressing the tabs and pulling straight up. Repeat for the other side.



**44.** Unlatch the two cable ends for the hood release and remove the release mechanism and bracket. \*See second photo below for details.



**45.** Remove the 2x Torx screws (T30) fastening the core support then remove the core support and headlight brackets as an assembly by pulling toward front of the vehicle.



**46.** Remove upper rubber seal and mounts.

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**47.** Zip-tie the top of the radiator to the frame to hold it in place then remove the lower brace that was reinstalled in step 37. Remove the clips holding the transmission cooler and AC condenser from the radiator.



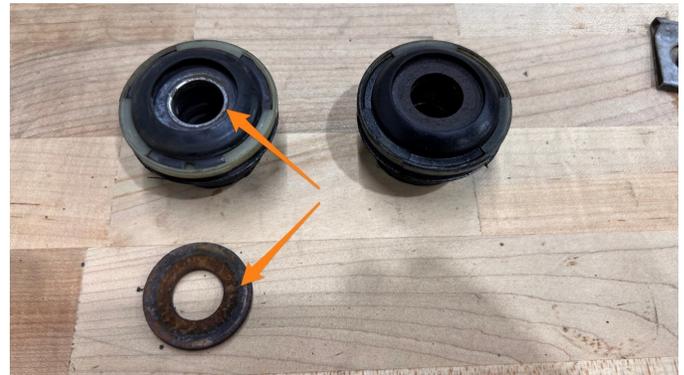
**48.** Remove the transmission cooler from the radiator and lay it down. Remove the AC condenser from the radiator and let it rest on the frame rail.



**49.** Cut the zip ties and remove the radiator from the vehicle. Remove the 2x clips for the radiator mounts then remove the mounts.



**50.** Make sure the washers are installed in the stock mounts.



**51.** Install the stock mounts onto the Mishimoto radiator using the provided 8mm hardware (13mm socket). Make sure the radiator drain bolt is tight (18mm socket).

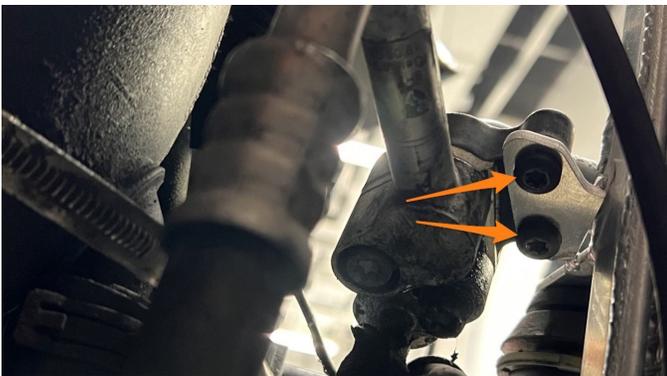


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**52.** Place the Mishimoto radiator between the frame rails and secure the top with zip ties like in step 47. Fasten the transmission cooler, AC condenser/power steering pump to the radiator with the provided M6 hardware (10mm socket). Attach air bleed hose on the top right side and secure with the stock clamp.



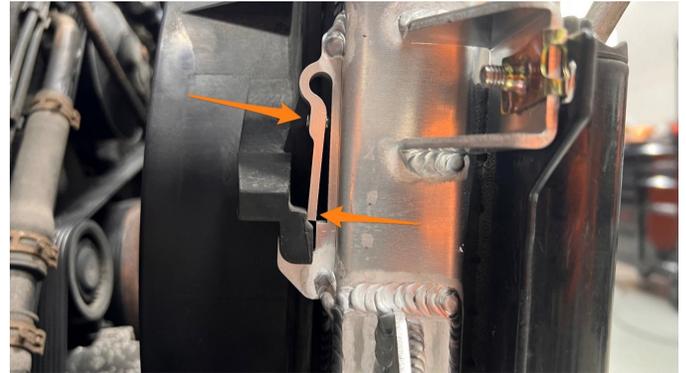
**53.** Fasten the 3 pairs of cooler lines to the radiator brackets (AC lines shown).



**54.** Install the radiator fan assembly onto the radiator ensuring the tabs fall in the slots and the top is hooked on the core support.



**55.** Install the provided set screws in the fan shroud clamps (2.5mm Allen) and tighten until shroud is locked in.



**56.** Install the stock rubber seals on the top and bottom of the radiator then reinstall the bottom brace from step 14 to support the cooling stack. Cut the zip ties once brace is installed.



**57.** Reinstall the front core support and headlight bracket assembly by reversing removal steps.



**58.** Reinstall the crash bar ensuring the tabs are properly slotted into the radiator mounts.

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**59.** Reinstall the stock plastic retainers and metal clips onto the crash bar tabs. Make sure the radiator is pushed all the way forward and the clips are fully latched on both sides.



**60.** Reassemble the rest of the vehicle by reversing the removal steps.

**Note:** The Mishimoto radiator kit comes with replacement o-rings for the radiator hose quick-connect fittings. We recommend these be replaced to avoid potential leaks. Test drive and check for coolant leaks. This concludes the installation.

## DISPOSAL INSTRUCTIONS

- › Do not dispose of any product as unsorted municipal waste. Use separate collection facilities. Contact your local authority for information regarding the collection systems available.
- › Never improperly dispose of any coolant, oil, or other chemicals

## WARRANTY INFORMATION



- › All claims must be accompanied with a picture of the Mishimoto product showing the issue for which the claim is being submitted.
- › Mishimoto asks that the customer inspect their purchased item for any damage immediately upon arrival.
- › Any product deemed dead on arrival (DOA) must be claimed within 14 business days of delivery. Claims outside of this time frame will not be covered under the Mishimoto Lifetime Warranty.
- › This warranty does not include payment and/or reimbursement of the cost of labor in connection with the removal of any product returned pursuant to the warranty policy or in connection with the installation of any replacement items provided under the warranty policy.
- › Mishimoto has the right to refuse a claim at any time.

- › When Mishimoto accepts a claim, Mishimoto retains full discretion to choose if it will: (i) repair or replace purchaser's original Mishimoto product; (ii) replace purchaser's original Mishimoto product with the most current available model; or (iii) provide the purchaser with a gift card redeemable on [Mishimoto.com](http://Mishimoto.com) in the amount of the original purchase price of the original Mishimoto product. The provision of a replacement of a Mishimoto product is subject to availability and Borne Off-Road retains the right to substitute any warranty claim item with a comparable item or credit at any time.
- › If Mishimoto determines that it will provide a replacement item in connection with a claim under this warranty policy, and such item is out of stock, Mishimoto will place the customer on backorder and ship the replacement product to the purchaser once it becomes available.
- › Mishimoto is not liable for incorrect shipments in connection with a claim if a claim form is completed incorrectly, or if a model number is not included in a claim.
- › If you have a vehicle equipped with an automatic transmission, please make sure to specify this within the text box on the claim form. Mishimoto is not responsible for incorrect replacement shipments if transmission type is not indicated.



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- › This product can expose you to chemicals which are known to the state of California to cause cancer. For more information visit: [www.p65warnings.ca.gov](http://www.p65warnings.ca.gov)