

INSTALLATION INSTRUCTIONS

COOLANT EXPANSION TANK





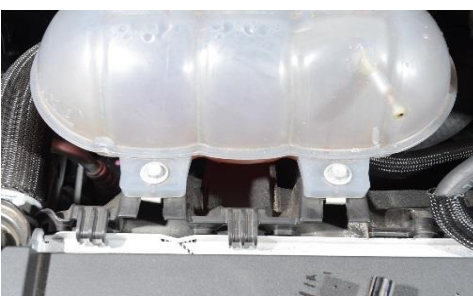

2011+ FORD MUSTANG



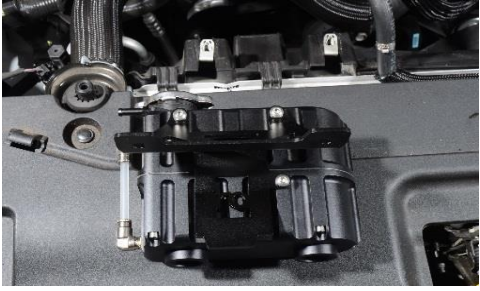



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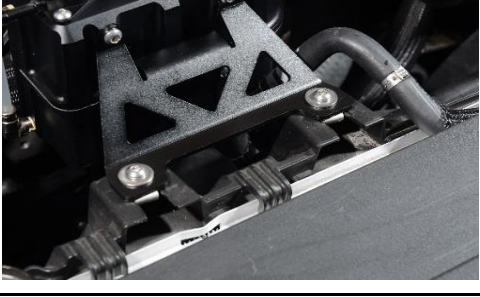

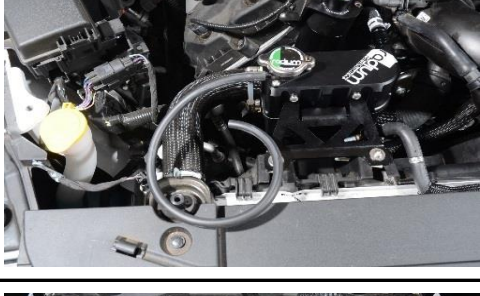

Steps below show installation in a 2015+ Ford Mustang (P/N: 20-0286)
The same procedure applies to installation in the 11-14 Ford Mustang (P/N: 20-0285)
Installation steps specific to the Shelby GT500 (S197) are shown in steps 23-34 (P/N: 20-0293)







Do NOT perform this installation on a hot engine. Wait for engine to fully cool before beginning.





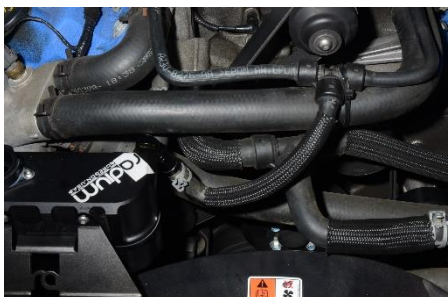

STEP	TOOLS NEEDED	INSTRUCTIONS	PHOTO
1	Metric Allen wrench	Place the included gasket in between the 2 coolant tank halves. Using a 3mm Allen hex wrench, install the 7 included socket head bolts. Use anti-seize on the threads to prevent galling. Tighten all bolts evenly until snug in a crisscross sequence (as shown). Then tighten each bolt to 38 in-lbs. in the same sequence using a calibrated torque wrench. WARNING: Do not overtighten! NOTE: After the tank is heat cycled, check the gasket for leaks and retorque if needed.	
	Torque wrench		
	Anti-seize		
2		Hand-tighten both elbow fittings in the 1/8" NPT ports. Then add an additional 1.5 to 3 turns until tight. The tapered pipe threads are preimpregnated with Teflon so no addition lubrication is required.	
		In order to install the clear tubing, temporarily clock each fitting, as shown.	
		Verify that the included clear tubing is 81mm (+/-1mm).	
		Push-in and fully insert the tubing into either elbow fitting, as shown.	
3		Bend the tube just enough to get it into the opposing instant tube fitting, as shown. NOTE: the fittings might need to be rotated slightly.	
4	8mm open end wrench	Using an 8mm open end wrench, rotate the elbow fittings so they are in line with one another. NOTE: if not tight enough, the elbow fittings may need to be rotated 360 degrees.	

5		Inspect the tubing. If it is not get completely straight, the tube is most likely slightly too long, as shown.		
		To fix, rotate the elbow fittings back as before. Simultaneously push the retaining locks flush to release the tube from the each elbow fitting.		
		Shorten the tube slightly, then reinstall.		
6		Make sure the area shown in the picture is free of dirt and debris before proceeding.		
		Place the included O-ring into the groove around the fill neck opening.		
7	3mm Allen wrench	Place the included fill neck receiver onto the tank, oriented to best fit the application.		
	Thread locker			
				Apply a medium strength thread locker and install the 3 included socket head bolts using a 3mm Allen hex wrench, as shown. Torque to 48 in-lbs. (5.4Nm).
8	Pliers	Shelby GT500 (kit 20-0293): Skip to steps 23-34		
		Release the hose clamps and disconnect the two small hoses that are attached to the nipples on the top side of the coolant tank.		
9	10mm Socket	Remove the two bolts holding the coolant tank to the fan shroud.		
10	Pliers	Tilt the coolant tank sideways as shown, being careful not to let coolant drain from one of the two small nipples on the tank. Tilt until there is no coolant gathered at the large nipple on the bottom of the tank.		
		Release the hose clamp on the large diameter hose attaching to the bottom port of the tank. Pull the hose off the nipple and do not allow it to fall.		

11		Tuck the large hose out of the way, as shown.	
		Cautiously remove the coolant tank from the engine bay being careful not to spill any.	
12		Drain the coolant from the tank into a clean container.	
13	4mm Allen	Attach the mounting bracket to the coolant tank (as shown) using the three M6 screws included in the kit.	
		The bracket may look slightly different depending on the configuration being installed.	
14	3/4" Socket	Install the 6AN ORB to 6AN flare fitting into the coolant tank upper port.	
	1" Socket	Install the remaining adapter fittings into bottom ports, as shown.	
	Oil	Lubricate all O-rings with light oil prior to installation.	
15	Hose Cutter	Cut the 3/8" heater hose included in the kit to ~3-1/4" long.	
		Find the 120 degree Push-lok hose end in the kit and install it into the heater hose. Some lubrication may be necessary. Push until the hose is fully seated.	
		No clamp is necessary for Push-Lok hose ends.	
16	11/16" wrench	Slip the included spring hose clamp over the open end of the hose, as shown.	
		Attach the 120 degree hose end to the -6AN fitting on the coolant tank bottom port. Use the same orientation shown.	

17	Pliers	Use the included stainless steel 3/8" hose barb coupler to join the hose previously installed to the OEM hose on top of the radiator.		
18	Pliers	Attach the large diameter coolant hose to the 3/4" barbed fitting on the coolant tank bottom port. Re-use the OEM clamp.		
19	4mm Allen	Position the coolant tank bracket in place making sure the bottom tab engages the slot in the radiator fan shroud. Secure the bracket to the OEM fastener nuts using the included button head screws and washers.		
20	11/16 wrench	Install the straight Push-lok hose end onto the top port of the coolant tank and tighten. Slide the last remaining OEM water hose onto the fitting and reuse the OEM hose clamp.		
	Pliers			
21		Locate the small diameter rubber hose included in the kit. Push it onto the coolant tank pressure relief barb fitting. Route the hose into the fender area and to the ground.		
22		Slowly return the previously removed coolant to the new tank to avoid air bubbles. 3/4 full is sufficient (do not fill the tank). After a few full heat cycles, coolant will be expelled until the proper level is reached.		
		Install the pressure cap. Start the engine and let the system warm up. Check for leaks. Installation is complete. Occasionally inspect the coolant level using the sight tube. Installation is complete.		

23	Pliers	FORD SHELBY GT500 (S197) INSTALLATION	
		Follow steps 1-7 to assemble the coolant tank.	
		Disconnect the small diameter coolant hose from the top nipple on the coolant tank. The hose clamp will be reused in a later step.	
24	10mm socket	Unbolt the coolant tank from the radiator and lift it up, exposing the attachment point of the large coolant hose.	
25	pliers	Disconnect the hose and drain the coolant into a clean bucket. The coolant can be reused. Remove the coolant tank from the vehicle.	
26	4mm Allen wrench	Bolt the mounting bracket to the back of the coolant tank using the supplied 3 screws.	
27	1" wrench	Install the 10AN ORB plug, barb fitting adapter and 6AN swivel fitting in the ports of the coolant, as shown in the picture. Lubricate all O-rings prior to assembly.	
	3/8" Allen wrench		
	7/8" wrench		
28	8mm nut driver	Find the short length of heater hose included in the kit and install the double ended hose barb adapter as shown. Use the included hose clamp and tighten with a screwdriver or nut driver.	

29	8mm nut driver	Install the other end of the short hose onto the barb fitting in the coolant tank and secure with another hose clamp, as shown.	
30	pliers	Connect the hose barb adapter to the factory coolant hose from step 24. Reuse the factory hose clamp, as shown.	
	4mm Allen wrench		
		Mount the coolant tank to the radiator shroud using the included M6 fasteners. Reference step 19.	
31	11/16" AN wrench	Install the barbed hose end fitting included in the kit onto the swivel 6AN adapter in the coolant tank and tighten.	
32	Hose cutter	Cut the OEM small coolant hose in the same location as shown in the picture.	
33	pliers	Install the small hose on to the hose barb fitting from step 31. Reuse the factory hose clamp.	
34		Install the piece of small vacuum hose included in the kit on to the overflow nipple and route the hose to somewhere outside the engine bay.	
		Install coolant tank cap and refill the tank. Start the engine and let the system get up to temperature then check for any leaks and address as necessary.	
		Installation is complete.	