



Radiator Install



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The radiator is a crucial part of your engine's cooling system. When planning to build a motor, replacing the stock radiator should be seriously considered. Keeping your motor cool can save unnecessary wear and tear and reduce pinging. On our project car, a blown 1994 Cobra, the stock radiator was not enough to keep the 308ci block cool. The motor was consistently running at 215° that significantly



impaired the amount of horsepower the motor was capable of producing. So, installing a Steeda Heavy Duty Aluminum Radiator was a necessary modification. The Steeda radiator is more than 3 times as thick as the stock Cobra radiator, plus it has 3 cores compared to the Cobra's 2-cores.

Replacing a radiator is a fairly simple task and requires less than an hour and half. Start by emptying the fluid



from the radiator. Place a drain pan under the passenger side of the radiator. There is a plastic wing nut located near the bottom of radiator on the passenger side. Loosen the wing nut and allow the fluid to drain. In order to completely remove all of the fluid remove the radiator cap. For the second step, remove the sheet of plastic covering your radiator, by removing the plastic plugs that hold it in place. These can be a bit tricky to remove if you have not done it before. A screwdriver and a pair of pliers

can aid you in this task. Next, take off the two bolts holding your overflow bottle into place. On 94-98 models there is another bolt holding the overflow bottle to the bottle mount. The bottle can be removed by a slight tug upward. Be sure to disconnect the rubber line running to the radiator neck. Set the overflow bottle aside. Loosen and remove the bolt to the radiator bracket located to the left of the overflow bottle mount. If you have an electric fan, remove the wiring harness from the fan.

The upper radiator hose needs to come off next. Loosen the two screw clamps located on each end of the hose. Once loose, pull off the hose and set it aside. Move the drain pan for your coolant under the lower radiator hose located on the driver's side of the radiator. The clamp holding the lower hose to the radiator requires some pliers to grasp and squeeze the clamp. Move the clamp to a different part of the hose to allow for the removal of the hose. Be careful, as some coolant will spill out of the radiator where the lower hose was attached. To remove the electric fan, if you have one, remove the 2 bolts on the driver's side, which attach the fan to the radiator. Now the only thing holding the radiator in place are two bolts located above your driver's side headlight. They are hidden so it may take some searching to find them. After their removal the radiator can be lifted straight out. Before you put in the new radiator, be sure to remove any plastic plugs or tape covering the openings.

The radiator has two metal 'feet' that slide into the rubber mountings on the bottom of your frame. Take special care to be sure that the feet are properly seated in the mounts. Insert and tighten the two bolts removed from above the headlight. Attach your fan shroud and bolt it into place. Add the radiator bracket on the left-hand side and tighten down. The overflow bottle can be inserted next... it may require a hard push to get it to snap into place. Once in place, bolt it to the mount, and attach the mount to your frame. On the Cobra there are 2 places on the overflow bottle mount to bolt it to the frame. We chose to use the holes closest to the overflow bottle to make sure that it was tight and secure. We didn't want the bottle to come loose at a run at the drag strip and get caught in the belts! Inspect your upper and lower radiator hoses for possible cracks or small holes that can cause a leak after re-installing them. Your clamps may also be worn and may need to be replaced. Install the upper and lower radiator hoses and tighten down the clamps on both sides. Use Teflon tape on the new wing nut supplied with the new radiator and screw into place. In order to attach the rubber hose from your overflow bottle to the radiator neck, use the supplied npt plug and use a wrench or ratchet to tighten. Don't forget to wrap it a couple of times with Teflon tape as well. DO NOT over-tighten the npt plug as it may strip the bung in the radiator neck!!!

Reconnect the harness to your fan. Double-check everything! Make sure all of your hoses are properly installed and secured.

To fill the radiator, first start the motor and then pour anti-freeze into the radiator using a funnel. Turn your heater on to high and run at full blast. This will help remove any air bubbles trapped in your coolant system. Keep in mind that the new radiator will hold more fluid than the stock one. Once the radiator is full, allow the motor to warm up to operating temperature. As the motor warms up the fluid in the radiator will rise so be careful not to let it overflow. If necessary give the upper radiator hose a few squeezes to be sure all the air pockets get pushed out the system. Carefully install the radiator cap and secure it. Use a rag to protect your hand because the cap will heat up rather quickly.



For the project car, the radiator made a drastic difference in the operating temperature. As stated before it used to run at 215° constantly. With the new Steeda Heavy Duty Aluminum Radiator, it consistently runs at 180° in cold weather, dropping to 165° once the thermostat opens. In warmer weather, the highest temperature reached was 190° however the Cobra has a chip which turns the electric fan no at 190°. For 94 to present [Mustangs](#), the fan should turn on between 210°-230°