YOU CAN DO IT EASY UPGRADES

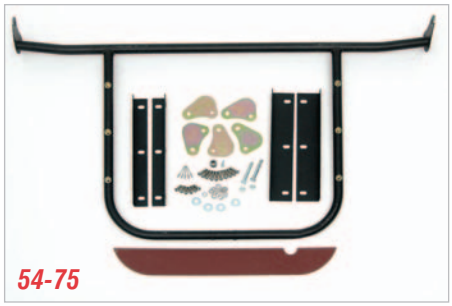
by Randy Irwin

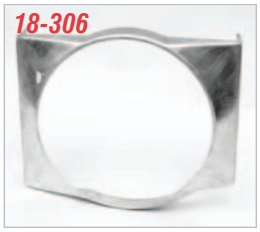
1955-57 RADIATOR INSTALLATION

Randy Irwin - Technical Writer

Randy has been involved in the Chevy parts business for over 25 years. He is a wizard at creating, making and modifying custom parts for Chevys.

The radiator core support is the main component that ties the front end sheet metal together in addition to providing the mount for the radiator. The original core support is made out of C-channel sheet metal and no matter how much body work you do, it still looks like something from the horse and buggy days. Eckler's Classic Chevy manufactures a tubular core support that replaces the original core support and is constructed of 7/8" round tubing. The 7/8" round tubing results in a custom looking engine compartment and 1/2" more clearance between the fan blade and radiator. Custom radiator filler panels are also available for the tubular core support.





Parts Needed:

54-73 1955 Tubular Core Support
54-74 1956 Tubular Core Support
54-75 1957 Tubular Core Support
18-306 V8 Aluminum Fan Shroud
18-307 6-Cylinder Aluminum Fan Shroud
18-308 Cross-Flow Upper Radiator Hose
18-309 Griffin Cross-Flow Aluminum Radiator Kit
18-201 Down-Flow Upper Radiator Hose
18-202 Lower Radiator Hose
18-44 Radiator Relocation Kit
18-23 Core Support Cushions & Shims
54-146 Extra Clearance Hood Latch Striker Plate

To order parts call 1-800-456-1957 or visit ClassicChevy.com

Tools Needed:

3/4" Masking Tape
1/2" Wrench
5/32" Allen Wrench

Time Frame:

4-Hours

Photo #1a & 1b: With the radiator in the V8 position (behind the core support) and using a short water pump small block, the fan blade is very close to the radiator core. When additional pulleys are added to drive air conditioning or power steering, a fan spacer is required so the fan will clear the additional pulleys. With the fan spaced forward, it may no longer clear the radiator core.

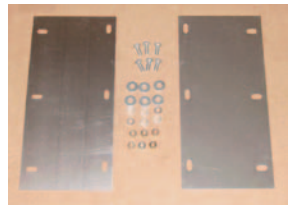


Photo #2: A simple solution for this problem is to move the radiator to the 6-cylinder (in front of the core support) position. This can be done by removing the V8 core support and installing a 6-cylinder core support and purchasing a 6-cylinder position radiator. Or, a clean and simple solution is to use the radiator relocation brackets **P/N 18-44.** These brackets install a V8 radiator in the 6-cylinder position using the original V8 core support.

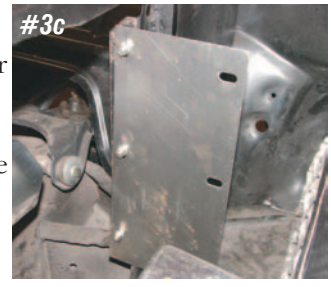


Photo #3a & 3b & 3c: The radiator is bolted to the core support with three bolts per side. Drain the radiator, remove the six radiator mounting bolts, the radiator hoses, transmission cooler lines (if the car is an automatic) and the radiator can be removed. The mounting holes in the relocation brackets are slotted, allowing the radiator to be adjusted up and down as well as front to rear.

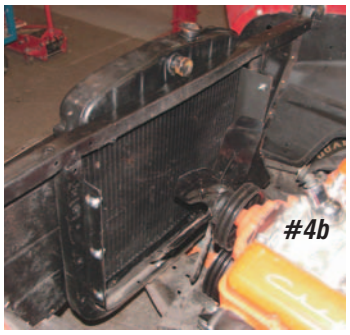
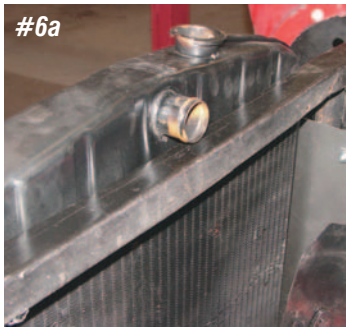


Photo #4a & 4b: Using the original radiator mounting bolts, attach the radiator to the new relocation mounting brackets and adjust appropriately. With the radiator now in the 6-cylinder position, there is plenty of room for any type of pulley system, a long water pump on a small block engine or even a short water pump big block engine.

Photo #5a & 5b: With the V8 radiator relocated to the 6-cylinder position, longer radiator hoses must be installed. Use **P/N 18-201** for the upper hose and **P/N18-202** for the lower hose. These hoses are also used if a 6-cylinder radiator and 6-cylinder core support are being used along with a small or big block. If the car has an automatic transmission, longer cooler lines will be needed as well, **P/N 19-41** for a TH200/350/400 or **P/N 19-70** for a 700R4.



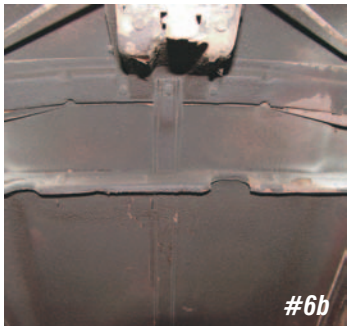
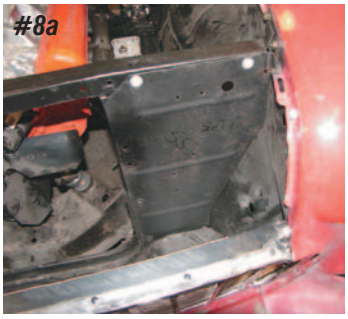
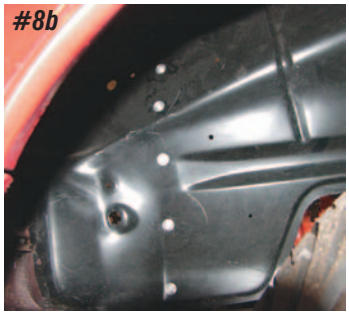


Photo #6a & 6b: The radiator top tank neck on the 1955 and 1956 cars is centered for both V8 and 6-cylinder position radiators. The radiator top tank neck on 1957 cars was centered on V8 position radiators, but is offset to the driver's side on 6-cylinder position radiators. The under hood baffle must be notched on 1957 cars when a V8 radiator is installed in the 6-cylinder position.

Photo #7a & 7b: The original core support is made out of stamped C-channel that has ripples in the steel from being formed and is fairly weak when compared to a tubular design.The radiator filler panels bolt to the front of the core support and their crude appearance can take away some of the smoothness on a custom car. If you need to purchase a radiator core support they are only available used, are hard to find and are usually in poor condition.





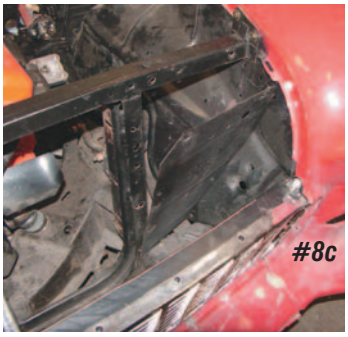


Photo #8a & 8b & 8c & 8d: We are going to swap out the original radiator core support with the Eckler's Classic Chevy tubular core support. Using the tubular core support will not only give your engine a more custom look, you will also gain almost a 1/2" more clearance between the radiator core and the fan blade when the radiator is in the V8 position. To remove the old core support, remove the left and right radiator filler panels. The panels bolt to the front of the core support, to the splash pan and inner fender wells. With all the bolts removed the filler panels can be removed from the core support.

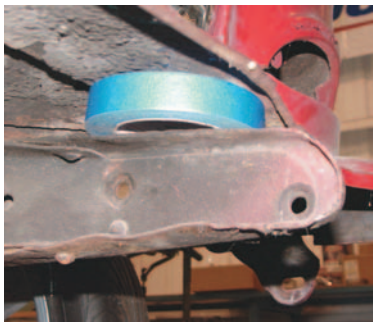


Photo #9: The radiator core support also holds the front fenders in place. The fenders MUST be supported before the core support is removed or paint damage may occur. We found slipping a roll of 3/4" masking tape between the splash pan and the top of the frame supported the front fenders perfectly.

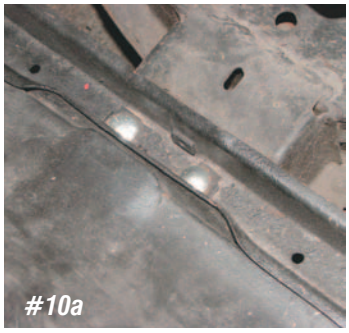


Photo #10a & 10b: The radiator core support is bolted to the frame in the center with two 3/8" carriage bolts and nuts. There are cushions and shims located here between the core support and frame.

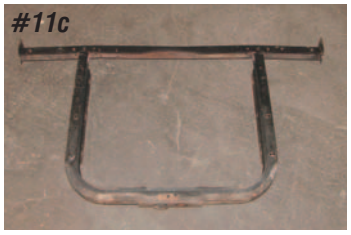


Photo #11a & 11b & 11c & 11d: Remove the two bolts on each side of the core support where it is bolted to the front fenders. There are often shims between the core support and inner flanges of the fenders.

With the bolts removed, the core support can be lifted straight up and out of the engine compartment.

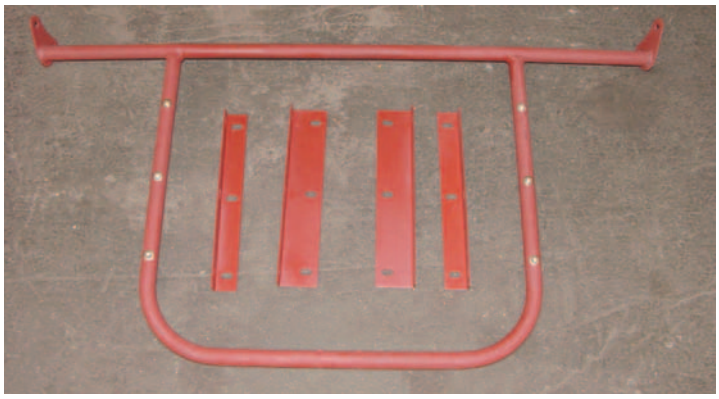
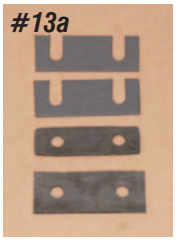


Photo #12: One of the best features of the tubular core support is that the same core support can be used to mount a 6-cylinder or V8 down-flow radiator as well as a cross-flow radiator.



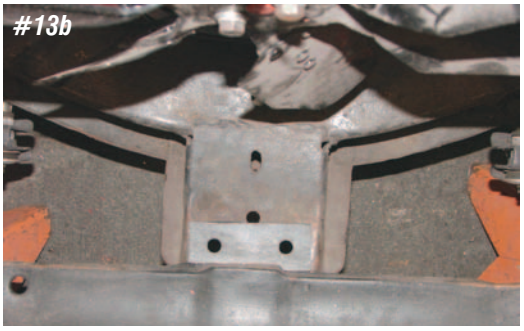
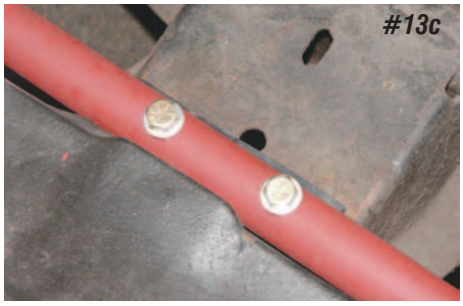


Photo #13a & 13b & 13c: The radiator core support cushion kit **P/N 18-23** includes the cushions and shims to mount a stock or tubular core support. Place just the upper cushion on the frame and install the tubular core support using the supplied 3/8" X 2-1/2" bolts, flat washers and lock nuts. The shims may need to be added later to align the core support to the front fenders.



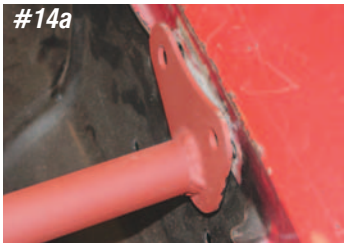


Photo #14a & 14b & 14c: The tubular core support bolts to the fenders using the same holes the stock core support uses. Shim as required using the supplied new shims.

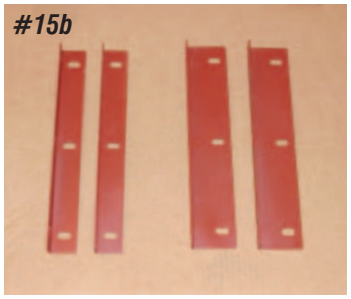


Photo #15a & 15b: The mounting brackets for the radiator bolt to nut inserts on backside of the tubular core support to give the front side of the core support a very clean look. The short brackets are used to mount the radiator in the V8 position while the long brackets are used to mount the radiator in the 6-cylinder position.

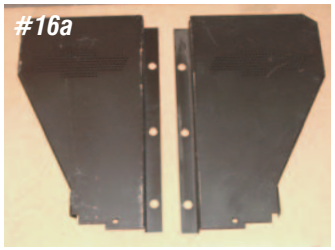


Photo #16a & 16b & 16c: The tubular core support uses custom filler panels that bolt to the backside of the core support and to the original holes in the inner fenders and splash pan. The panels are available with louvers or bowties, primered carbon steel or polished stainless steel.

Photo #17a & 17b & 17c & 17d: The tubular core support kit includes polished stainless steel button head hardware. The 1/4" bolts and locknuts hold the filler panels to the inner fenders and the 5/16" bolts hold the radiator mounting brackets to the core support. The vertical slots on the radiator mounting brackets mount to the core support.

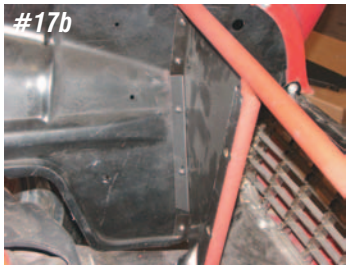


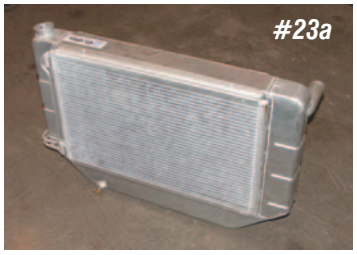
Photo #18a & 18b: The tubular core support is made of 7/8" round tubing while the old stock core support measures 1-1/4". By installing the tubular core support, you will gain 1/2" of additional clearance between the fan blade and radiator core. This can amount to a mile when you are installing different accessories on the front of your engine.

Photo #19: The tubular core support and filler panels can be painted body color to really give the engine compartment a custom look. Be sure to test fit everything before applying paint.

Photo #20: A great addition to any radiator is installing a fan shroud. A fan shroud will force all the air that is pulled by the fan blade through the radiator and in turn make the cooling system much more efficient. The aluminum fan shroud for a radiator in the V8 position is **P/N 18-306.** Our aluminum fan shroud can be sanded and polished, powder coated or painted.

Photo #21a & 21b: If your 6-cylinder radiator is going to be mounted in the 6-cylinder position, the longer radiator brackets supplied with the tubular core support will be used. The 6-cylinder brackets bolt to the nut inserts on the backside of the core support and feed through the opening to mount the radiator in the 6-cylinder position.

Photo #22: A 6-cylinder radiator will bolt directly to the new brackets. The aluminum fan shroud **P/N 18-307** will work perfectly with the tubular core support.



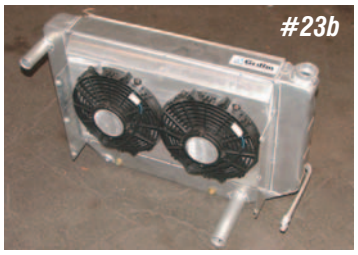


Photo #23a & 23b: If you want to install the "Mack Daddy" of radiators, you need the Griffin cross-flow. The cross-flow radiator bolts to a stock V8 radiator core support or can be used with the tubular core support and the V8 brackets. This radiator can be purchased with electric fans and an A/C condenser or it can be purchased separately.

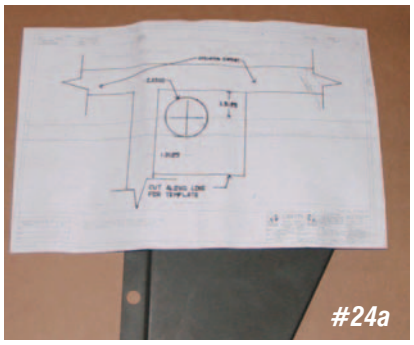
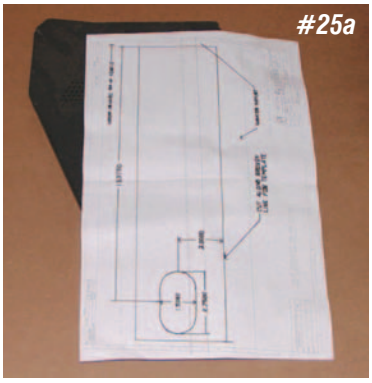


Photo #24a & 24b & 24c: A 2" hole must be drilled in the driver's side filler panel for the upper radiator hose on the cross-flow. A template is supplied with the cross-flow radiator so there is no guessing on where to put the hole.



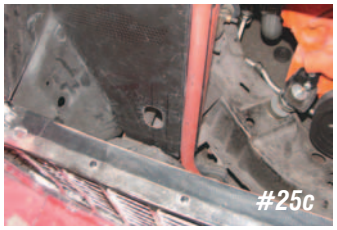
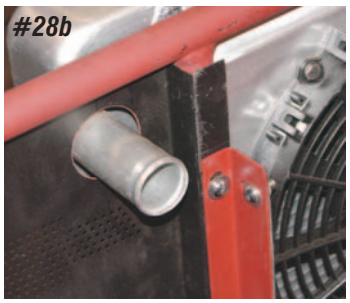


Photo #25a & 25b & 25c: If the cross-flow A/C condenser is used, a hole must be drilled in the passenger side filler panel for the condenser lines. Using a 1-1/4" hole saw, drill two adjacent holes and connect them to create an oval.

Photo #26: On 1955 cars only; the grille, grille molding and grille tie bar must be removed to install the cross-flow radiator.

Photo #27: The A/C condenser must be removed from the radiator to allow the radiator to be installed on all years.



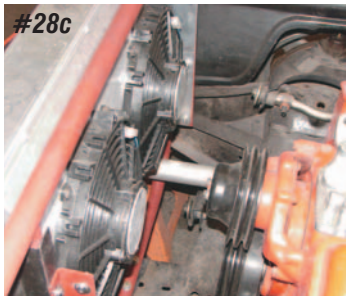


Photo #28a & 28b & 28c: The radiator bolts to the V8 brackets using the supplied stainless steel Allen head bolts. The radiator can be adjusted up or down to center the upper water neck perfectly in the new hole in the filler panel. With the radiator in the 6-cylinder position, even with the electric fan system there is plenty of room for any fan belt configuration.

Photo #29: The Griffin cross-flow has a large lower tank that fits between the left and right side tanks. This tank adds five additional quarts of coolant over other cross-flow brands, which will only help the cooling capacity. In addition, this tank fills the well area in the splash pan in front of the core support. The petcock drain on the cross-flow will line up with the original hole in the splash pan for the stock petcock.

Photo #30a & 30b: With radiator installed, the A/C condenser can be installed back onto the radiator. The hard lines from the condenser pass through the new oval hole on the passenger side filler panel.

Photo #31: With the radiator and A/C condenser installed, the grille can be put back in place.

Photo #32a & 32b & 32c: On 1955 cars only, the grille is so flat it gets very tight between the condenser and hood latch striker plate and support bracket. You will have to trim both pieces to clear the radiator. On our 1955 the back side of the bracket had to be trimmed about 5/16". With the bracket trimmed we now have about 5/16" of clearance.

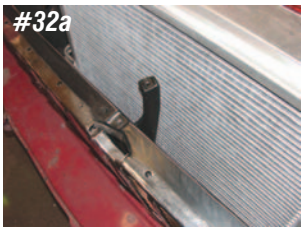


Photo #33: The latch plate was trimmed about 3/8" to give us about 5/16" clearance. If you don't wish to trim the latch striker, an extra clearance polished aluminum striker **P/N 54-146** may be used.

Photo #34: Another great feature of the Griffin cross-flow is that it uses the stock lower radiator hose. Use **P/N 18-26** for a small block engine and **P/N 18-202** for a big block engine.

Photo #35a & 35b: Now for the icing on the cake; our molded upper radiator hose **P/N 18-308.** This hose will make the conversion very clean and factory looking. For a small block engine trim, each end of the hose by 2". For a big block engine trim, each end 3".

We have given you several choices on how to install a down-flow or cross-flow radiator system in your classic and the clearance issues to consider when installing either type. This should help you make the decision on which installation method is best for your classic.

Good luck!