INSTALLATION INSTRUCTIONS

Removal of Existing Fan, Shroud & Radiator

1. **BE SURE THE ENGINE IS COOL BEFORE PROCEEDING.**

2. Disconnect the negative (-) battery cable from inside the trunk compartment before proceeding with the installation. The battery is located beneath the spare tire cover. **Note:** Do not close the trunk while the battery is disconnected. The trunk latch is triggered open by means of power from the battery.

3. Drain all coolant from the radiator. Use the factory drain plug at bottom of radiator. Remove radiator cap to release vacuum from inside the radiator for better draining of coolant.

4. Remove oil filler cap. Remove large plastic engine cover by lifting up front edge and then pulling cover straight out toward you. Replace oil filler cap. (see Detail A)

5. Disconnect electrical plug from the mass air flow sensor located on outlet tube of the air filter housing.

6. Remove air cleaner outlet duct from between air filter housing and intake manifold by loosening large hose clamps (2ea.). Removal of PCV tube will go along with removing air cleaner outlet duct. Take care when removing PVC tube as to not break fitting at manifold connection point. (see Detail B)

7. Unplug the power connector for fan motors located next to the coolant overflow bottle on passenger side.

8. Remove the small diameter steam vent hose. The attachment of this hose is from the radiator filler neck to front of the driver's side cylinder head. (see Detail C)

9. Disconnect the coolant overflow hose from the radiator filler neck. Remove the hose from the hooked on routing path along the top of fan shroud until separated from fan shroud. Tuck this hose out of the way.

**Note: Always read instructions and verify kit contents prior to installation.**

<table>
<thead>
<tr>
<th>Hardware Kit Includes:</th>
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<tbody>
<tr>
<td>screw #8x1/2&quot; pan head (1ea)</td>
</tr>
<tr>
<td>nylon hose routing clamp (1ea)</td>
</tr>
<tr>
<td>small worm drive hose clamp (3ea)</td>
</tr>
<tr>
<td>large worm drive hose clamp (2ea)</td>
</tr>
<tr>
<td>bolt 1/4&quot;-20x5/8&quot; (8ea)</td>
</tr>
<tr>
<td>bolt 1/4&quot;-20x3/4&quot; (2ea)</td>
</tr>
<tr>
<td>flat washer 1/4&quot; I.D. (10ea)</td>
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<tr>
<td>brass pipe-nipple (1ea)</td>
</tr>
</tbody>
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<table>
<thead>
<tr>
<th>Connector Kit Includes (Optional):</th>
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<tbody>
<tr>
<td>butt splice (4ea)</td>
</tr>
<tr>
<td>nylon tie strap (6ea)</td>
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</table>

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Radiator ..................................... 1 ea.
Pre-Mounted Fan (Optional) ...... 1 ea.
Brackets, mounting to vehicle ...... 4 ea.
Rubber Hose ............................. 2 ft.
Radiator Cap ............................. 1 ea.
Instruction Sheet ....................... 1 ea.
Warranty Card ............................ 1 ea.
Flex-a-lite Decal ......................... 1 ea.
*Hardware Kit ............................. 1 ea.
*Connector Kit (Optional).......... 1 ea.

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*Note: Manual transmission preferred; automatic transmission requires a remote cooler. (pt. #4116C available)*

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*Kit #56488 or Camaro Radiator Only Kit Kit #56418 Fits 2010-2011 Chevrolet Camaro*

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**Detail A**

**Detail B**

**Detail C**
10. Disconnect the upper radiator hose, on drivers’ side, from inlet tube of radiator and move out of the away. You could possibly hold it back with string or a large nylon strap.

11. Remove the ½” bolts (2ea) securing the fan shroud to top of radiator and carefully lift fan shroud assembly up and out.

12. Disconnect the lower radiator hose, on passengers’ side, from outlet tube of radiator and move it out of the way.

13. Disconnect both transmission coolant lines from radiator (if applicable). Cap / plug lines to prevent transmission fluid from draining out. (see Detail D & E)

14. Remove 10mm bolts (2ea) loosening an A/C line from the frame and cross member located behind the passenger side radiator outlet tube. Remove 10mm bolt (1ea), loosening a power steering line, located near drivers’ side frame / cross member merger point. Loosening the lines creates more room for ease of stock radiator removal and Flex-a-lite® radiator insertion. (see Detail E)

15. Remove ½” bolts (2ea) securing A/C condenser at top / front of radiator.

16. Remove 10mm bolts (2ea) securing both “L”-brackets at top of the radiator to radiator support. Note: Save “L”-brackets and bolts for use during new radiator installation. (see Detail F)

17. The A/C condenser must be disengaged from the stock radiator for radiator removal. Tilt top of the radiator toward engine and lift A/C condenser off and out of plastic loop attachment points (2ea) located on front of radiator bottom tank. This will now allow the stock radiator freedom to move upward. Note: The idea is to remove the radiator without removing the A/C condenser or disturbing its connections.

18. Carefully lift radiator up and out. Be mindful not to force anything. Make sure lower radiator mounting grommets are still attached to frame of vehicle. If not, separate them from bottom of removed radiator and re-attach them to original frame positions. Note: Use caution while removing the radiator, it may still contain coolant which can spill out.

Note: For automatic transmission equipped vehicles.
We chose not to install a transmission cooler within our radiator’s side tank. This maximizes the cooling efficiency of both your engine and transmission. If your vehicle is equipped with an automatic transmission, you will need to install an aftermarket transmission cooler. We have developed an auxiliary direct fit transmission cooler kit for the Camaro ’10-’11, part #4116C. Flex-a-lite makes a full line of transmission coolers along with customized mounting options.

For more mounting options, call Technical Assistance at: 1-877-767-0554 or FAX: (253) 922-0226. or visit www.flex-a-lite.com

Installation of Radiator and Fan Combo #56488 or Radiator only #56418

Note: If your vehicle is equipped with an automatic transmission, an aftermarket transmission cooler kit should be installed during new radiator installation.

Radiator mounting requires utilizing two pre-mounted brackets on top of radiator and two lower brackets that are pre-placed at the lower stock mounting points prior to lowering the radiator into position.

1. Mount the top mounting brackets using supplied ¼-20 x 5/8” hex bolts (4ea), ¼-20 flat washers (4ea). Place brackets on top of radiator, along top cap, aligning holes of each bracket with pre-installed threaded inserts. The bent 3/8” lip of both top brackets hangs over to the engine side. The drivers’ side bracket will have the longer tab with an installed threaded insert. (see Detail G on next page)
2. Place the lower brackets into the original stock rubber grommets, inserting the aluminum rod, until fully seated. The bent 3/8" lip of both bottom brackets is positioned toward the engine side of radiator, just like the top brackets. (see Detail H) The passengers' side bracket will have the longer "loop". Lift up, and then lower, the A/C condenser placing manifold ends into loops of the lower brackets. This will replicate how the stock radiator held the lower portion of the A/C condenser.

3. With the top brackets attached, carefully lower the radiator into position resting finally onto the pre-positioned lower brackets. (see Detail H) The pre-positioned lower brackets will act as cradles to catch and hold the radiator when lowered into place. Center the radiator between the vehicle's side frame rails. Double check the lower brackets, A/C condenser, and radiator for proper positioning.

4. From below the vehicle, align slots of each bottom bracket with pre-installed threaded inserts of radiator. Secure bottom brackets to bottom of radiator using supplied 1/4-20 x 5/8" hex bolts (4ea), 1/4-20 flat washers (4ea). (see Detail I)

5. From top side of vehicle, reattach the A/C condenser to the threaded inserts of the top brackets using supplied 1/4-20 x 3/4" hex bolts (2ea), 1/4-20 flat washers (2ea). (see Detail J)

6. Reattach the "L"-brackets and bolts saved during removal of the stock radiator in step “16”. Place the slotted end of the brackets onto the aluminum posts of the radiator top brackets and then insert the bolt through the brackets into the threaded holes of the radiator support. Apply downward pressure onto the bracket before tightening the bolts. This will minimize the possibility of radiator movement. (see Detail K)
7. Refasten 10mm bolts (2ea) securing the A/C line to the frame and cross member located behind the passenger side radiator outlet tube. Refasten 10mm bolt (1ea), securing the power steering line, located near drivers’ side frame / cross member merger point.

8. Due to inlet and outlet tube alignment differences on new radiator, you will need to trim both hoses to acquire proper fitment when securing. Carefully position the hoses next to the radiators’ inlet and outlet tubes to determine how much of each needs to be removed. Mark a line and then trim to length. It’s better to trim the hose a little long and need to re-trim than to cut it short and need to purchase another hose. **Secure the bottom return hoses only at this time** to radiator outlet tube utilizing the provided hose clamp. (see Details L & M)

9. To install the new Flex-a-lite® fan motors to the vehicles’ existing temperature regulating system you will need to remove the large grey electrical connector from the stock fan shroud. Cut the motor wires at the locations shown. (see Detail N) Use the stock fan shroud as a reference as to how the wires should be routed to each of the motors from the grey electrical connector. The red & black wires from the stock shroud motors on the driver & passenger sides will be replaced with the red & black wires on the new Flex-a-lite® shroud motors. Re-connect the large gray electrical connector back onto it’s male mating connector. (see Detail O) Trim the new Flex-a-lite® motor wires to neatly meet up with the salvaged grey connector wires. Use the provided yellow butt connectors to crimp / splice new motor wires and salvaged grey connector wires together. Use the provided nylon tie straps to secure the wires to the outside of the shroud.

10. Attach the provided ¼” I.D. hose to the previous steam vent hose connection point on front of drivers’ side cylinder head with provided hose clamp. Route the hose directly toward top of radiator and attach with provided 3/8” nylon clamp and screw to small hole. (see Detail P) Continue by routing ¼” I.D. hose toward barbed elbow fitting mounted on top of drivers’ side radiator inlet tube. Carefully position the hoses next to the barbed elbow fitting to determine how much hose needs to be removed. Mark a line and then trim to length. Secure ¼” I.D. hose to barbed elbow fitting with provided hose clamp. (see detail M)

11. Install the provided pipe-nipple for the coolant overflow hose into filler neck of the radiator. Route and trim the previously tucked away stock overflow hose as needed.

12. Note regarding filling cooling system: When you attempt to fill the vehicle’s cooling system in the traditional way, by only filling the radiator, the vehicle will overheat. The V-8 Camaro thermostat is located in the coolant return line. We suggest “Back filling” the engine first by pouring coolant in through the top radiator hose, then filling the radiator. “Back filling” the engine block allows coolant to reach the back side of the thermostat. When the engine has heated up the coolant, from the backside of the thermostat, the thermostat will open allowing the cooling system to properly operate.

**Note: Reference vehicle manufacture for proper recommended coolant.**
13. Secure the top radiator hoses to radiator inlet tube after you have filled the cooling system utilizing the provided hose clamp. **(see Detail M on previous page)** Top off radiator coolant level as necessary and attach supplied 20psi. radiator cap. Remember to fill reservoir to cold fill level. Check for leaks before proceeding. **Note: BE SURE that all moving parts of the engine and electric fan (where applicable) are clear of each other before proceeding!!**

14. Reattach air cleaner outlet duct with attached PCV tube back onto previous mounting points. Tighten large hose clamps (2ea) and reattach PCV tube back to manifold connection point.

15. Reconnect electrical plug back onto mass air flow sensor located on outlet tube of the air filter housing.

16. Remove oil filler cap. Reattach large plastic engine cover in opposite order of how it was removed. Reattach oil filler cap.

17. Reconnect the negative (-) battery cable inside the trunk compartment.

18. Start vehicle and idle until it has reached normal operating temperature. The electric fans should cycle on and off to regulate engine coolant temperature.

19. After electric fan operation has been verified turn vehicle off and allow coolant to return to ambient temperature. Check coolant levels of reservoir and radiator topping off as needed.

20. **Note:** We suggest following the vehicle manufactures recommended transmission fluid level checking and filling procedure before operating the vehicle on the road. The transmission on this vehicle does not come equipped with a fill tube and dipstick.

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**Limited Radiator Warranty**

Flex-a-lite Consolidated warrants its aluminum radiators to be free from defects in materials and workmanship for a period of one year from the date of purchase at retail by the original purchaser. This warranty is extended only to the first purchaser of any such radiator at retail. If the Flex-a-lite radiator is used in any racing application, repaired or altered, this warranty is considered null and void, it also does not cover any radiator repaired or altered in any way. If products such as transmission cooler or electric fan are attached with cable ties or similar fasteners that run through the radiator core, the warranty is voided.

This warranty does not cover labor, materials not manufactured by Flex-a-lite, or shipping charges. The retail purchaser is responsible for the appropriate use and application of the product. This warranty does not cover the effects of physical or chemical properties of water, steam, or other liquids used in the radiator. Radiators used without an adequate proportion of premium quality antifreeze/coolant are not covered by this warranty. Flex-a-lite aluminum radiators require a correct proportion of quality coolant, which contains aluminum corrosion inhibitors in the formula.

Claims for internal damage of the engine, components, or user's vehicles are not covered by this warranty. It is the responsibility of the Flex-a-lite product user to monitor engine operation and have proper detection devices installed to warn the user of overheating. Specific exemptions to the warranty include tube damage, ballooning or bursting from excessive engine operating temperature, internal corrosion due to inadequate proportions of antifreeze/coolant, or damage to radiator resulting from a collision damage.

Flex-a-lite shall not be responsible for damages to its product or injury to persons using the product when improperly opening radiator pressure caps, burst hoses, etc. Flex-a-lite shall not be responsible for injury or harm to persons or property caused by persons or vehicles using our products.

The purchaser's remedy for breach of this warranty, exclusive of all other remedies provided by law, is expressly limited to repair or replacement of any part or parts. All products returned for warranty consideration must be returned through the point of purchase with all transportation expenses prepaid. Upon receipt of the product, Flex-a-lite will examine the product to determine the condition and validity of the claim.

Radiators or products received, which were damaged in shipping, should immediately be reported to the shipping carrier as damaged, and claims of damage filed accordingly. Contact the transport carrier (UPS, truck line, etc.) for procedures in filing damage claim with the carrier or their agent. Do not return product damaged in shipping to Flex-a-lite.

Some states may not allow a limitation on the duration of any implied warranty. The above warranty may not apply to you. This warranty grants you specific legal rights, and you may have other rights, which vary from state to state.

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The Flex-a-lite Limited Warranty

Flex-a-lite Consolidated, 7009-45th St. Ct. E., Fife, WA 98424, Telephone No. 253-922-2700, warrants to the original purchasing user, that all Flex-a-lite products to be free of defects in material and workmanship for a period of 365 days (1 year) from date of purchase. Flex-a-lite products failing within 365 days (1 year) from date of purchase may be returned to the factory through the point of purchase, transportation charges prepaid. If, on inspection, cause of failure is determined to be defective material or workmanship and not by misuse, accidental or improper installation, Flex-a-lite will replace the product free of charge, transportation prepaid. **Flex-a-lite will not be liable for incidental, progressive or consequential damages.** Some states do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation or exclusion may not apply to you. This warranty gives you specific legal rights and you may have other rights, which vary from state to state. The Flex-a-lite warranty is in compliance with the Magnuson-Moss Warranty Act of 1975.