



Flex-a-Fit[®]
ALUMINUM RADIATORS



Jeep CJ Radiator & Fan Kits;

*Right hand inlet: stock application
or Ford V8 conversion. Kit #51169

*Left hand inlet: GM V8 conversion. Kit #51168

Jeep CJ Radiator Only Kits;

*Right hand inlet: stock application
or Ford V8 conversion. Kit #51009

*Left hand inlet: GM V8 conversion. Kit #51008

Fits 1972-1986 Jeep CJs

Note: Manual transmission preferred; automatic transmission requires a remote cooler.

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

Radiator1 ea.
Pre-Mounted Fan (Optional)1 ea.
Brackets, mounting to vehicle2 ea.
Instruction Sheet1 ea.
Warranty Card1 ea.
Flex-a-lite Decal.....1 ea.
*Hardware Kit1 ea.
*Wiring Kit (Optional).....1 ea.

* *Hardware Kit Includes:* clip on nut (4ea), 5/16-18 bolts (4ea), 5/16" washers (4ea), 5/16" lock washers (4ea), 1/4-20 t-nut studs (4ea), 1/4" washers (4ea), 1/4-20 locknuts (4ea), brass overflow fitting (1ea)

* *Wiring Kit Includes (Optional):* 40 amp fuse (1ea), fuse holder (1ea), thermostat knob (1ea), rubber probe cap (1ea), tie straps (6ea), blue 3-way connector (1ea), yellow butt connectors (2ea), yellow ring connectors (2ea), yellow female spade connectors (2ea), blue female spade connectors (2ea), green 14 guage wire (5ft), red 14 guage wire (6ft), red 12 guage wire (6ft), black 12 guage wire (6ft)

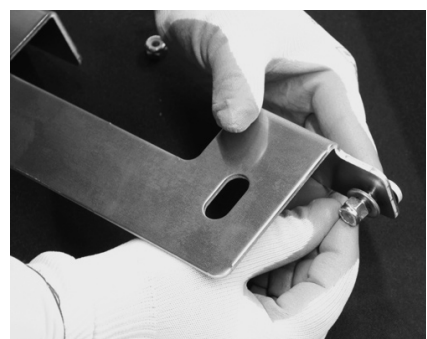
INSTALLATION INSTRUCTIONS

Removal of Existing Fan, Shroud & Radiator

1. **BE SURE THE ENGINE IS COOL BEFORE PROCEEDING!!**
2. Disconnect the negative (-) battery cable before proceeding with the installation.
3. Drain all coolant from the radiator. Use the factory drain plug if available. It may be necessary to remove the radiator cap to release vacuum inside the radiator for better draining.
4. Remove the upper and lower hoses from the radiator. It is not necessary to remove them completely from the vehicle for installation.
5. Remove factory fan, clutch, & shroud (if equipped) from vehicle.
Note: Consult your vehicle service manual for details on clutch fan removal.
6. If vehicle is equipped with an automatic transmission, remove both inlet and outlet lines from radiator.
Note: A *remote* mount oil cooler (not included) will need to be used to cool transmission fluid.
7. Remove mounting bolts securing the radiator to vehicle on both driver and passenger side then remove the original radiator.
Note: Use caution while removing the radiator to avoid any possible spillage.

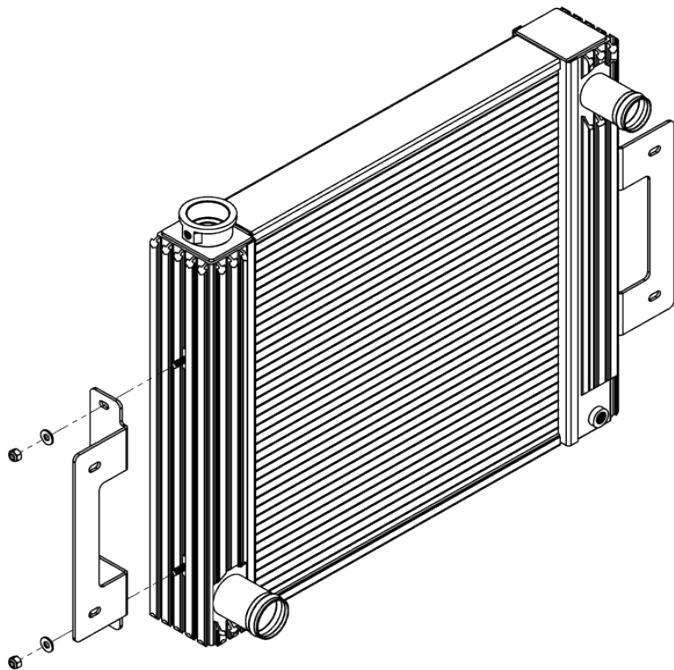
Installation of Radiator and Fan Combo #'s 51168, 51169 or Radiators only #51008, 51009

1. Loosely attach the T-bolts, washers, and lock nuts to the brackets, leaving enough "gap" between T-bolts and bracket to allow the T-bolts to slide easily down the side tracks of the tanks. **see Detail 1**
2. Attach brackets to the side tanks on the outside ends of the radiator, by sliding the brackets down the second track back from the radiator's engine side. Loosely tighten bracket so that they are about 5" from top of side tank but do not secure locknuts yet.
see Detail 2 (Next Page)

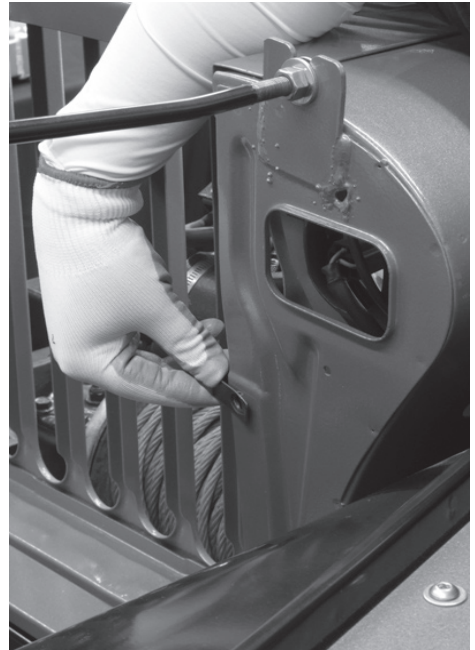


Detail 1

Installation instructions continued on next page



Detail #2



Detail 3

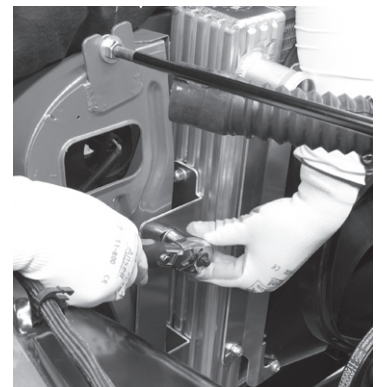
3. Replace the OEM radiator support “spring / clip on nuts” (4ea.) with the 5/16” nuts provided in the mounting hardware kit bag. These will be used to secure the radiator mounting brackets to the radiator support. **see Detail 3**

4. Lower the radiator into the engine compartment.
5. Utilizing the included 5/16” hex bolts (4ea.), 5/16” flat washers (4ea.), and 5/16” lock washers (4ea.), mount radiator through previously attached brackets to previously installed spring / clip on nuts on radiator support. Loosely attach but do not tighten securely yet. **see Detail 4**

6. *Flex-a-Fit®* radiator tanks are made for maximum adjustability. Depending on space limitations within your engine compartment, you will need to adjust bracket positioning by sliding the T-bolts up / down or even select an alternate tank slot. Be sure all bracket mounting hardware has been sufficiently tightened after proper positioning has been achieved.

Note: BE SURE that all moving parts of the engine and electric fan (where applicable) are clear of each other before proceeding!!

7. Re-secure the pulley to the water pump, using the four (4) bolts that held the fan to the water pump, then reinstall fan belt. If replacing the radiator only, reattach the fan to water pump. **Note: Be sure to check the clearance of these bolts on the backside of the pulley to the water pump.** After being tightened, there should be no less than 1/4” of clearance to the water pump. If they are too close, they may cause severe damage to the water pump upon start-up. It may be necessary to replace these bolts with shorter ones.



Detail 4

8. Connect the upper and lower radiator hoses to the new radiator. Make sure they are properly clamped to the inlet and outlet tubes. **Note:** Once again.... **BE SURE** that all moving parts of the engine and electric fan (where applicable) are clear of each other before proceeding!!

9. Install the pipe-nipple for the overflow tube to the filler neck of the radiator. Route and trim the overflow hose as needed. **Note:** Be sure that there is enough clearance between the hose and any moving engine components.

10. Fill radiator/ cooling system with vehicle manufacturer recommended coolant. Remember to fill reservoir to cold fill level if equipped. Check for leaks before proceeding.

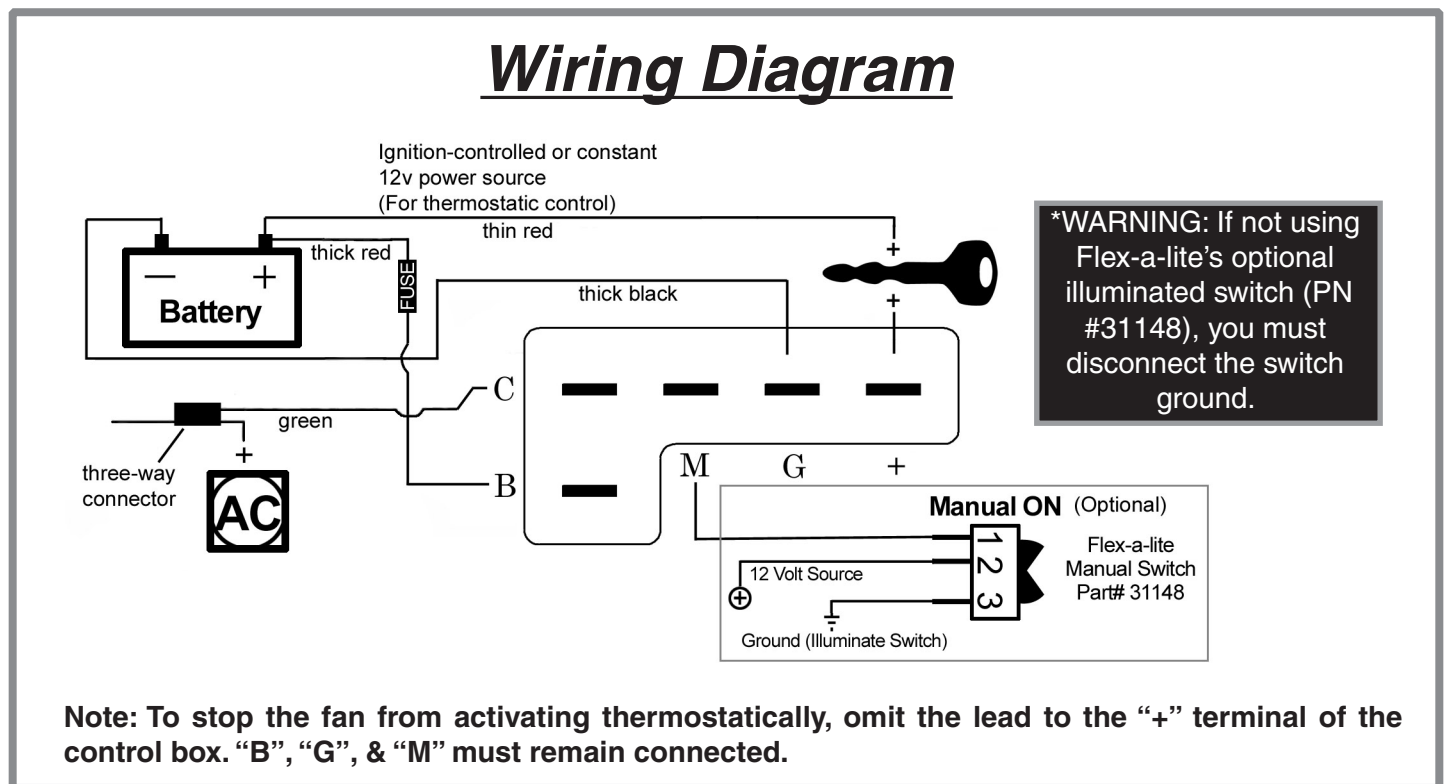
Note: For automatic transmission equipped vehicles.

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. 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”

Wiring the Fan: Radiator and Fan Combo #51168 & #51169 only

1. Connect the "B" terminal on the control to the 12 volt positive (+) battery terminal using the thick red wire and fuse holder provided in the kit. (Do not install fuse at this time)
2. Connect the "G" terminal on the control to battery negative (ground -) terminal using the thick black wire provided in the kit.
Note: Failure to connect ground wire directly to negative battery terminal may lead to premature failure of control module.
3. Connect the "+" terminal of the control box to a keyed 12 volt positive (+) power source (i.e. fuse box), using the thin red wire and fuse taps (if necessary) provided in the kit.
Note: Do not connect to a circuit that is directly related to the ignition system or computer system. (if equipped)
Note: Attach this wire to an ignition controlled source to stop the fan when the vehicle is shut off. Attach this wire to a constant source to keep the fan running after the vehicle is shut off.
4. **If you have air conditioning:** With the 3-way connector provided, pass the A/C clutch positive(+) wire (connected to the A/C compressor) through the connector. Place the green wire provided into the closed end of the connector. Crimp metal plate. Snap plastic cover into place. Attach green wire to the "C" terminal of the control box. Air Conditioning Relay activates fan when A/C is turned on.
5. Insert temp. probe through radiator core fins near the upper (inlet) hose. Install rubber cap over end of probe.
Note: To maintain position of temp probe the cap must be installed onto probe end.
6. Reconnect the negative (-) battery cable to the battery.
7. Place new fuse into fuse holder previously installed at step #1.



ADJUSTING THE TEMPERATURE CONTROL:

1. Attach the temperature control knob to the control box.
2. Turn the knob clockwise completely.
3. Start the engine and allow it to idle, observe the temperature of the vehicle. (Use the vehicles gauge)
4. When the vehicle reaches normal operating temperature, turn the control knob counter-clockwise until the fan turns on. From here on, the fan should activate at this temperature setting. Adjust as necessary according to your vehicle needs.

OPTIONAL CONNECTIONS:

Manual Switch (not included) - Allows manual operation of the fan.

(This step is based on Flex-a-lite's manual switch part #31148, other switches will cause this unit to fail).

1. Connect the "M" terminal to terminal 1 on the switch.
2. Attach terminal 2 of the switch to a 12V positive (+) source.
3. Attach terminal 3 of the switch to ground, in order to illuminate the switch.



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.

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.