

Aluminum GMC Radiator Installation Instructions

We are enclosing some information on the care and use of the new Griffin aluminum radiator and an invoice for the radiator. The important part of the installation is that you have no voltage greater than 0.1 volt between the coolant and battery ground. This is to prevent electro chemical corrosion of the radiator. This is also a problem for both brass and aluminum radiators. The second is to be sure all the elements in the cooling system are in good working order. We are adding some heat load to the cooling system by installing larger and more efficient coolers in the radiator, but the radiator has about 35% more cooling capacity than the original. The fan clutch may operate more frequently if you are using the AC-4644 clutch and a 195 degree thermostat, particularly on climbing grades due to this, but the engine oil and transmission fluid temperature will be lower and give better engine and transmission protection. There will be a package in the radiator box containing two rubber pads, two oil cooler adapters, and a ½ inch adapter with a 1/8th inch plug. The plug is for coaches who did not have a coolant level sensor. Use Teflon dope for sealant on the adapters and plugs and not Teflon tape. The rubber pads are for bottom supports for the radiator. You may have to install a new longer top oil line to the oil cooler due to making the cooler larger than the original. Some replacement lines have been shorter than the original and will be too short for the new cooler connection. The top transmission line to the cooler will also have to be modified to fit the cooler. It now has to go around the coolant discharge nozzle, again due to making the transmission cooler larger.

A premium grade antifreeze with no silicates such as Prestone that is approved for Aluminum should be used in a 50% solution made using distilled water. Do not use DEX COOL unless the old radiator had it in it! If you dilute the antifreeze, use distilled water only, never use tap water. The minerals in the tap water will cause electrolysis. New coolant media must be used. Coolant should be changed every three to five years to assure corrosion protection. Two new radiator pads should be installed with the radiator.

The passenger side bottom metal piece that holds the rubber pads should be removed by knocking it loose with a cold chisel or bending the tabs down. The new passenger side pad needs to be moved closer to the passenger side frame due to making the core wider.

You should glue the cushion to the radiator at the junction of the core and tank. This extension will give clearance between the frame and the filler nozzle. The recommended radiator cap pressure is 16 lb, but you can continue at the original 9 lb cap if you want. Most people seem to prefer a 13 lb cap. We recommend the 13 lb. or 7 lb Stant cap with the red release lever. If you pull the lever up when removing or installing the cap it turns easily without heavy downward force. The radiator is tested at 36 psi before packaging. The brass adapters are for the oil cooling connection if you need them. The ½ inch reducer is for the low coolant level probe if you have one and the 1/8 inch plug is if you have no probe. The wire for the low coolant sender will have to be lengthened since the probe must go to the other side of the radiator due to the larger coolers.

Please check the radiator for possible shipping damage as soon as possible, preferably with the driver present. We suggest not signing for the package until inspected for damage. If the radiator is damaged please let me know immediately since Fed Ex will not honor claims after 21 days of receipt. There is usually no damage due to the excellent padding around the radiator, but on rare occasion something happens.