



# Fitting Instructions

## AAMGTRM-OCRLLine

### NISSAN GTR R35

IF PRINTING, PLEASE DO SO IN COLOR TO BETTER SEE ILLUSTRATIONS WHICH HAVE COLOR CODED ARROWS

#### WARNING FOR INSTALLER OF THIS PRODUCT

\*\*\* Product(s) are designed for off-road / competition use only \*\*\*

This AAM product requires above average mechanical ability to install properly. This product ideally requires the use of a car lift so that clear access can be obtained to the underside of the vehicle. Installation requires the appropriate tools for tightening and loosening nuts and bolts involved for the installation of this kit. As with all mechanical projects, take appropriate precautions for your personal safety and for the proper care and treatment of the vehicle being serviced.

Be sure and read through all directions before attempting.

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## 1. Components

Oil cooler

Thermostat

Bracket

Spacer

2 Machined adaptors

1 Hose sleeve

2 AN reducer o-ring fittings

2 Oil lines

2 Water lines

5 6mm bolts and lock washers

## 2. Tools Required

a. 10mm Socket

b. 12mm Socket

c. 5mm allen

d. Pliers

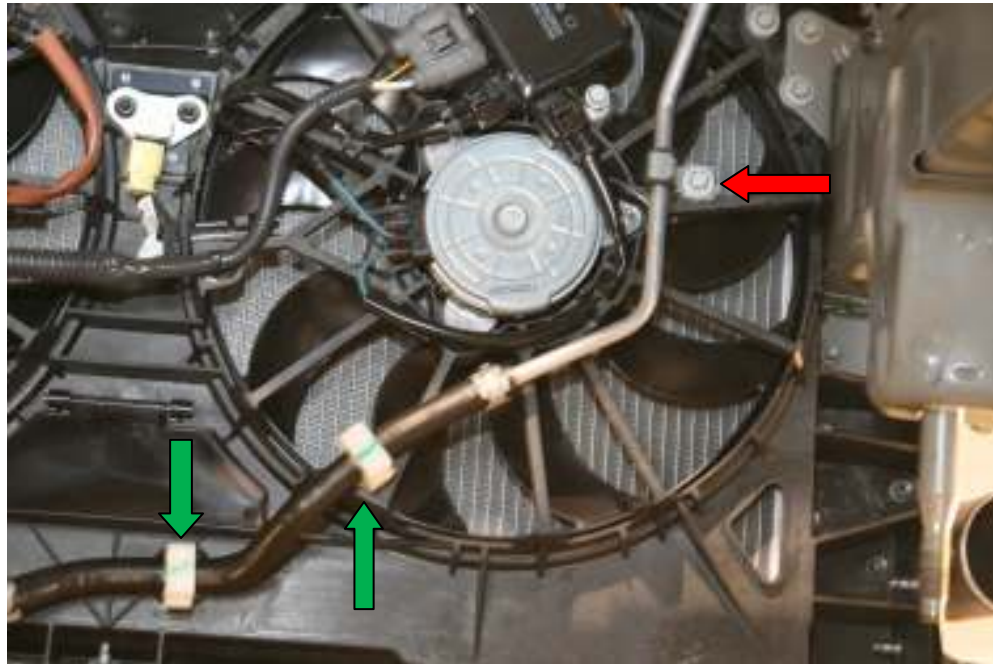
e. -10 and -12 AN wrench or large crescent wrench

## 3. Removal of OE Parts

- a. Remove the 3 belly pans under the front of the car as well as the passenger side front wheel, inner fender and top engine cover.
- b. Drain the coolant from the car by removing the plastic plug with a large philips screwdriver on the bottom passenger side of the radiator.



- c. Up against the fire wall behind the passenger side of the motor you will find the  $\frac{3}{4}$ " rubber hose that leads to the heater core. Push back one of the spring clips and **separate** the two hose sections from each other.
- d. Remove only the outside down tube from the factory oil cooler and the retaining bracket held by the one 6mm bolt. You will reuse the two nuts that come off of the studs here.



- e. Separate the clamped power steering line that sits between the sway bar and radiator. Temporarily cap one end and plug the other (An old spark plug works well). Remove the two **white clips** from this hose and fan support (they will pop right out). Discard these. Next remove the 6mm bolt retaining the hard line **here**. Swing this line up and out of the way for now.



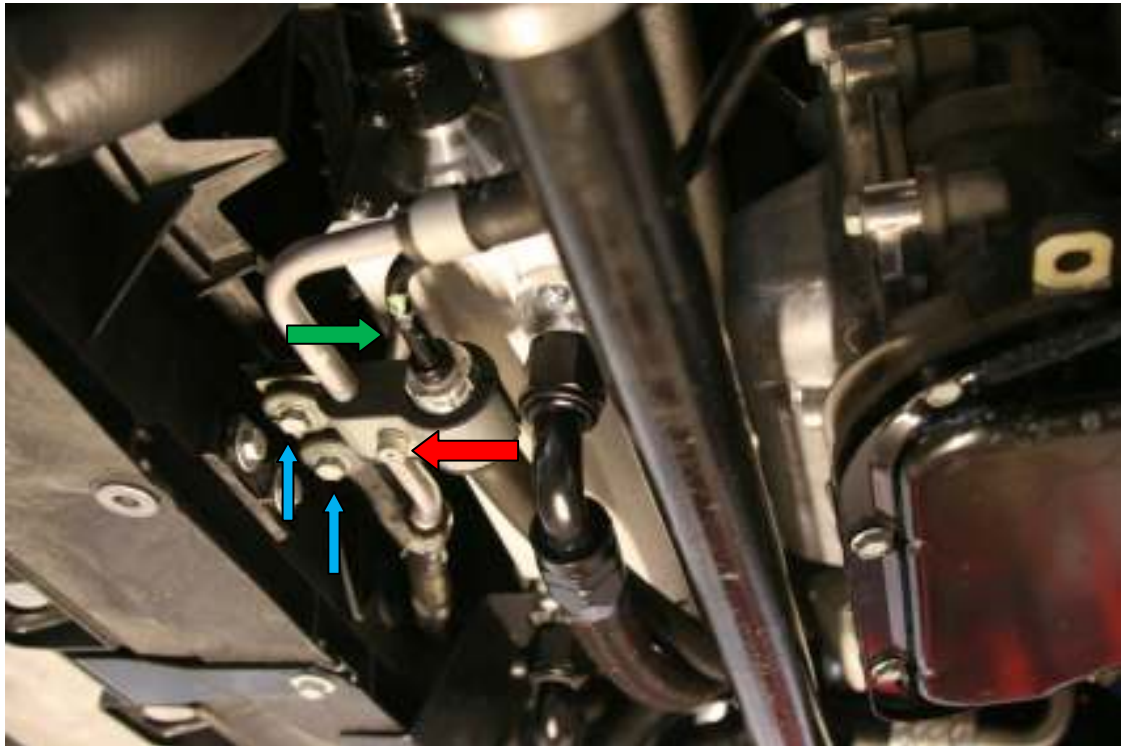
- f. Remove the 6mm bolt that's clamping the two power steering lines together and set aside. You will be reusing this later. Then remove the two bolts holding this clamp to the radiator support. You must then **drill out** the single hole with a 5/16" bit to get rid of the threads. Deburr the hole and set aside for now.

- g. Remove the driver side radiator hose completely as well as the ½” coolant bottle hose from the thermostat housing. Then the three 8mm bolts holding the thermostat housing to the engine. Be careful with the gasket, you will be reusing it. You must now remove the factory thermostat from the housing and replace with the supplied one. (Note the position of the thermostat before removal, the hood goes up) With the correct size screwdriver, remove the two screws. Push hard and make sure you don't strip these screws.

#### 4. Fitment of AAM Competition, LLC Parts

**WARNING: If any adjustments need to be made to the oil cooler bracket for mounting, do not damage the o-ring seal underneath it!**

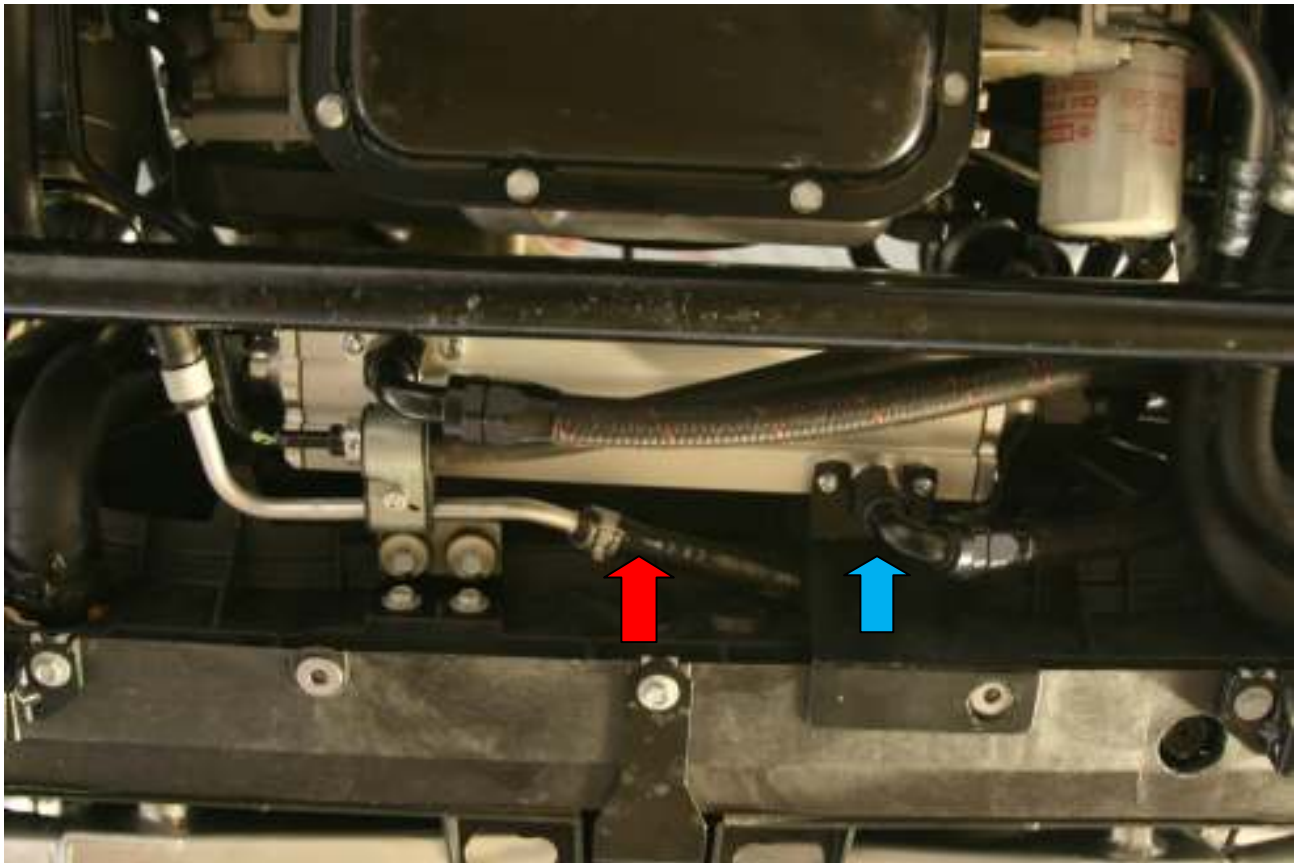
- a. Install the new thermostat (be sure the stem fits into the socket) with the supplied screws making sure you don't tweak and bind the internal spring when collapsing. Try and push down on the thermostat evenly. Once you get one side started, go to the other. Secure as tight as possible then make sure the top part springs freely.
- b. Reinstall housing onto the engine. A thin film of grease applied to the gasket will help hold it in place while you start the bolts.
- c. Put the supplied big washer onto one of your 6mm belly pan bolts. Slide the oil cooler into position above the power steering lines and secure with this bolt. Make sure the hole in the bracket sits **AROUND** the aluminum fitting in the radiator support. This is only temporary while you finish the kit.



- d. With the supplied **long 6mm bolt** and a lock washer, reinstall the power steering line clamp. Slide the bolt through the clamp, insert the supplied **spacer** on top and then thread into the oil cooler. Before you tighten that, reinstall the **two 6mm bolts** that mount this to the radiator support. Then secure all.



- e. Feed the water lines up from the bottom of the engine bay next to the ends of the cooler. One hose will run on each side of the engine with the long one being on the driver side. This may take a couple of tries depending on your intake setup to get the cleanest, best fitting rout back to the heater hoses. Make sure you keep away from exhaust, sharp edges, moving parts, etc. We supply a little extra hose to make sure it will fit with your setup.
- f. Insert the  $\frac{3}{4}$ " sleeve into the heater hose without one, half way and bring the spring clip back into position. Once you have the new water lines in position, secure to the mating ends with the supplied hose clamps.
- g. Once you are positive about water line position, trim the water lines to fit and secure hose onto the oil cooler with the supplied hose clamps.



- h. Run the **power steering line** around the back of the cooler mount and reconnect.
- i. (All fittings should have a small amount of clean engine oil on the threads to insure a proper and long lasting seal) Install the short line with the **120 degree AN fitting** onto the oil port of the cooler where the mounting bracket is. Rout it the best fitting way to the end of the open oil line. Clean the gasket used at this joint and reinstall it with one of the machined adaptors with the o-ring boss facing up. Secure together with the two medium length 6mm bolts with lock washers and now reuse the two nuts that came off of the factory piece. Install the AN fitting with the o-ring here then attach the oil line. Make sure oil lines won't interfere with the inner fender once it is reinstalled. Tuck them in neatly toward the front of the car.



- j. Before reinstalling the factory **double hose clamp**, open one side up slightly to accommodate the new bigger fitting. Mount the clamp with the longer 6mm bolt you saved earlier. Make sure this hard line does not sit lower than the other when clamped.
- k. The longer oil line is next. Mount the 90 degree AN fitting to the far side of the new cooler and rout the line over to the open port on top of the factory oil cooler. There could be a gasket or an o-ring here from the factory. Clean and install the last machined fitting using the two small 6mm bolts with lock washers on top with the o-ring boss facing up. Install the o-ring fitting and then attach the 150 degree hose end to it. With the oil line just off of the cooler, tighten the fitting.
- l. Slide the radiator hose up from the bottom in front of the radiator out port and attach without clamping. Up top, slide the radiator hose onto the thermostat housing and clamp it. Once the hose is positioned and not under any tension, you can clamp the bottom. Now reinstall the 1/2" line from the coolant bottle.
- m. Go back over all lines installed and make sure none are in danger using the supplied zip-ties to secure if needed.

**You will now need to add an extra half quart of oil to the car, check the oil level,  
and check the power steering fluid level!**

- n. Reinstall the radiator drain plug and begin refilling the coolant system. When full, install the engine side radiator cap and start the car. (Check for leaks under car) Leave the coolant bottle cap off and fill the water/coolant here as the engine sucks it out until full. Then install cap when at proper level.



- o. If there are no leaks, you can now begin to reinstall the belly pans, inner fender, wheel and top engine cover. The oversized washer will be discarded now as the mid-pan goes up first. The bolt that holds the pan up here will hold the bracket in place as well.

