

Installation Instructions SuperCooler™ Engine Oil Cooler

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This B&M SuperCooler™ Engine Oil **Cooler** is designed to lower the engine oil temperature under all driving conditions. It is particularly useful for competition, trailer towing, heavy loads and very hot conditions. It uses a cooler of a unique design, with 100% aluminum construction. It uses embossed plates that are sandwiched together to create one of the most efficient oil cooling devices available. Not only does this unique design provide for maximized cooling through more efficient heat dissipation but it also provides a much sturdier cooler which is practically impervious to flying rocks and other debris.

There are several versions of this kit: #70270 fits all GM V8 engines with recessed filters. #70271 fits these other domestic V8 engines: '59 and later Chrysler V8, '67 and later Ford V8 except 4.6 liter, '59-'86 AMC V8 and General Motors V8 without recessed filter. #70263 fits all 4.6 liter Ford V8. These kits differ only in the sandwich adapter that goes between the oil filter and the engine. In all other respects they are identical. #70261 fits most late model Hondas and Acuras and features a polished aluminum cooler. These kits fit engines with spin-on filters - engines with canister filters will need to be changed over to spin-on.

Prior to beginning installation be sure

to check for adequate clearance for engine oil filter when used with the sandwich adapter.

The cooler relies solely on air flow to provide maximum cooling efficiency. The best location in the vehicle is where the cooler will receive maximum airflow, both from vehicle motion and from the fan.

Note: The cooler will protect your engine oil from overheating, but it cannot correct a faulty engine. The mechanical condition of the engine should be checked by a competent mechanic prior to installation if troubles are suspected.

CAUTION - For cold climatic conditions, B&M recommends that you install the **B&M Thermostatic Control Valve#70259.** Engine oil temperature should not operate below 140° F.

When installing your **B&M** SuperCooler™ Engine Oil Cooler there is another **B&M** product you may wish to consider:

B&M Thermostatic Control Valve #70259 This remote oil thermostat will help maintain proper oil temperatures required in today's high performance vehicles outfitted with auxiliary oil coolers. When oil temperature is below 180° F, the valve bypasses 90% of the oil, allowing 10% to flow through the cooler to prevent possible air pockets. Above 180° F, the valve opens fully and flows 95% through the cooler.

INTRODUCTION

This **B&M SuperCooler™ Engine Oil Cooler** is easy to install by carefully following the instructions.

Read all instructions first to familiarize yourself with the parts and procedures.

During installation, the following should be kept in mind:

Keep rubber hoses away from sharp edges, hot exhaust pipes, manifolds and/or points of wear.

Be careful not to bend hose less than a 3" radius. Keep hose runs as short as possible and always rough cut to length at least 1" longer than measured.

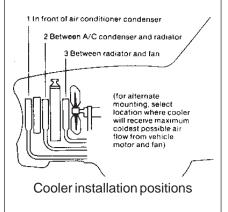
Care should be taken to keep cooler 1" from fans, 1/8" from radiator and A/C condensers, 2" from hoods, wheel wells and firewalls and 6" from exhaust manifolds.

Tighten hose clamps until rubber extrudes through slots, level with the metal surface of the clamp.

After six (6) months, retighten hose clamps to insure no leakage.

Pipe fitting should be sealed with either Teflon tape or thread sealant. Use a backup wrench on the cooler fitting when tightening.

CAUTION - DO NOT OVERTIGHTEN FITTINGS. 15 lb-ft is correct torque.



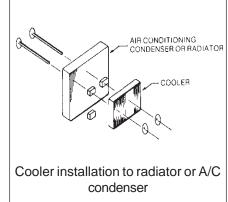
SUGGESTED MOUNTING POSITIONS

Determine the best cooler location for your vehicle from the positions shown in the illustration. Position 1 is the preferred location, but positions 2 or 3 are acceptable. Other positions can be used, but they must be locations where there will be a good, cold airflow through the cooler. The cooler can be mounted with the fittings facing up, down or to either side as is convenient.

INSTALLATION

Before starting the installation, check the oil filter clearance by adding twice the depth of the sandwich adapter to the filter length. If there is insufficient clearance the filter must be remotely mounted. In some cases a short filter will suffice. Make sure that the threads on a shorter filter will fit the adapter.

STEP 1. Install the 1/2" NPT fittings into the cooler and the 3/8" NPT fittings into the sandwich adapter. Use Teflon



tape or suitable thread sealer. Do not overtighten.

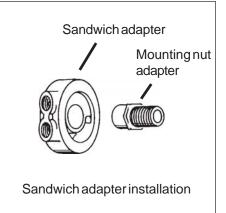
STEP 2. Position the cooler in the location that you have determined. Do not install the cooler yet.

STEP 3. If your kit includes more than one mounting nut adapter, select the correct one for your car. This is easily determined by test threading the adapter into your oil filter. Select the one that you need and set the others aside.

STEP 4. Apply a light coating of engine oil to the O-ring seal of the sandwich adapter. Insert the correct mounting nut adapter through the adapter and screw it over the threaded nipple in the cylinder block. The O-ring seal side of the adapter goes against the block. Locate the fittings on the sandwich adapter in the direction that the hoses will be routed. Tighten the mounting nut adapter.

STEP 5. Fit and cut hoses to length (add 1" and keep 3" minimum radius) and attach to cooler.

STEP 6. Attach the cooler to the radiator or A/C condenser using mounting



ties, making sure that the four rubber pads are installed between the cooler and the radiator or the A/C condenser. **STEP 7.** Complete the hose assembly, keeping well away from unprotected sharp edges, exhaust system, etc. Trim the hoses to the final length and tighten the hose clamps per instructions. Use tie wraps to secure hoses if necessary.

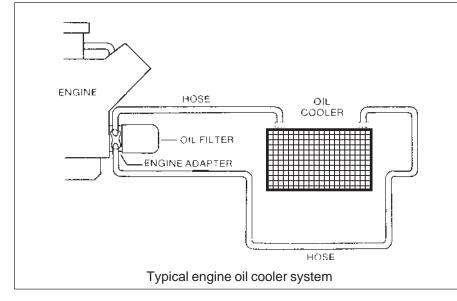
STEP 8. When installation is complete, test as follows:

a. Start engine; immediately check for oil pressure. If there is no oil pressure turn the engine off and look for the problem.

b. Place the car in neutral and idle for ten minutes with the parking brake on.c. Check for possible leaks.

d. Feel both ends of the cooler to be sure that they are warm. If not the oil is not flowing and needs to be corrected. Check the diagram for proper oil circuit.

e. Check the oil level. Some additional oil may be needed, but do not overfill. f. In a few days recheck the system for leaks and correct operation.



KITINCLUDES

B&M Engine oil cooler Sandwich adapter and O-Ring seal Mounting nut adapter(s) Engine oil cooler hose Hose fittings and hose clamps Cooler mounting ties Instruction sheet

TOOLSREQUIRED

Filter wrench and catch pan Screwdriver Wrenches and pliers Knife Engine oil....as needed