



# Installation Instructions

## Supercooler

### Engine Oil Cooler

Part Nos. 70270 and 70271

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This B&M engine oil cooler is designed to lower the engine oil temperature under all driving conditions. It is particularly useful for 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 two 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. The kits differ only in the sandwich adapter that goes between the oil filter and the engine. In all other respects they are identical. The 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.

#### GENERAL

1. This engine oil cooler is easy to

install, however, the "Installation Musts" below should be studied prior to starting the installation.

2. 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.
3. 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, disconnect or cover the engine oil cooler during the cold season. Engine oil temperature should not operate below 140F.**

#### INSTALLATION MUSTS

1. Keep rubber hoses away from sharp edges, hot exhaust pipes, manifolds and/or points of wear.
2. 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.
3. 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.
4. Tighten hose clamps until rubber

extrudes through slots, level with the metal surface of the clamp.

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

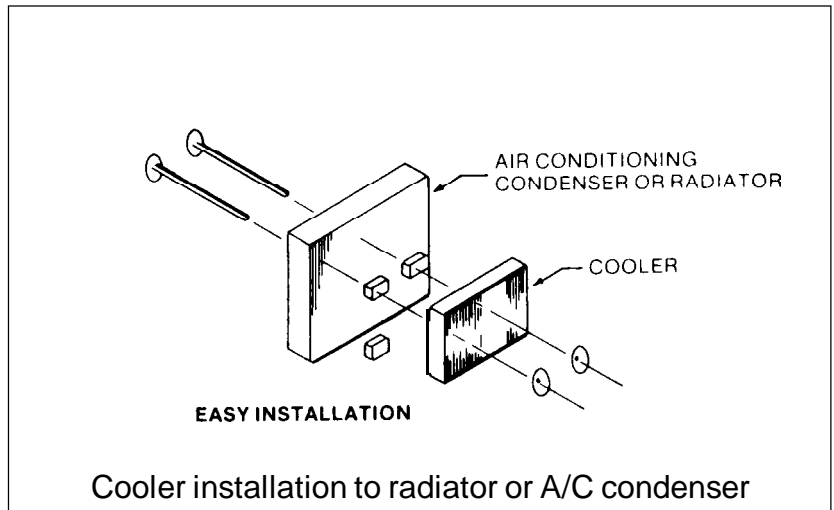
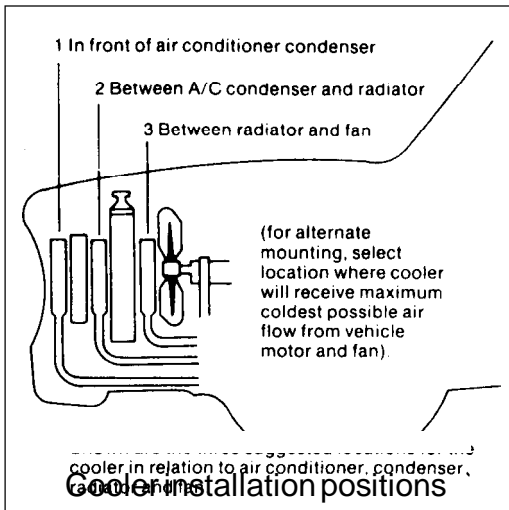
#### SUGGESTED MOUNTING POSITIONS

Determine the best 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 PROCEDURE

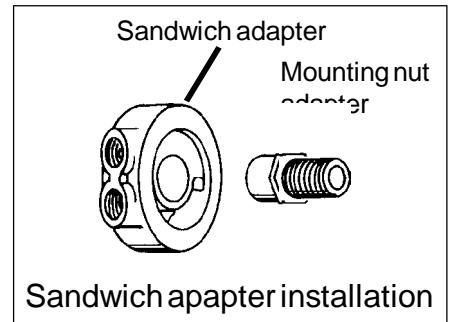
Before starting the installation, check the oil filter clearance by adding the depth of the sandwich adapter to the filter length. If there is insufficient clearance the filter must be remotely mounted. In some cases a short filter will suffice. Make sure that the threads on a shorter filter will fit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

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

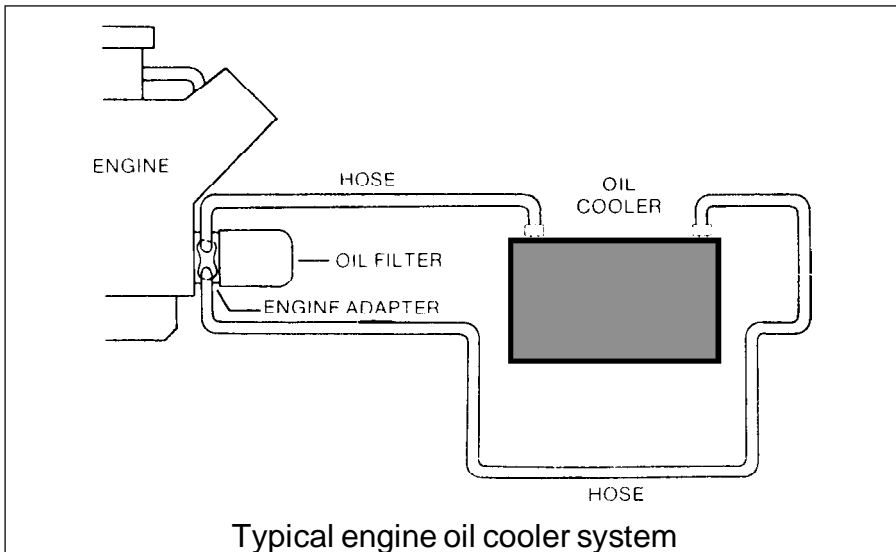


- not overtighten.
- Position the cooler in the location that you have determined. Do not install the cooler yet.
  - (#70271 ONLY) Select the correct mounting nut adapter for your car. There are three supplied with this kit. The threads are 13/16-16 which is used on most GM vehicles and AMC cars, 3/4-16 which is used on most Chrysler and Ford vehicles, and 18mm which is used on late model GM metric engines. Select the one that you need and set the others aside. (Only one mounting nut adapter is needed for all Chevrolet V8s, so only one is included in #70270.)
  - 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.
- Fit and cut hoses to length (add 1" and keep 3" minimum radius) and attach to cooler.
- 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.
- 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.
- When installation is complete, test as follows:
  - Start engine; immediately check for oil pressure. If there is no oil pressure turn the engine off and



- look for the problem.
- Place the car in neutral and idle for ten minutes with the parking brake on.
- Check for possible leaks.
- 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.
- Check the oil level. Some additional oil may be needed, but do not overfill.
- In a few days recheck the system for leaks and correct operation.



**KIT INCLUDES**

- 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

**TOOLS REQUIRED**

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