



Flex-a-lite®

Engine Oil Cooler Kit Installation Instructions

Please read the following instructions carefully. Improper installation may result in premature engine failure, and possible injury. *Do not locate the cooler in areas exposed to thrown gravel, water, ice or road grime, or next to exhaust components.* Before driving, engine oil cooler must be checked to make sure it is operating properly. See "Test Your Installation" below.

PARTS LIST

Description	QTY	** Not included in Chevy V8 kits			
Oil Cooler with 1/2" barb fittings	(1)	Stainless Steel Hose Clamp	(4)	Hardware Installation Kit, comprised of:	
3" (3-5/8"*) Sandwich Adapter	(1)	Hose Adapter Fitting, 1/2" barb x 3/8" FPT	(2)	Nylon Push Nut	(4)
2-1/2" (3-1/8"*) O-ring	(1)	Mounting Nuts, 3/4", 13/16", 18, 20, 22mm	(5)	Nylon Mounting Bolt	(4)
3-3/8" O-ring**	(1)	Oil Hose, Neoprene 10 ft.	(1)	Nylon Washer	(4)
Adapter Plate**	(1)	Instruction Sheet	(1)	Rubber Spacer	(4)

INSTALL ENGINE OIL COOLER

Mount Oil Cooler (radiator mount)

- 1) Position the cooler on the radiator where you have access to front and back sides of radiator. Using a Phillips screwdriver, carefully spread the fins (on the cooler AND the radiator) to allow the mounting bolts to pass through the radiator. (On heavy duty coolers, the bolts fit through the large mounting holes in the end plates.) Be careful not to damage the radiator tubes.
 - 2) Slip a nylon washer over each nylon bolt (not necessary when installing a heavy duty cooler). Fit 4 nylon bolts through the cooler, then slip a rubber washer over each bolt, and slide up to the back of the cooler. FIG. 2.
 - 3) Fit the cooler to the radiator, feeding all four bolts through the radiator. Push a nylon push nut onto each bolt until snug against radiator.
 - 4) Turn push nuts clockwise until tight, then trim off excess bolt, leaving 1/4" exposed.

Install Sandwich Adapter

- 1) Remove oil filter and clean the oil filter landing on the engine block.
 - 2) Wrap the threads of 2 brass fittings with Teflon tape, or coat with automotive thread sealer, and screw them securely into the ports of the sandwich adapter. FIG. 3.
 - 3) Each of the five mounting nuts included in your kit have a different filter thread: 3/4", 13/16", 18mm, 20mm and 22mm. ONE of them matches the oil filter mounting stud on your vehicle. If you don't know the thread size of your vehicle's oil filter stud, check the manufacturer's specs for your oil filter. You will not need the remaining mounting nuts.
 - 4) Apply a light coat of oil to rubber o-ring and fit to groove in sandwich adapter. Screw sandwich adapter onto the engine block with selected mounting nut. Fittings should point toward route that hoses will take. Torque down slightly tighter than you would an oil filter.
Note: Some GM V8s have a large diameter oil filter land. On these, you must install the plate adapter and large o-ring, as well. See FIG. 3. The Chevy V8 kits - #3952 and 3954- are supplied with a larger, thicker sandwich adapter, and do not require the adapter plates.

5) Run a piece of hose from the sandwich adapter to one fitting on the oil cooler. Trim the hose to length, allowing enough for routing the hose around obstacles, anchoring in place, etc. Attach the hoses with hose clamps supplied. Tighten securely. Use the rest of the hose for remaining connection. Hose clamps are correctly tightened when hose rubber squeezes up just flush with surface of clamp band.

⑥ Reinstall oil filter. Top off engine oil if necessary.

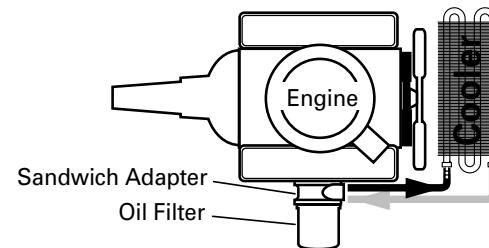
TEST YOUR INSTALLATION

- 1) Start engine and check engine oil pressure. If oil pressure does not reach normal within 5-10 seconds, shut off engine; oil is not flowing. Review instructions and correct the installation before proceeding.
 - 2) Let engine run until it reaches normal operating temp. Check that both ends of cooler are warm. If not, engine oil is not flowing through cooler. Shut off engine and correct the installation.
 - 3) Inspect for leaks and fix any found. Top off oil, if necessary. Periodically inspect and tighten all fittings during the first 100 miles of driving.

***This kit covers installation of the following
Flex-a-lite Engine Oil Cooler kits:***

#20E1 20E2 20E3 20E4

#3951, 3952, 3953, 3954.



Typical Engine Oil Cooler Installation FIGURE 1

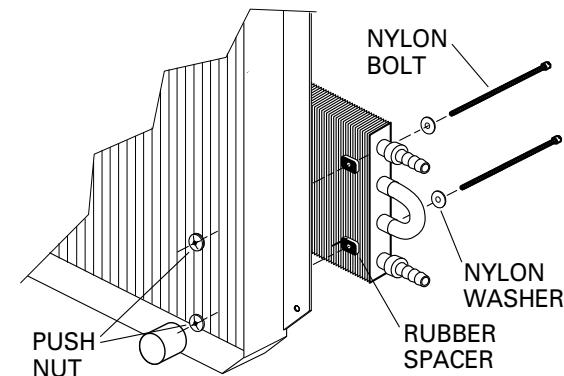
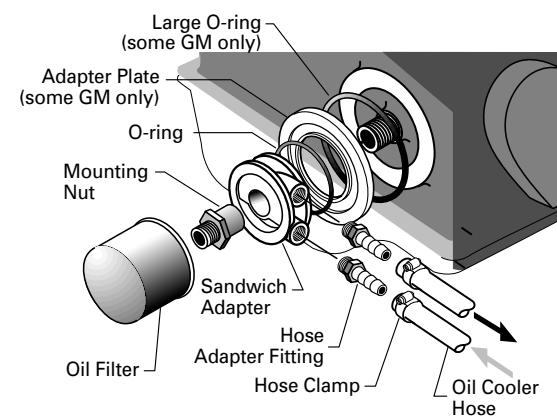


FIGURE 2



Sandwich Adapter Installation FIGURE 3