

## 4.3 V6 Oil Cooler Removal

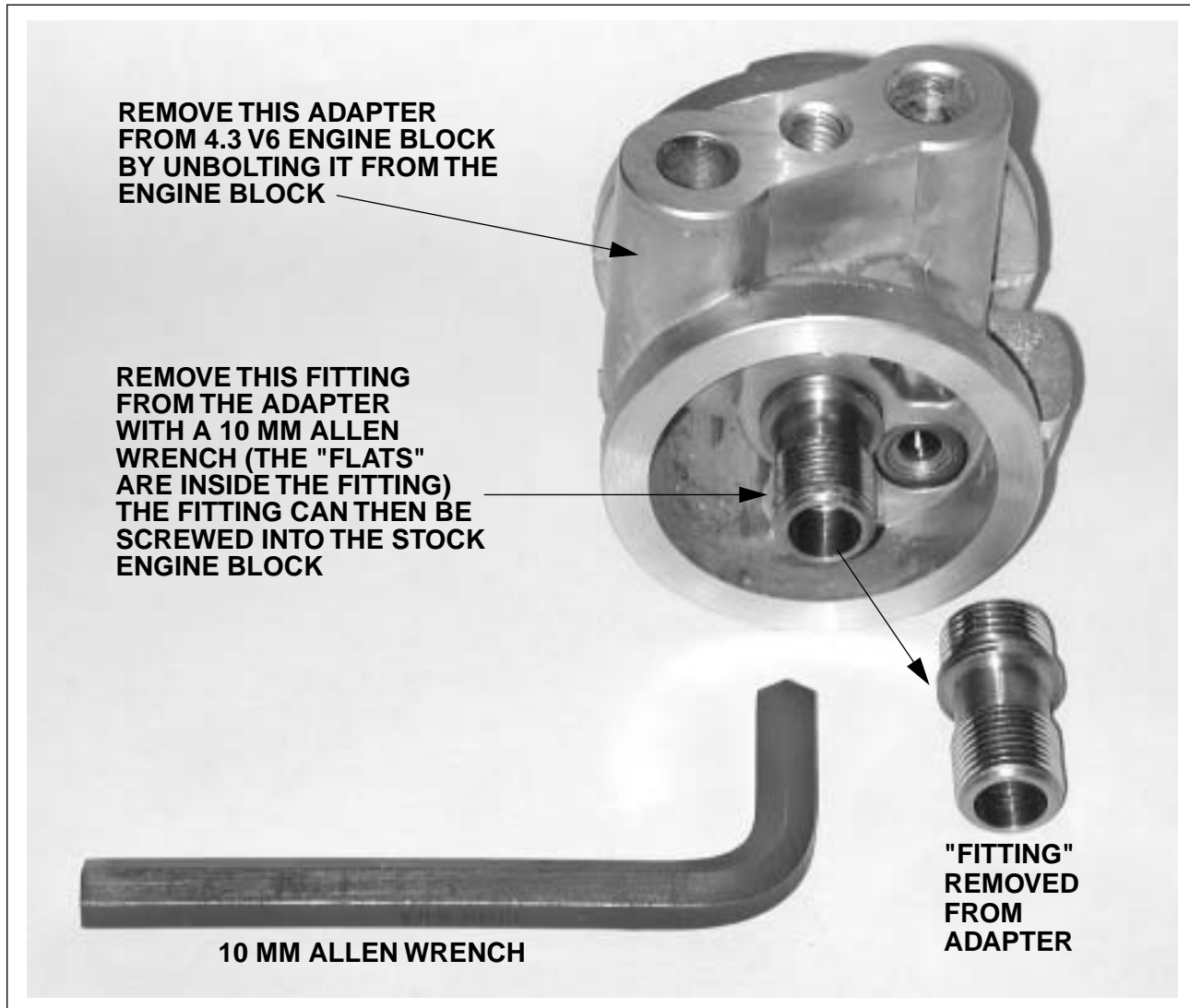
Most cars and trucks don't need oil coolers. Oil temperatures usually stay at about the same temperature as the water temperature, except when the engine is run at a high rpm for extended periods of time. Most cars and truck never run under these types of conditions, and do not require an engine oil cooler.

When oil temperatures remain high for long periods of time, the oil can break down, and the engine will wear out more quickly. But high oil temperature, by itself, has little effect on the engine. Synthetic oils, such as Mobil 1, can run at high temperatures for a very long time, with no effect on its lubricating qualities. The 1992 Chevrolet Corvette LT1 did not run an oil cooler, but Chevrolet specified Mobil 1 synthetic motor oil because it allowed the engine to run at high speeds without the need for an oil cooler. Chevrolet removed the oil cooler to reduce weight and improve reliability -- hoses and fittings are prone to leak when they get old.

An additional requirement of running an oil cooler is more oil pressure to push the oil through the cooler and the additional plumbing that goes to the oil cooler. As an example, a typical Chevrolet engine normally has an oil pressure relief valve set at 40 psi, but the Chevrolet engines with engine oil coolers run pressures of about 60 psi.

After removing the oil cooler, you may notice that the oil pressure is lower at idle. This is due to the reduced restriction caused by the oil cooler and the extra hoses. The typical pressure change at idle is 5psi to 20 psi. For example, if your dash gauge showed 40 psi of oil pressure at idle with the oil cooler, it may show 20 psi after the cooler is removed. As long as oil pressure is above 10 psi at idle, and over 40 psi at 2000 rpm, there is nothing to worry about.

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#### OIL COOLER ADAPTER ON 4.3 V6 ENGINE

The "fitting" for the oil filter is screwed onto the oil cooler adapter.

This can be unscrewed from the oil cooler adapter with a 10mm allen wrench, and the fitting can then be screwed directly into the 4.3 V6 engine block. The fitting is also available from GM as part #14081300 (price is about \$5). This part was used on 1985 and newer 4.3 V6 engines which did not have the oil cooler.

The oil cooler hoses and fittings can then be removed: eliminating weight, clutter and potential leaks. With that being said, synthetic oil is recommended, in case the engine is ever operated at high-speeds for long periods of time.