## 11 42 020 Removing and installing complete full-flow oil filter (M52 / S52 / M52TU / M54 / M56)

Remove intake air housing with air-mass flow sensor.

Unfasten oil filter cover to allow oil to flow out of main flow oil filter housing and back into oil pan.

This operation is described in the section BMW engine oil service . Remove alternator.

If necessary, empty supply tank for power steering.

If necessary, remove supply tank (lines remain connected).

If necessary, remove vane pump for power steering (lines remain connected).

If necessary, remove alternator drive belt tensioner.

Remove connector for oil pressure switch.

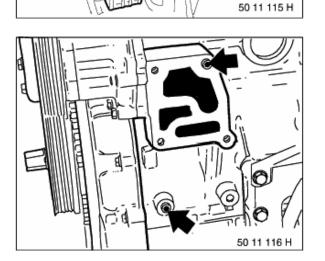
If necessary, disconnect plug for oil temperature switch.

Disconnect oil pressure line for VANOS adjustment unit from oil filter housing.

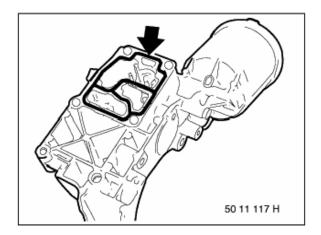
Unfasten screws and remove complete full-flow oil filter.

## Installation:

Check dowel sleeves for damage and correct installation position.







*Installation:* Replace seal.

Top up engine oil.