



Haynes
shows you how

BMW 3-Series and Z4 (99-05) Includes 2006 325ci/330ci Coupe and Convertible models Haynes Online Manual.

12 Starter motor - removal and installation

Removal

1 Disconnect the cable(s) from the negative battery terminal(s) (see [Section 1](#)).

3 series models

Note:

The following procedure describes removing the starter from underneath the vehicle. On some models it may be easier to remove the starter from above, after removing the intake manifold. Check your vehicle carefully to assess which method will be more appropriate.

2 Apply the parking brake, then raise the vehicle and support it securely on jackstands. Remove the engine splash shield (see [Chapter 2A](#)).

3 Remove the reinforcement plate from below the engine compartment (see [Chapter 2A, Section 12](#)). **Caution:** *The vehicle must not be driven with the reinforcement removed, or damage may result.*

4 Remove the fuel filter and position the fuel lines off to the side to make clearance (see [Chapter 4](#)).

5 Note their installed positions, then remove the nuts and disconnect the wiring from the starter motor (see [illustration](#)) .

12.5 Note their locations, then disconnect the starter motor connectors



6 Using a socket, ratchet and long extension, remove the starter motor mounting bolts from the transmission bellhousing.

7 Pull the starter motor forward and maneuver it downwards.

Z4 models

8 Remove the air filter housing (see [Chapter 4](#)).

9 Note their installed positions, then remove the nuts and disconnect the wiring from the starter motor.

10 Remove the starter motor mounting bolts from the transmission bellhousing.

11 Lift the starter from the engine compartment.

Installation

12 Installation is a reversal of removal, noting the following points:

A. Tighten all nuts/bolts to the specified torque where given.

B. On 3 series models, new bolts must be used when installing the underbody reinforcement plate/bar.
Tighten the bolts to the torque listed in the [Chapter 2A Specifications](#) .