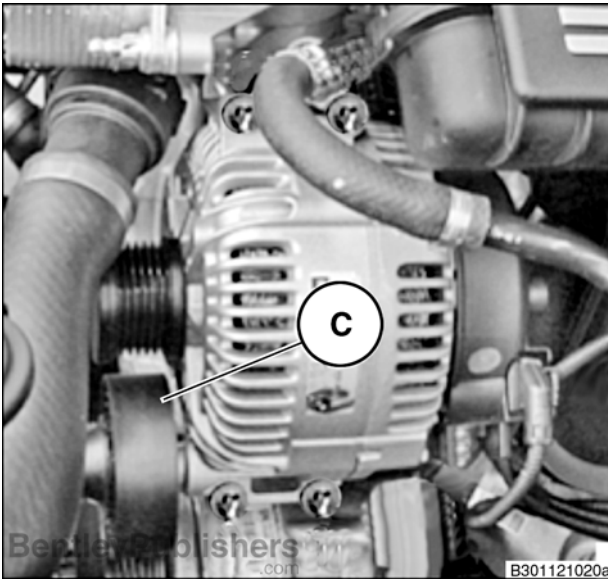


121-20 Battery, Starter, Alternator

Alternator, removing and installing (turbo)



With alternator on work bench:

- Remove idler pulley (C) fastener plastic cover, if applicable.
- Remove idler pulley and transfer to new alternator.

Tightening torques	
Idle pulley to alternator housing	40 Nm (30 ft-lb)

- Reinstall alternator using new aluminum bolts. Reattach electrical harnesses.

Tightening torques	
Alternator cable to alternator (M8)	19 Nm (14 ft-lb)
Alternator to engine block (M8 x 82 mm aluminum bolts, replace with new)	10 Nm additional 180°
• Stage 1	
• Stage 2	

- Reassemble front of engine. Remember to:
 - Reinstall accessory belt using previously made direction-of-rotation marks.
 - Make sure accessory belt grooves engage pulleys correctly.
 - After reconnecting battery, see **Battery reconnection notes** in this repair group.

Alternator, removing and installing (turbo)

- Switch ignition OFF. Disconnect negative (–) battery cable and cover battery terminal to keep cable from accidentally contacting terminal.

CAUTION—

- Prior to disconnecting the battery, read the battery disconnection cautions in **001 Warnings and Cautions**.

- Raise vehicle and support safely.

WARNING—

- Make sure the vehicle is stable and well supported at all times. Use a professional automotive lift or jack stands designed for the purpose. A floor jack is not adequate support.

- Remove splash shield underneath engine compartment. See **020 Maintenance**.
- Remove electric fan cowl and fan. See **170 Radiator and Cooling System**.
- Remove engine accessory belt. See **020 Maintenance**. Mark direction of rotation on belt before removing.
- Remove intake air filter housing. See **130 Fuel Injection**.
- Remove left side charge air duct. See **130 Fuel Injection**.