# Starter, removing and installing

#### **CAUTION!**

Disconnect the battery Ground (GND) strap before working on the electrical system.

#### Notes:

- ◆ Before disconnecting the battery, determine the correct coding for the anti-theft radio.
- ◆ Once the battery is reconnected, check and activate the vehicle's electrical equipment (radio, clock, comfort and convenience features, etc.) as described in this Repair Manual or the Owners Manual.

# Vehicles with 4-cylinder gasoline engines

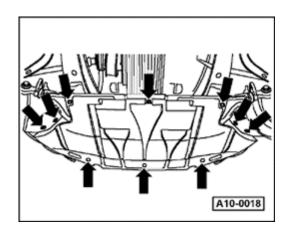
# Removing

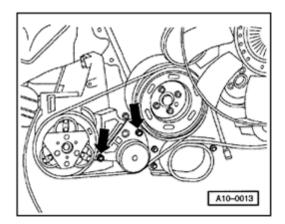


- Remove noise insulation panel (arrows).

# Vehicles with air conditioning

- Remove front bumper.
- ⇒ Repair Manual Body Exterior, Repair Group 63
- Move lock carrier into service position.
- ⇒ Repair Manual Body Exterior, Repair Group 50







- Loosen mounting bolts for air conditioning compressor belt tensioner (arrows).
- Release tension on ribbed belt and remove.

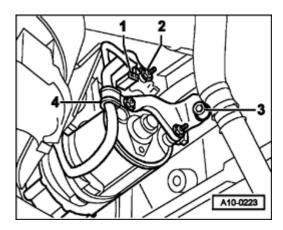
#### Note:

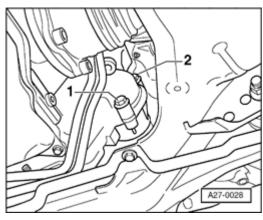
Before removing the ribbed belt, mark the direction of travel with chalk or a felt tipped marker. Reversing the direction of travel of an used belt can destroy it. When installing the belt, make sure it is correctly seated in the belt pulleys.

- Unbolt air conditioning compressor.

Tightening torque: 25 Nm (18 ft lb)

- Hang air conditioning compressor up on chassis with its refrigerant lines attached.





Disconnect wire from terminal 30/B+ by removing nut -2-.
Tightening torque: 16 Nm (12 ft lb)

- Disconnect harness connector -1- from terminal 50.
- Remove bolt -3-.

Tightening torque: 22 Nm (16 ft lb)

- Unbolt wiring clamp -4-.

Tightening torque: 4 Nm (35 in. lb)

- Remove starter mounting bolts -1- and -2-.

Tightening torque: 65 Nm (48 ft lb)

- Remove starter toward front.

# Installing

Installation is the reverse of removal; noting the following:

# Vehicles with air conditioning

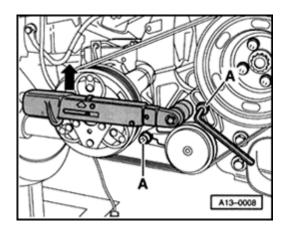
- Install ribbed belt for air conditioning compressor.



- Place torque wrench on hex head of belt tensioner as shown and tighten to 25 Nm (18 ft lb).
- Maintain torque on belt tensioner and tighten bolt -A- to 20 Nm (15 ft lb).

#### All vehicles

- Start engine and make sure belt runs properly.



# Vehicles with 6-cylinder gasoline engines

### Removing

#### Note:

To remove the starter, it is first necessary to remove the generator  $\Rightarrow \frac{\text{Page } 27-26}{\text{Page } 27-26}$ .

### 2.7 L/184 kW engine, 5V twin-turbo only

- ⋖
- Remove air duct -1-.
- 2 Attachment point for oil and refrigerant lines
- 3 Engine block mounting point
- 4 Hose clamp (loosen)

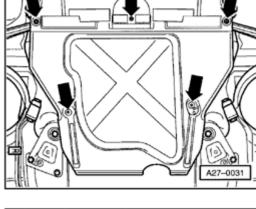
#### All vehicles

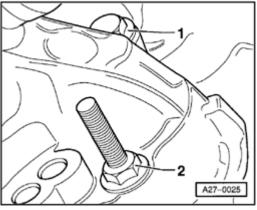
- 4
- Disconnect wire from terminal 30/B+ -2- by removing nut. Tightening torque: 16 Nm (12 ft lb)
- Disconnect harness connector from terminal 50 -2-.

# **Vehicles with manual transmission**



- Remove rear noise insulation panel (arrows).





- ⋖
- Remove mounting bolts -1- and -2- for starter.
  - Tightening torque: 65 Nm (48 ft lb)
- Remove starter toward front.

#### Vehicles with automatic transmission

- Remove right-front wheel.



- Upper bolt -1- can be unscrewed from right-front wheel housing.
  - Tightening torque: 65 Nm (48 ft lb)
- From engine side, remove lower bolt.
  - Tightening torque: 65 Nm (48 ft lb)
- Remove starter toward front.



- Install starter in reverse order of removal.

