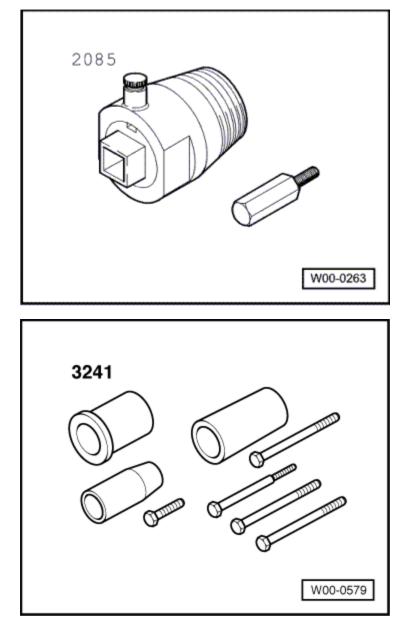
# Camshaft Position Sensor Seals, Replacing

Special tools and workshop equipment required

• Seal remover -2085-

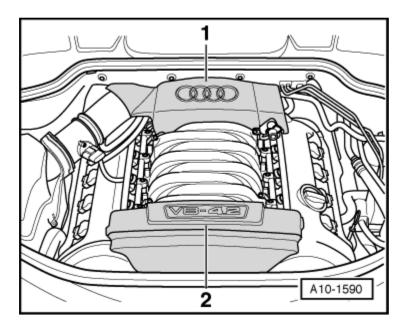


• Seal installer -3241-

Work procedure

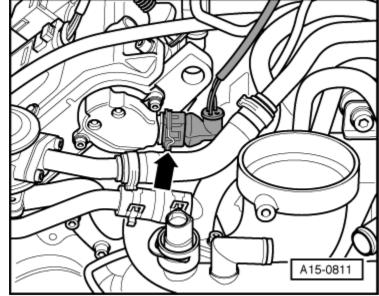
Left cylinder head:

- Remove engine cover -1- upward.
- Remove left combination valve for secondary air injection system → Chapter.

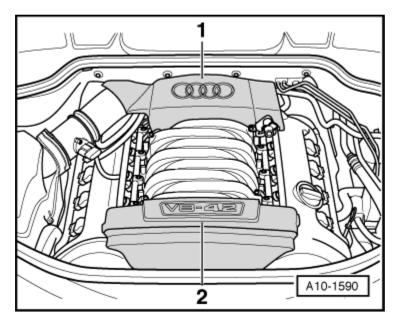


- Disconnect electrical harness connector arrow- at Camshaft Position (CMP) Sensor 2 -G163-.
- Remove housing for Hall sensor.
- Remove washer and cover for Hall sensor.

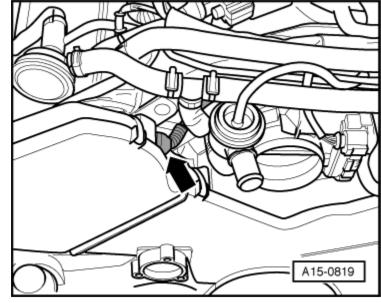
### Right cylinder head:



- Remove engine cover -2- upward.
- Pull lock carrier toward front  $\rightarrow$  Chapter.



- Disconnect electrical harness connector arrow- at Camshaft Position (CMP) Sensor -G40-.
- Remove right toothed belt cover.

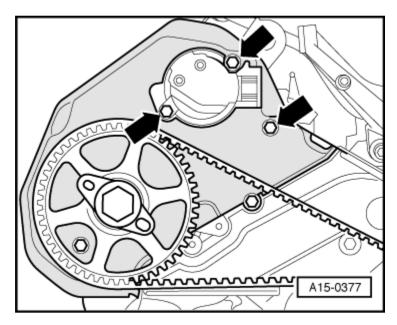


- Remove bolts -arrows-.
- Pull toothed belt guard slightly toward front and remove camshaft position sensor.
- Remove washer and cover for Hall sensor.

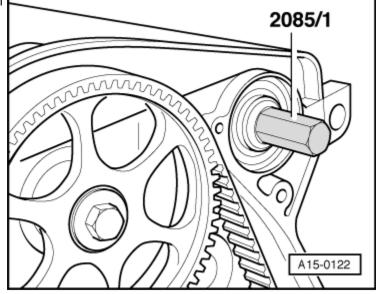
### Continued for both sides:



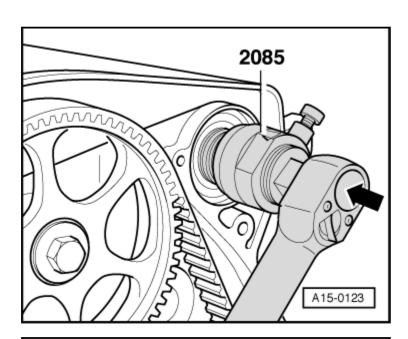
In the following illustrations, the right cylinder head is depicted.



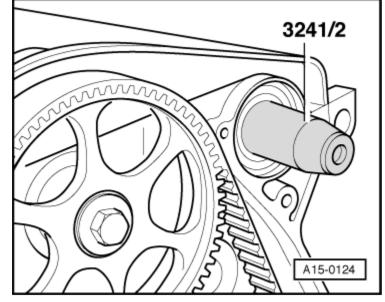
- To guide seal puller, thread adapter -2085/1- in camshaft by hand until stop.
- Remove inner portion of seal extractor -2085two rotations from outer portion and secure with knurled-head bolt.



- Grease threaded head of seal puller -2085-, position and install oil seal as far as possible with forced pressure.
- Loosen knurled bolt and turn inner part against camshaft until seal is removed.



- Place guide sleeve -3241/2- on camshaft pin.
- Push seal over guide sleeve.



 Press in seal up to stop using Thrust Sleeve -3241/1-. To do so, use bolt -3241/3-.

Further installation is in reverse order of removal, note the following:



- Replace O-ring.
- Secure all hose connections using hose clamps appropriate for the model type → Electronic Parts Catalog "ETKA".
- Hose connections and charge air system hoses must be free of oil and grease before installing. Do not use lubricant under any circumstances.

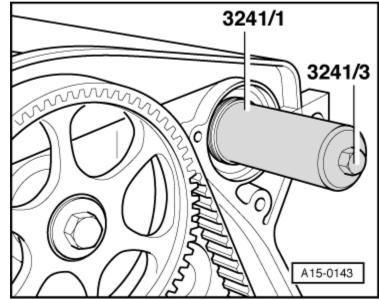
#### Left cylinder head:

Install left combination valve for secondary air injection system → Chapter.

## Right cylinder head:

- Install lock carrier with attachments  $\rightarrow$  Body Exterior; Rep. Gr.50 .

### **Torque specifications**



Component	Nm
Camshaft position sensor trim to camshaft	25
Camshaft position sensor housing to cylinder head	10
Rear toothed belt cover to cylinder head	10 <sup>1)</sup>

 Insert <sup>1)</sup> using locking compound; locking compound → Electronic Parts Catalog "ETKA"