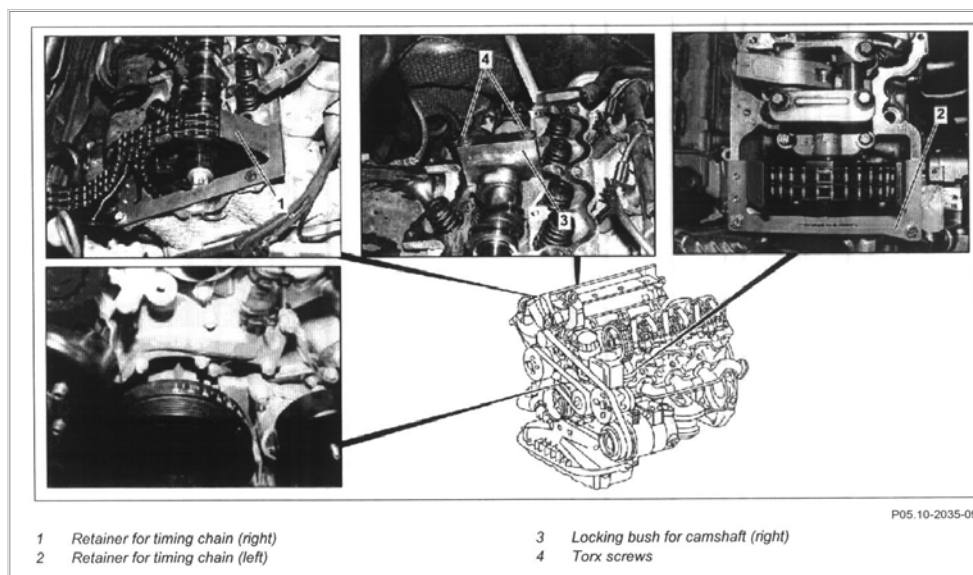


[Select Vehicle](#) | [New TSBs](#) | [Technician's Reference](#)Component Search: [Conversion Calculator](#)**1999 Mercedes Benz E 320 4MATIC Sedan (210.082) V6-3.2L (112.941)**[Vehicle Level](#) → [Engine, Cooling and Exhaust](#) → [Engine](#) → [Timing Chain](#) → [Service and Repair](#) → [With Electric Fan](#) ←

With Electric Fan

[Notes](#)

Replace Timing Chain



Remove

DANGER:

- Risk of explosion from hydrogen gas. Risk of poisoning and caustic burns from swallowing battery electrolyte. Risk of injury to eyes and skin suffering caustic burns from battery electrolyte or from contact with damaged lead acid batteries.
- No fire, sparks, open flames or smoking.
- Wear acid-resistant gloves, clothing and glasses. Pour battery electrolyte only into suitable and appropriately marked containers.

1 Disconnect ground cable of battery

CAUTION:

- **Do not connect quiescent current retention device otherwise this may cause damage to the control module.**

2 Remove [spark plugs](#)

NOTE: To ensure that the engine can be easily cranked when drawing in the timing chain, and to avoid the timing chain jumping across. Remove only once [spark plug](#) of each cylinder.

3 Remove cylinder head covers

- **Air cleaner mounted on vehicle**
- **Air cleaner positioned at engine side**

4.1 Remove [fan shroud](#)

NOTE: Not Model 211.061/065/070, 230.475

4.2 Remove electric fan

5 Position engine to **40 degrees** after TDC of first cylinder.

NOTE:

- **Engine must not be cranked backwards.**
- **The notches of the camshafts must point toward the inner V.**
- **It must be possible to easily insert the two locking plates. If this is not possible, Set the basic position of camshafts.**
- **The copper plates of the timing chain must be aligned with the scribe marks on the camshaft sprockets.**
- **Owing to the unevenly long paths of the timing chain it may be necessary to crank the engine as many as 14 times till the copper plates get aligned with the scribe marks on the camshaft sprockets.**
- **On vehicles equipped with an air pump, the combination valve must be unbolted before the right locking plate is inserted.**
- **Installation: Replace Gasket of combination valve.**

6 Remove chain tensioner

7 Remove camshaft position sensor

8 Crank engine in direction of rotation until the link for separating the timing chain is easily accessible

NOTE: Timing chain is separated one chain link next to the copper plate (on right). See new timing chain.

- 9 Remove [camshaft bearing](#) bridge on right
- 10 Install holding bush (3) onto [camshaft](#) on right

NOTE: Screw in bolts (4) only until they touch.

- 11 Attach retaining devices (1, 2) for timing chain to right and left cylinder head
- 12 Separate timing chain

CAUTION: Cover over timing case recess with a clean cloth. Parts which have dropped into the timing case recess, must be removed.

NOTE: To pull out the old timing chain, connect the old chain to the new timing chain.

Install

- 13 Draw in new timing chain

NOTE: To draw in the new timing chain, crank engine in direction of rotation at the [crankshaft](#).

- 14 Remove retaining devices (1, 2) for timing chain at right and left cylinder head
- 15 Rivet new timing chain
- 16 Crank engine in direction of rotation
- 17 Check timing of engine
- 18 Take off holding bush (3) on right [camshaft](#)
- 19 Install [camshaft bearing](#) bridge on right
- 20 Install camshaft position sensor
- 21 Installing chain tensioner
- 22.1 Install [fan shroud](#)

NOTE: Not Model 211.061/065/070, 230.475.

22.2 Install electric fan

23 Install cylinder head covers

- **Air cleaner mounted on vehicle.**
- **Air cleaner positioned at engine side.**

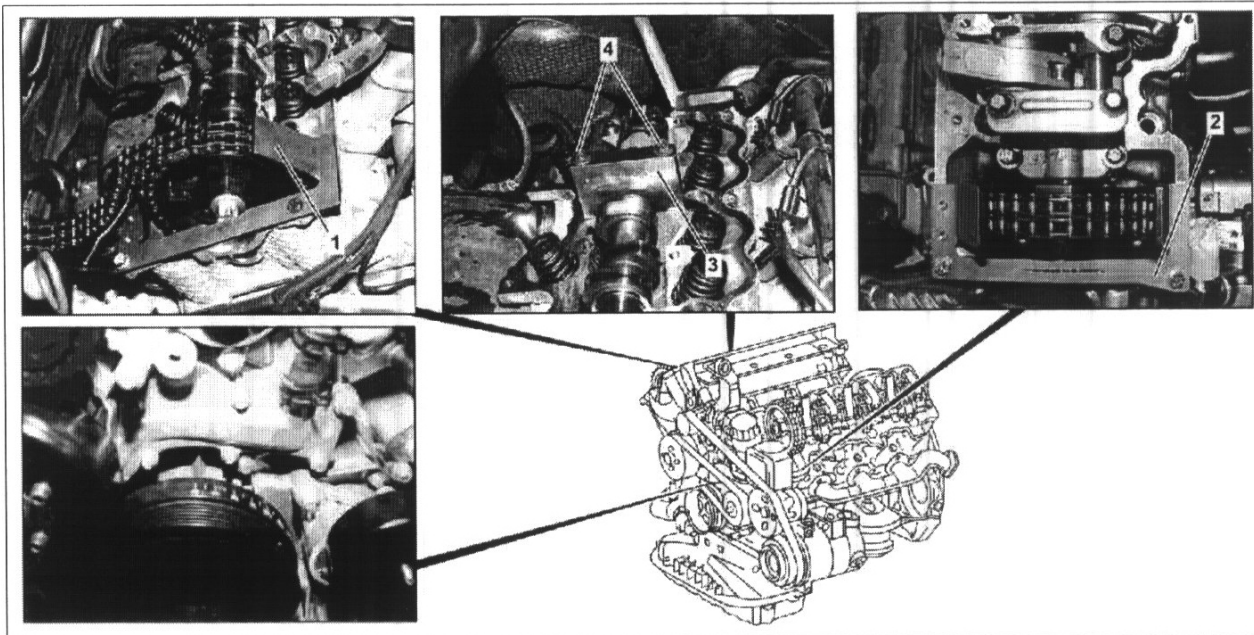
24 Install [spark plugs](#)

25 Connect ground cable

DANGER:

- **Risk of accident from vehicle starting off by itself when engine running. Risk of injury as working around the engine during startup or while running may result in contusions and burns**
- **Secure vehicle to prevent it from moving.**
- **Wear closed and tight-fitting work clothes.**
- **Do not grasp hot or rotating parts.**

26 Run engine and inspect for leaks.



P05.10-2035-09

- 1 Retainer for timing chain (right)
- 2 Retainer for timing chain (left)

- 3 Locking bush for camshaft (right)
- 4 Torx screws