

**Haynes**  
*shows you how*

**BMW 3-Series 320i & 320xi (12-14), 325i, 325xi, 330i & 330xi (06) & 328i & 328xi (07-14) Haynes Online Manual**

## 20 Drivebelt check and replacement

03:41

### Caution:

This video is for familiarization purposes only. Read below for specific information on your vehicle.

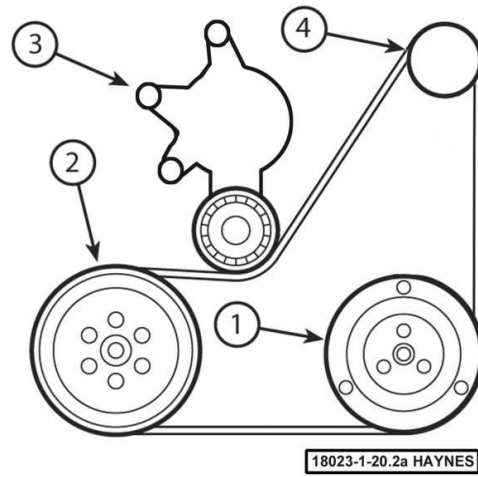
## Check

1 Due to their function and construction, belts are prone to failure after a period of time, and should be inspected periodically to prevent problems.

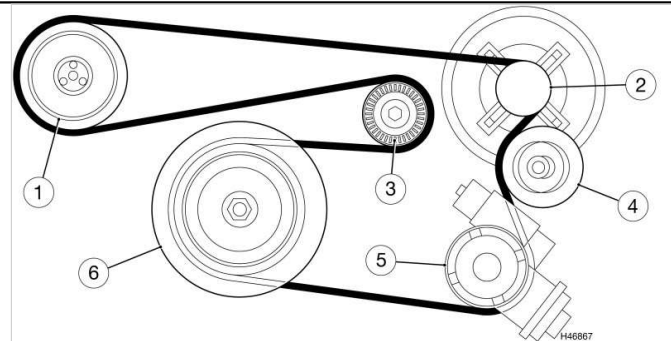
2 The drivebelt on these models is used to drive the alternator, power steering pump and air conditioning compressor (see illustration) . The engine coolant pump and cooling fan are electrically powered, instead of being belt-driven.

**20.2a Drivebelt routing – 2.0L engine**

- 1 Air conditioning compressor pulley
- 2 Crankshaft pulley
- 3 Tensioner assembly
- 4 Alternator pulley

**20.2b Drivebelt routing – 3.0L engine**

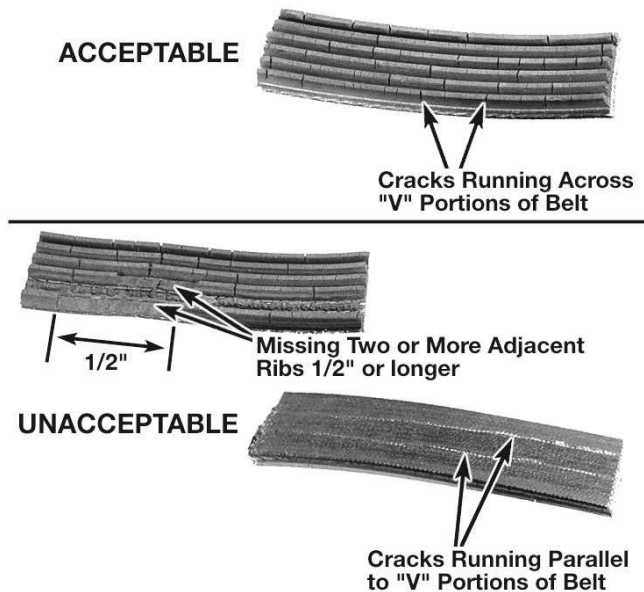
- 1 Power steering pump pulley
- 2 Alternator pulley
- 3 Tensioner pulley
- 4 Idler pulley
- 5 Air conditioning compressor pulley
- 6 Crankshaft pulley



3 The engine must be Off. Using your fingers (and a flashlight if necessary), move along the belt, checking for cracks and separation of the belt plies. Also check for fraying and glazing, which gives the belt a shiny appearance.

4 Both sides of the belts should be inspected, which means the belt will have to be twisted to check the underside. If necessary, turn the engine using a wrench or socket on the crankshaft pulley bolt so that the whole belt can be inspected (see illustration) .

**20.4 Small cracks in the underside of a V-ribbed belt are acceptable - lengthwise cracks, or missing pieces that cause the belt to make noise, are cause for replacement**

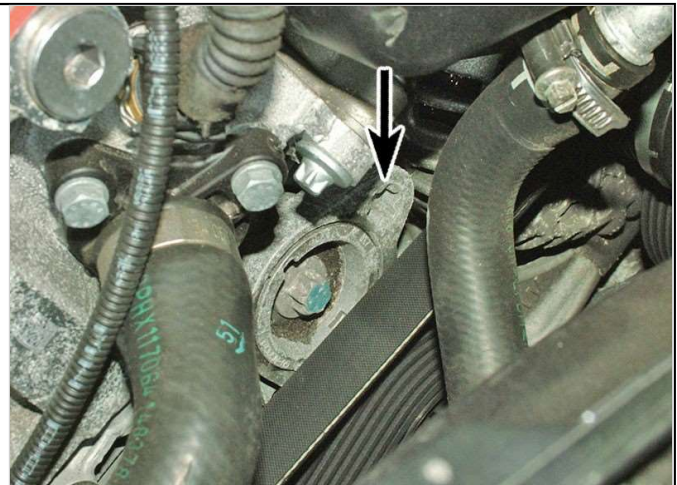


## Replacement

5 If the drivebelt is to be re-used, before removal, mark the belt with an arrow to indicate the direction of rotation.

6 On 2.0L models, using a box-end wrench, or on 3.0L models, using a Torx bit or key, rotate the tensioner pulley clockwise to compress the tensioner, and slide the drivebelt from the pulleys (see illustration).

**20.6 Use a Torx bit or key in the socket of the tensioner housing**



7 If desired, to help in installation, the tensioner can be compressed fully and locked in position using a metal rod engaged with a hole in the tensioner and mounting plate (see illustration). **Caution:** *The tensioner has a powerful spring, so a strong rod will be required.*

**20.7 Insert a rod or drill bit into the holes to lock the tensioner in the compressed position – 3.0L engine shown**



8 If the original belt is being installed, observe the rotational direction mark made before removal.

9 If the tensioner has not been locked in position, compress the tensioner and engage the belt with the pulleys, ensuring that it is routed as noted before removal (see illustration 20.2). Make sure that the belt engages correctly with the grooves in the pulleys.

10 Where applicable, compress the tensioner until the locking rod can be removed, then withdraw the rod and release the tensioner.

11 Install the cooling fan and shroud (see [Chapter 3](#)).

## Drivebelt tensioner replacement

12 Remove the drivebelt (see Step 6).

13 On 2.0L models, remove the three drivebelt tensioner mounting bolts and on 3.0L models, remove the mounting bolt from the center of the tensioner.

14 Maneuver the tensioner out from the timing chain cover. **Note:** *The mounting bolt is aluminum and must be replaced* .

15 Installation is the reverse of removal.