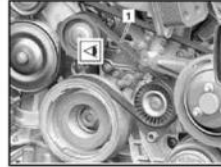


Drive Belt: Testing and Inspection

AP13.22-P-1352Z Check Visible Area Of Poly-V Belt For Wear

AP13.22-P-1352Z Check Visible Area Of Poly-V Belt For Wear

1 Poly-V-belt

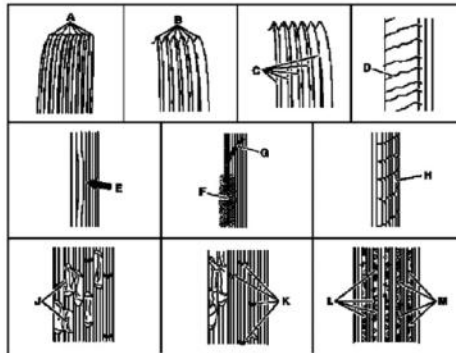


P13.22-2130-01

Component Identification

Damage diagram

- A New poly-V
- B Wear to flanks: Poly-V are pointed (new: trapezoidal)
- C Tensile cord in poly-V belt visible (bright points)
- D Transverse cracks on the cover plate
- E Poly-V released from base of the poly-V belt (arrow)
- F Fraying of outer cords
- G Cord torn out at the side
- H Transverse cracks in several poly-V
- J Poly-V fractures
- K Single poly-V transverse cracks
- L Dirt or stones embedded in ribs
- M Rubber lumps in base of poly-V belt



P13.22-0004-06

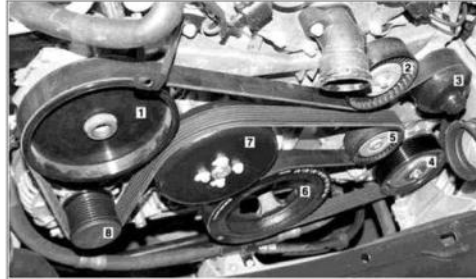
Component Identification

Drive Belt: Diagrams

Running diagram of poly V-belt

Shown on Engine 271.940 with
refrigerant compressor

- 1 Power steering pump
- 2 Guide pulley
- 3 Compressor
- 4 AC compressor
- 5 Tension pulley
- 6 Belt pulley of vibration damper
- 7 Coolant pump
- 8 Generator



Drive Belt: All Technical Service Bulletins Engine - Accessory Drive Belt Noise

Date: November 17, 2008

Order No.: P-B-13.20/03a

Supersedes: P-B-13.20/03 dated May 23, 2008

Group: 13

Revision History

Revision	Date	Purpose
a	11/17/08	Step 4 and 5 Updated / Figures 3 and 4 Added
-	5/23/08	Initial issue

SUBJECT:

Model 203.040/740

Noise from the Belt Drive

If you receive customer reports in the above model vehicles of noises from the belt drive, the cause could be the freewheel of the alternator pulley is seized or has excessive resistance. Follow the procedure below for corrective actions.

1. Remove the poly-V-belt.
2. Pry the plastic cover off the end of the alternator pulley (Figure 1, G2). Insert socket wrench tool (W602 589 00 10 00) to hold the shaft from turning. Turn the pulley clockwise by hand and it should lock. Turn the pulley counterclockwise, it should freewheel.

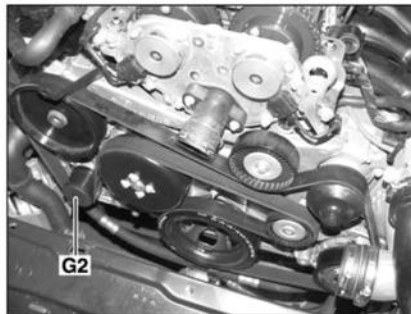


Figure 1
(G2) Alternator pulley

P-B-13.20/03

3. If the pulley did not freewheel, it needs to be replaced. It is not necessary to replace the alternator.
4. Use a **17 mm** wrench on the end of the socket wrench tool and hold it stationary (allow it to contact the frame/sub frame). Insert socket through the center of the socket wrench tool and into the end of the alternator shaft. For Bosch alternators, use M10 socket W601 589 00 10 00 and for Valeo alternators use a long Torx 50 socket available commercially. Turn the socket clockwise to remove the pulley (Figure 2). Remove spacer on Valeo alternator (Figure 3).

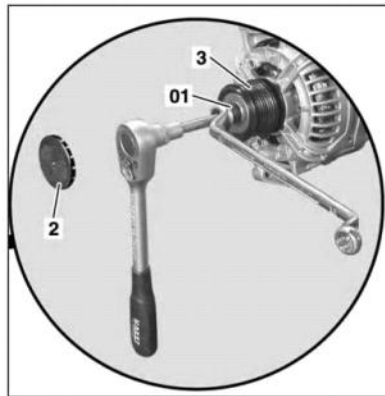


Figure 2 P-B-13.20/03
 (01) Socket tool W602 589 00 10 00
 (2) Protective cap
 (3) Alternator pulley w/ freewheel



Figure 3 P-B-13.20/03a

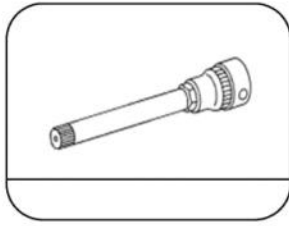
5. Confirm correct length of pulley, long pulley for Valeo and shorter pulley for Bosch and Valeo, refer to EPC (Figure 4). Install new pulley and tighten with the socket counterclockwise to **80 nm**. Use a torque wrench that functions in both directions. Install new plastic cover on end of pulley. It is important to follow loosening and tightening instructions as described.



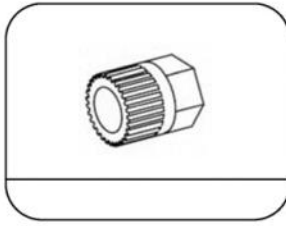
Figure 4 P-B-13.20/03a
 Long A271 155 02 15 Short A271 155 01 15

NOTE: A seized alternator pulley freewheel will cause the belt tensioner to oscillate back and forth when the engine is running. It can also cause the failure of the AC compressor pulley, refer to DTB P-B-83.55/87b (or latest version).

Special Tools



W601 589 00 10 00



W602 589 00 10 00

MBUSA Special Tool Number	Category	Description
W601 589 00 10 00	B	Socket M10
W602 589 00 10 00	B	Socket wrench

Parts Information

Qty.	Part Name	Part Number
1	Alternator pulley short (Bosch or Valeo) *	A271 155 01 15
1	Alternator pulley long (Valeo) *	A271 155 02 15

* Confirm correct pulley in EPC

NOTE: The following allowable labor operations should be used when submitting a warranty claim for this repair. This information has been generated on May 23, 2008. Please refer to Netstar -> Star TekInfo -> Star Time for the most current labor time allowance.

Damage Code	Operation Number	Time (hrs.)	Model Indicator (s)
15111 36	15 0000	0.1 hrs.	Q1, Q3
	15 5708	0.2 hrs.	Q1, Q3
	13 1202	0.5 hrs.	Q1, Q3

* Maximum time allowed with a separate time punch. Ensure that punches are labeled as NON time.

In Case of Warranty

Operation: Belt pulley for alternator, check (15-0000)

Belt pulley for alternator, replace (V-belt removed) (15-5708)

Poly V belt - single belt drive, replace (13-1202)