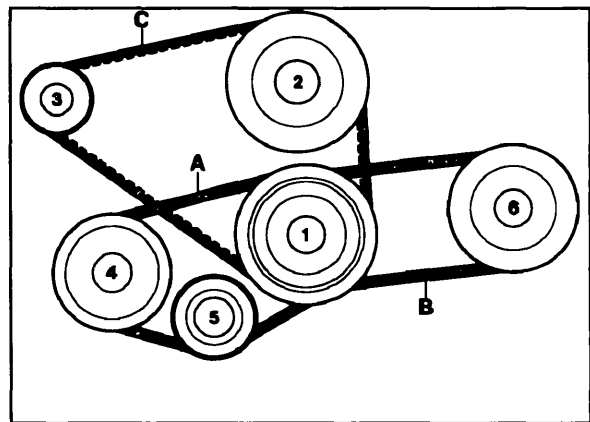


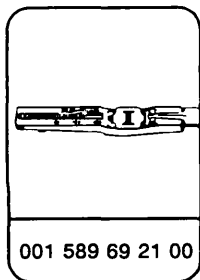
Engine 102
with multiple belt drive

V-belt	Location	Tension (KG) New V-belt	Tension (KG) Used V-belt
A	Air conditioning compressor	50	40-45
B	Power steering pump	50	40-45
C	Generator--coolant pump	30	20-25

- 1 Crankshaft
- 2 Coolant pump
- 3 Generator
- 4 A/C compressor
- 5 Tensioning pulley
- 6 Power steering pump
- Belt A A/C compressor
- Belt B Power steering pump
- Belt C Coolant pump - generator



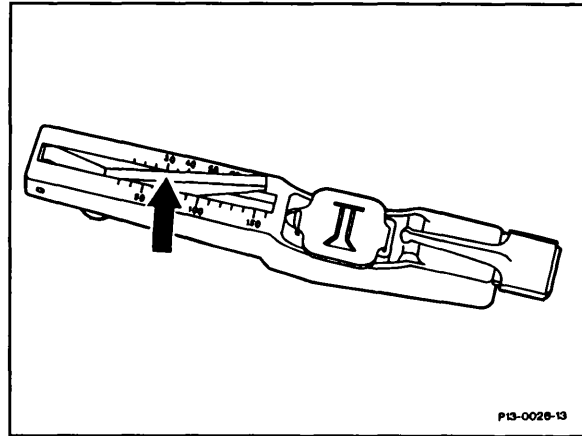
Special tools



Note

Refer to operating instructions for use of measuring instrument.

The specified tensioning values refer to the KG scales on the instrument (arrow).

**Checking condition of V-belt**

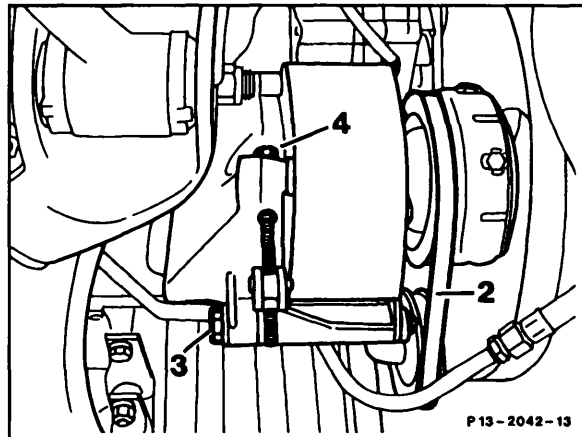
- Replace cracked or worn V-belts.

Tensioning

- Before tensioning, remove lower engine compartment panel.

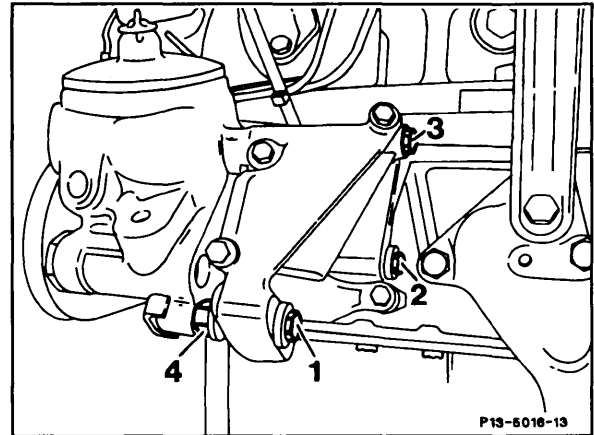
V-belt A Air conditioning compressor

- Loosen bolt (3).
- Tension V-belt with adjusting screw (4).
- Tighten bolt (3).



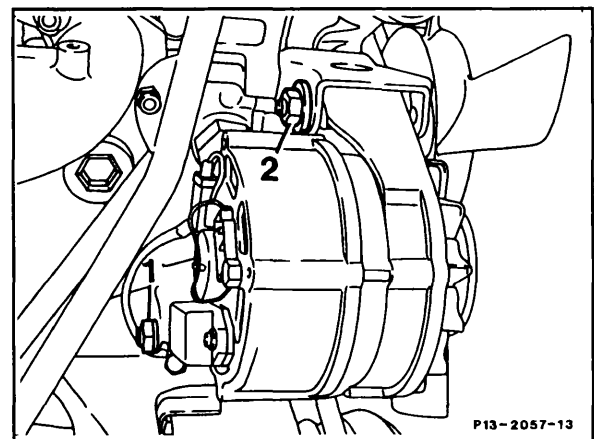
V-belt B Power steering pump

- Loosen bolts (1, 2, and 3).
- Tension V-belt with adjustment gear (4).
- Tighten bolts (1, 2, and 3).

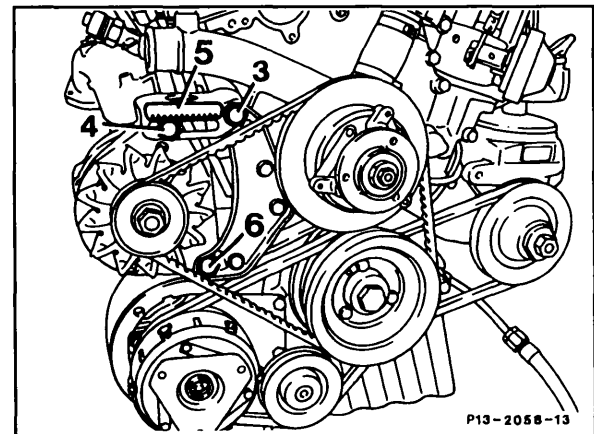


V-belt C Generator--Coolant pump

- Loosen nuts (1 and 2) as well as bolt (3).

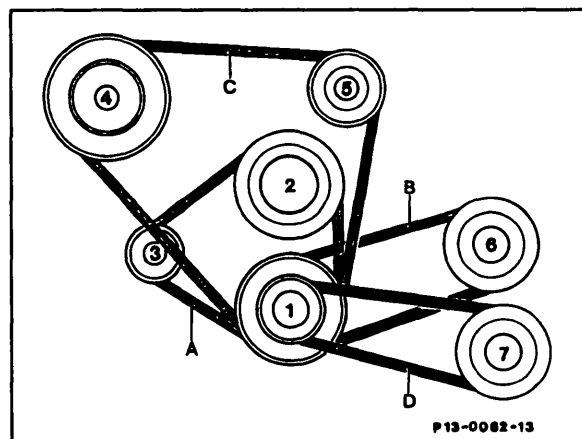


- Tension V-belt with adjusting screw (4).
- Tighten nuts (1 and 2), as well bolt (3).
- Install lower engine compartment panel.

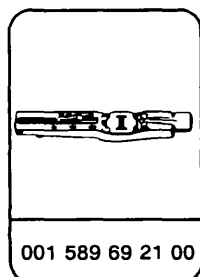


V-belt	Location	Tension (KG) New V-belt	Tension (KG) Used V-belt
A	Generator--coolant pump	30	20-25
B	Power steering pump	50	40-45
C	Air conditioning compressor	50	40-45
D	Secondary air injection pump	30	20-25

- 1 Crankshaft
- 2 Coolant pump
- 3 Generator
- 4 A/C compressor
- 5 Tensioning pulley
- 6 Power steering pump
- 7 Secondary air injection pump



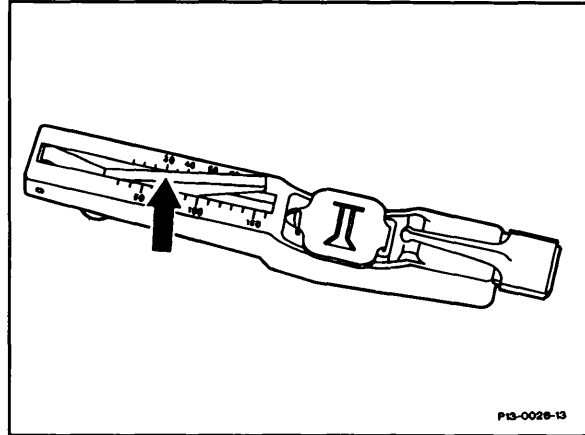
Special tools



Note

Refer to operating instructions for use of measuring instrument.

The specified tensioning values refer to the KG scales on the instrument (arrow).



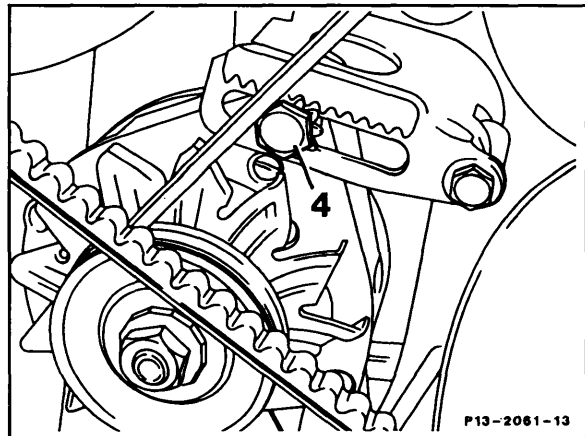
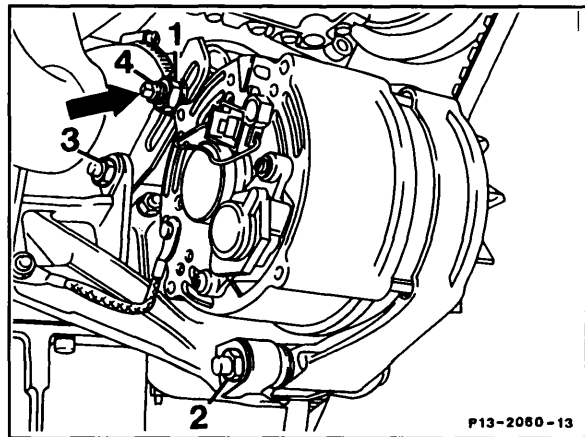
Checking condition of V-belt

- Replace cracked or worn V-belts.

Tensioning

V-belt A Generator--coolant pump

- Loosen nuts (1, 2 and 3).
- Tension V-belt at hexagon or on engines with air conditioning compressor at 6 mm square of adjustment bolt (4).
- Tighten nuts (1, 2 and 3).

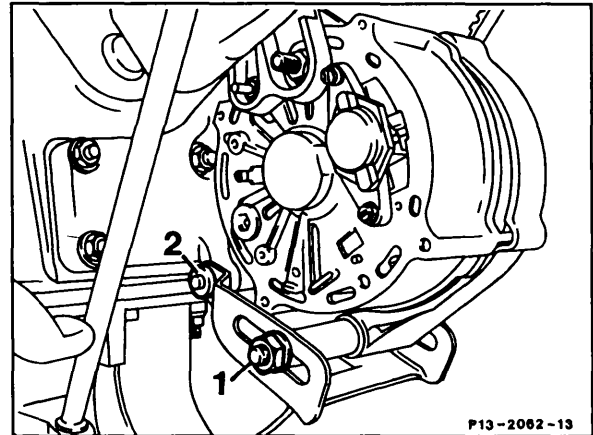


V-belt A Generator 80 A-coolant pump

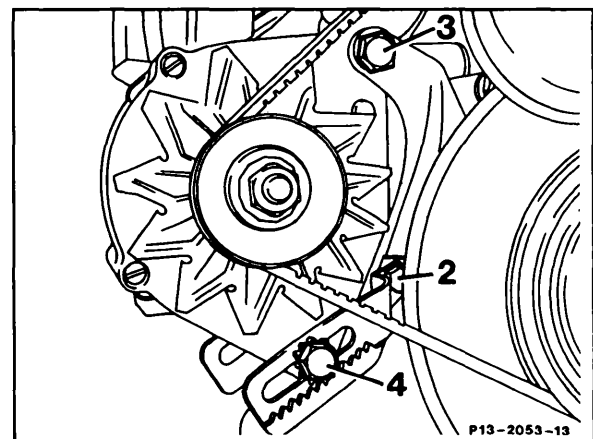
- Loosen nut (1).

Note:

Bolt (2) is installed from the rear of the generator on vehicles built starting July 1984.

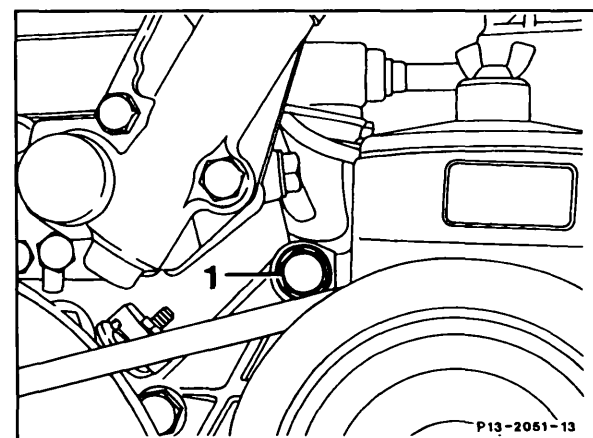


- On vehicle built up to July 1984, loosen bolt (2) from underneath the engine.
- On vehicle built starting July 1984, loosen bolt (2) from back of generator.
- Loosen bolt (3).
- Tension V-belt on hex of adjusting screw (4).
- Tighten nut (1) and bolt (3).
- Tighten bolt (2).

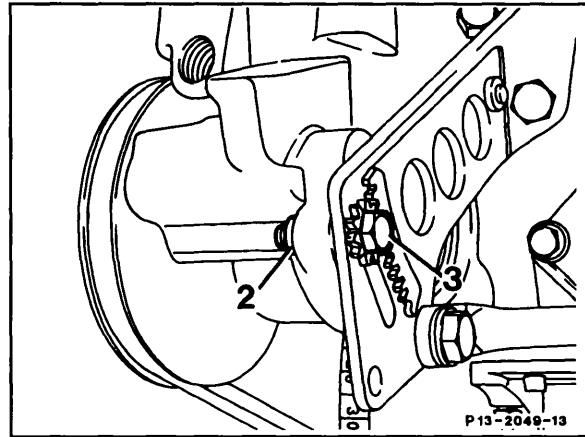


V-belt B Power steering pump

- Loosen bolt (1) on face of power steering pump.

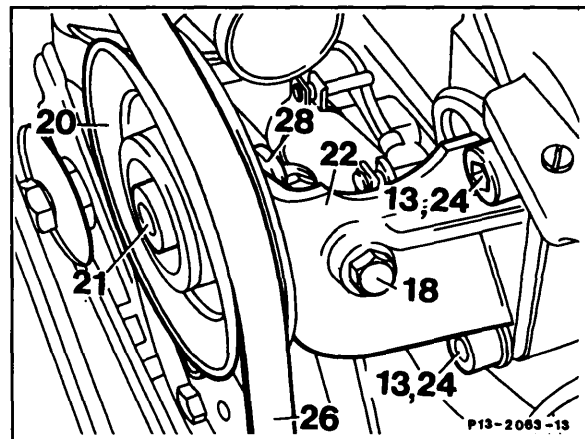


- Loosen nut (2).
- Adjust V-belt with adjustment bolt (3).
- Tighten nut (2) and bolt (1).



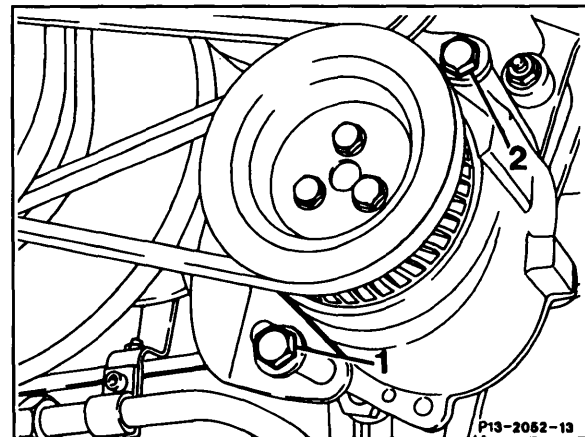
V-belt C Air conditioning compressor

- Loosen necked down bolt (21).
- Adjust V-belt with adjusting bolt (18).
- Tighten necked down bolt (21) to 25 Nm.



V-belt D Secondary air Injection pump

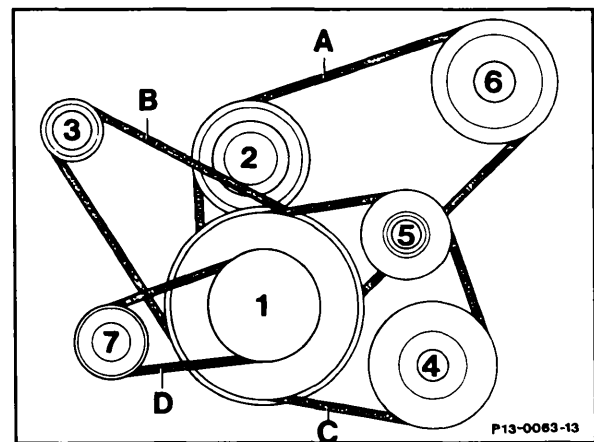
- Loosen mounting bolts (1 and 2).
- Adjust V-belt by swiveling secondary air injection pump outward.
- Tighten fastening bolts (1 and 2).



Engine 116 117

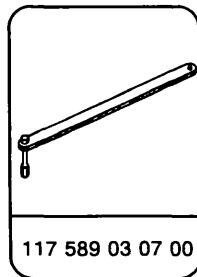
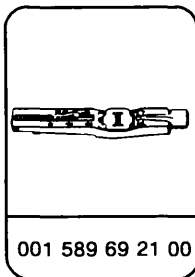
V-belt	Location	Tension (KG) New V-belt	Tension (KG) Used V-belt
A	Coolant pump - power steering pump ¹⁾	30	20-25
B	Generator	35	30-35
C	Air conditioning compressor	50	40-45
D	Secondary air injection pump	30	20-25

1) Double V-belt



- 1 Crankshaft
- 2 Coolant pump
- 3 Generator
- 4 A/C compressor
- 5 Tensioning pulley
- 6 Power steering pump
- 7 Secondary air injection pump

Special tools



Note

Refer to operating instructions for handling of measuring instrument.

The specified tensioning values refer to KG scale of measuring instrument (arrow).

Checking condition of V-belts

Replace cracked, scorched or worn V-belts.

Note: If one of the two V-belts of the double belt drive has to be replaced due to wear, both V-belts must always be replaced.

Only belts from one manufacturer may be installed together.

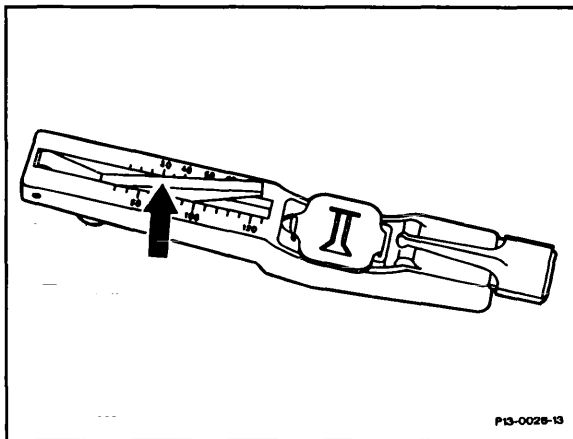
V-belts are supplied only in sets as spare parts.

Adjusting

V-belt A Coolant pump - Power steering pump

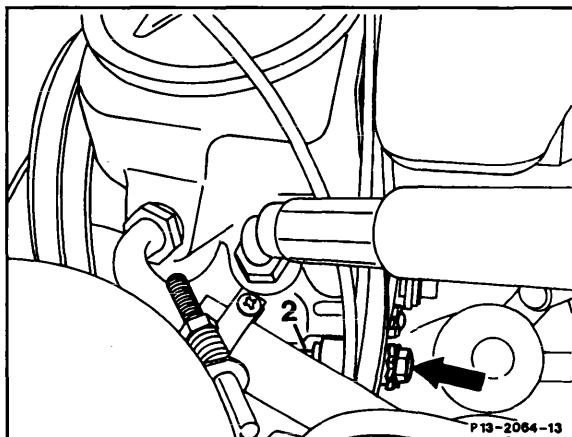
Loosen nuts (1,2 and 3 [fulcrum]).

Adjust V-belt with adjustment screw (arrow).



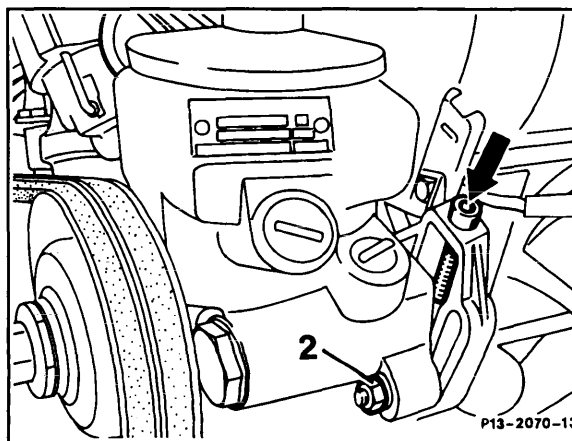
P13-0028-13

Power steering pump carrier (1st version)



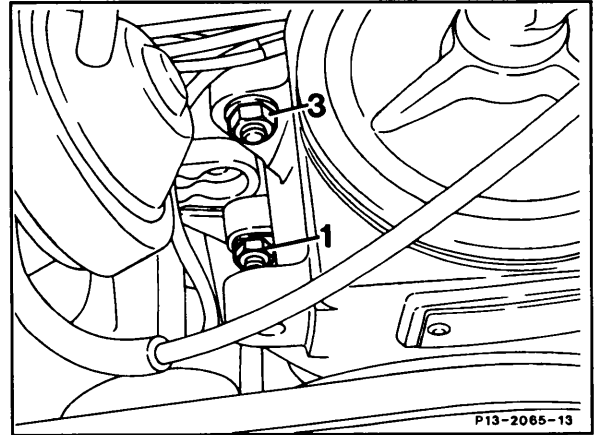
P13-2064-13

Power steering pump carrier (2nd version)



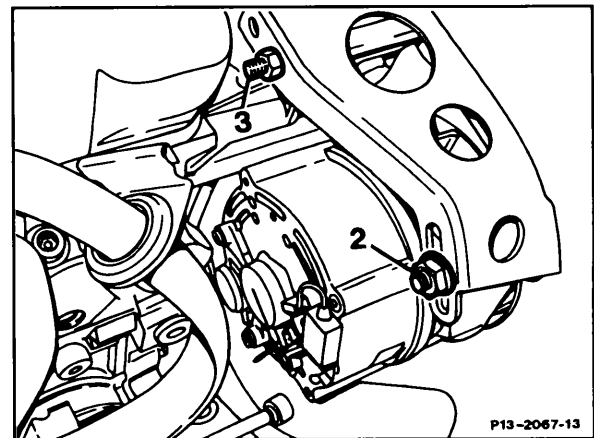
P13-2070-13

- Tighten nuts (1, 2 and 3).

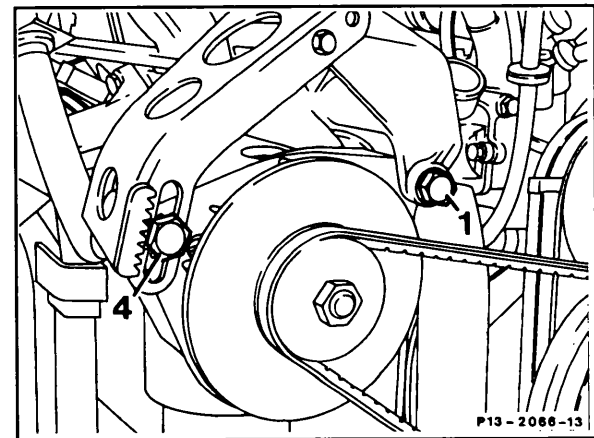


V-belt B Generator

- Loosen fastening bolt (1) and nuts (2 and 3).



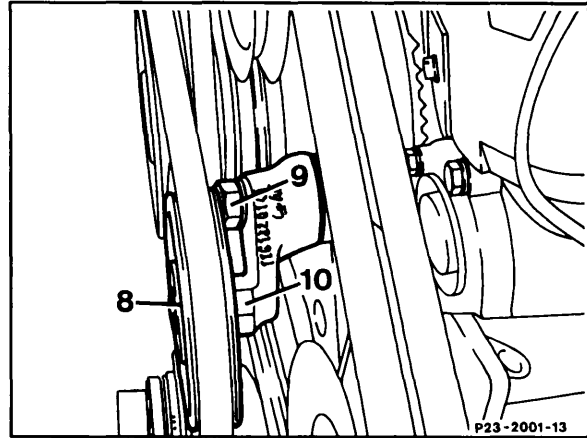
- Adjust V-belt with adjustment bolt (4).
- Tighten fastening bolt (1) and nuts (2 and 3).



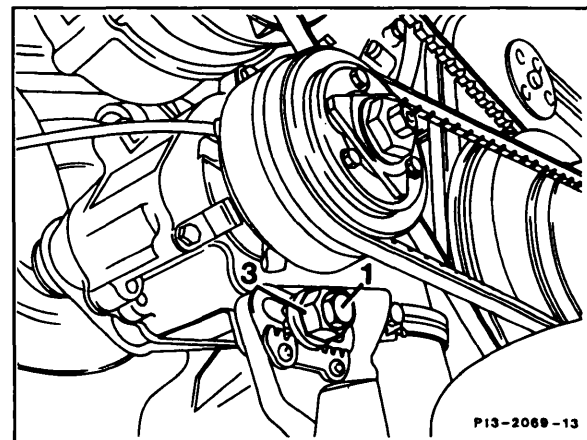
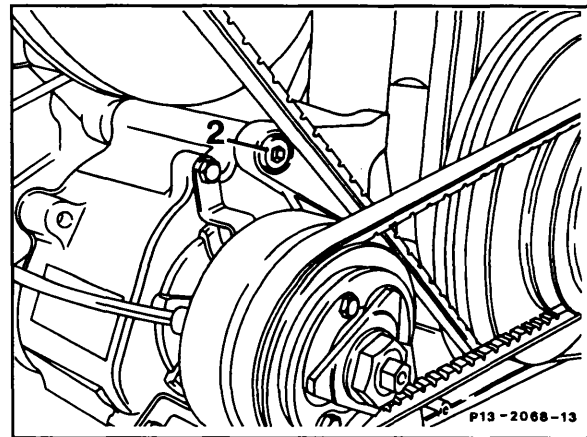
V-belt C Air conditioning compressor

- Loosen fastening bolt (9).
- Adjust the V-belt by turning the tensioning pulley (8). To do this place a right angle open end wrench (22 mm) on the flat surface (10).
- Tighten fastening bolt (9).

Note: As of November 1985 the mounting screw (9) is designed as a hex. socket screw. Use special tool 117 589 03 07 00.

**V-belt D Secondary air injection pump**

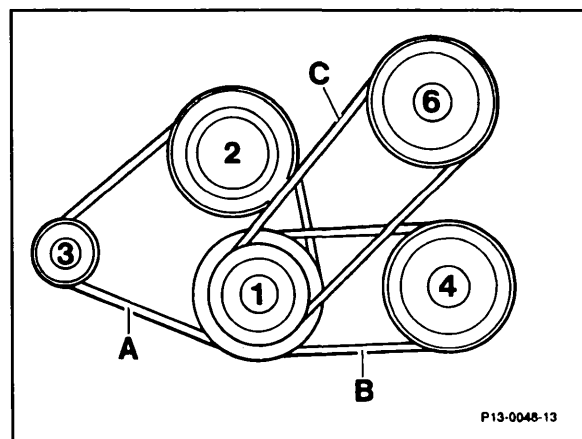
- Loosen fastening bolts (1 and 2).
- Adjust V-belt with adjustment wheel (3).
- Tighten fastening bolts (1 and 2).



Engine 616 617

Engine		616, 617.91	617.95	616, 617.91	617.95
V-belt	Location	Tension (KG) New V-belt	Tension (KG) New V-belt	Tension (KG) Used V-belt	Tension (KG) Used V-belt
A	Generator - coolant pump	50	30 ¹⁾	40-45	20-25 ¹⁾
B	Air conditioning compressor	50	50	40-45	40-45
C	Power steering pump	50	50	40-45	40-45

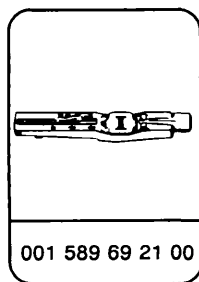
1) Double V-belt



- 1 Crankshaft
- 2 Coolant pump
- 3 Generator
- 4 A/C compressor
- 6 Power steering pump

P13-0048-13

Special tools



001 589 69 21 00

Note:

Refer to operating instructions for handling of measuring instrument.

The special tension data refer to KG scale of the measuring instrument (arrow).

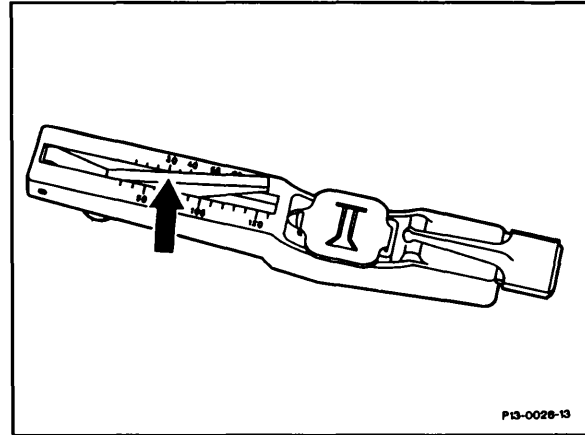
Checking condition of V-belt

Replace cracked, scorched or worn V-belts.

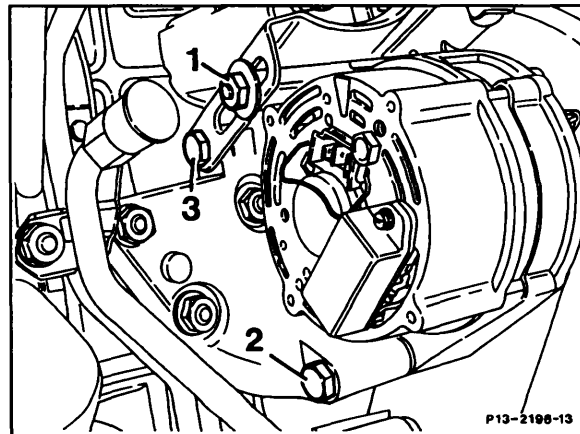
Note: If one of the two V-belts of the double belt drive (engine 617.95) has to be replaced due to wear, both V-belts must be replaced.

Only belts from one manufacturer may be installed together.

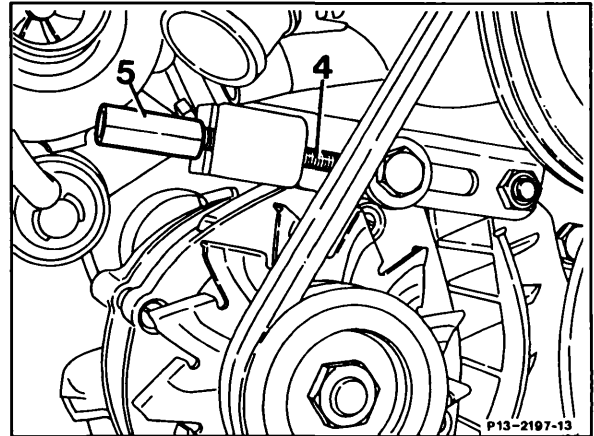
V-belts are supplied only in sets as spare parts.

**Adjusting****V-belt A Generator - Coolant pump**

- Loosen nut (1) and bolts (2 and 3).

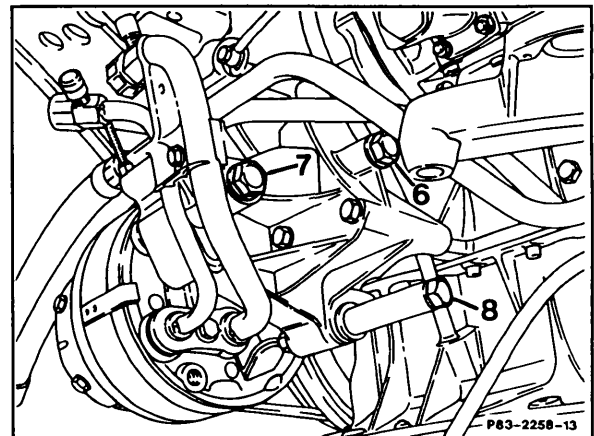


- Adjust V-belt with nut (5).
- Tighten nut (1) and bolts (2 and 3).
- Then keep turning nut (5) for approx. 1/4 to 1/2 turn (until tight).

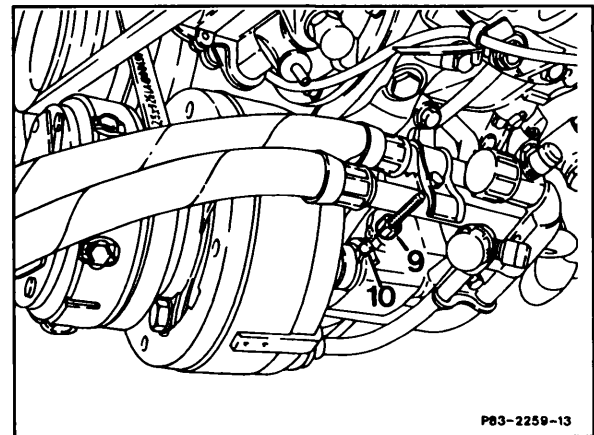


V-belt B Air conditioning compressor

- Loosen bolts (6, 7 and 8).

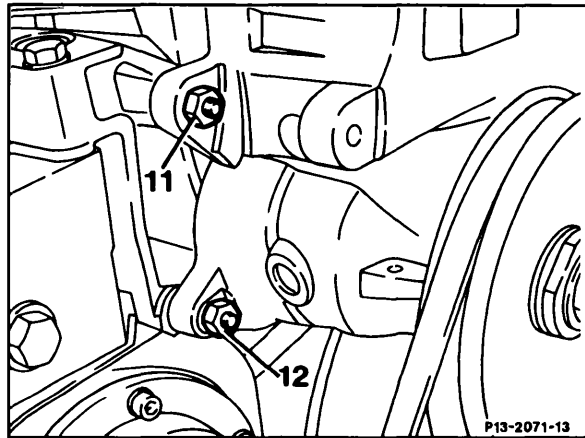


- Adjust V-belt with nut (9) of tensioning bolt (10).
- Tighten bolts (6, 7 and 8).



V-belt C Power steering pump

- Loosen nuts (11, 12 and 13).



- Adjust V-belt with clamping bolt (14).
- Tighten nuts (11, 12 and 13).

