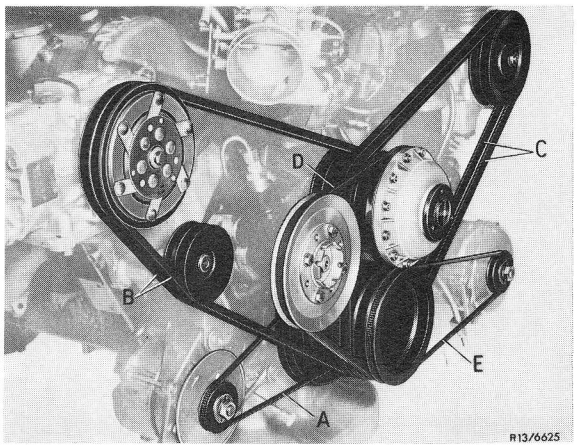
At the first maintenance job

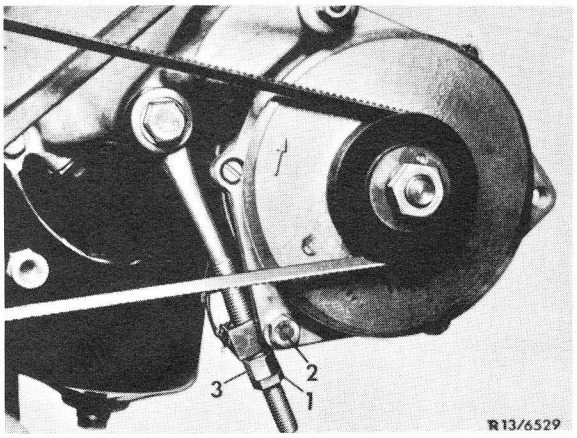
Engine M 100.980

V-belt	Deflection with 6 kp load
A B C	approx. 10
D	approx. 5
E	approx. 10



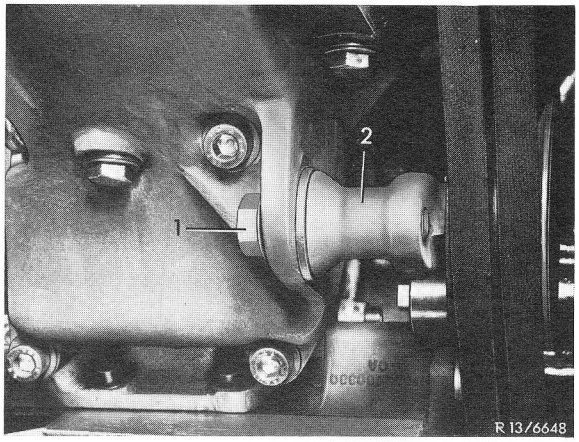
V-belts A and E

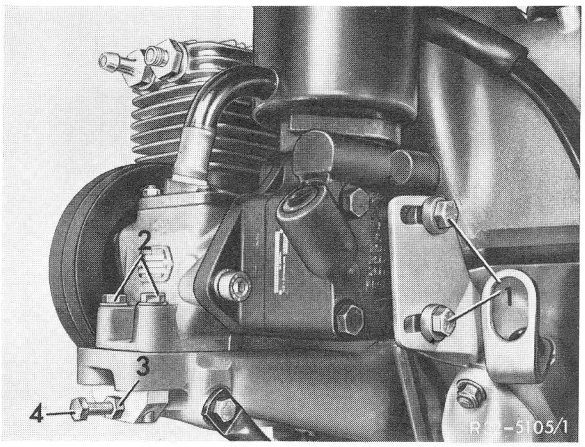
- Loosen counter nut (1) and fixing bolt (2)
- Adjust V-belt tension with the tensioning nut (3).
- Tighten fixing bolt and tensioning nut.



Double V-belt B

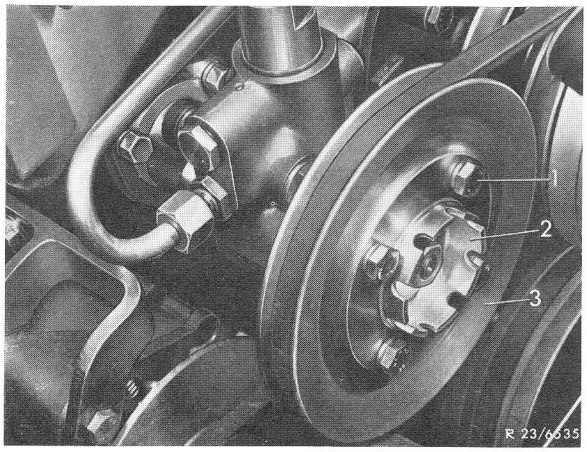
- Loosen fixing bolt (1) of the tensioner pulley (2) and adjust V-belts to the prescribed tension by repositioning tensioner pulley.
- Tighten fixing bolt.





Double V-belt C

- Loosen the two fixing bolts (1) and the four fixing bolts on the base of the air compressor (2) as well as the counternut (3).
- Tension the V-belts with the adjusting screw (4).
- Tighten fixing bolts and counternut.



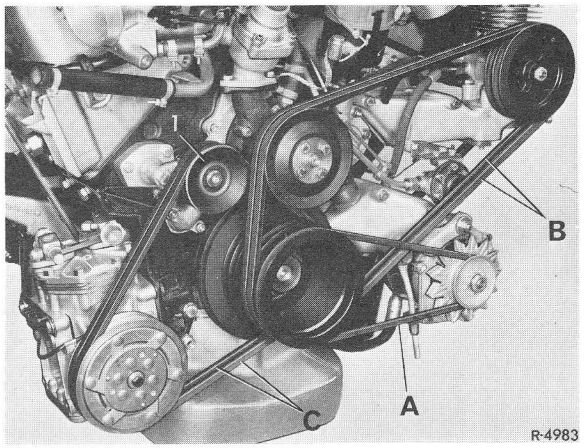
V-belt D

- Loosen the four hex.-hd. bolts (1).
- Tension V-belt by turning the threaded boss (2) to the right. Turn the engine at intervals with the starter so that the V-belt can adjust to the moveable pulley.
- Tighten hex-hd. bolts.

At the first maintenance job

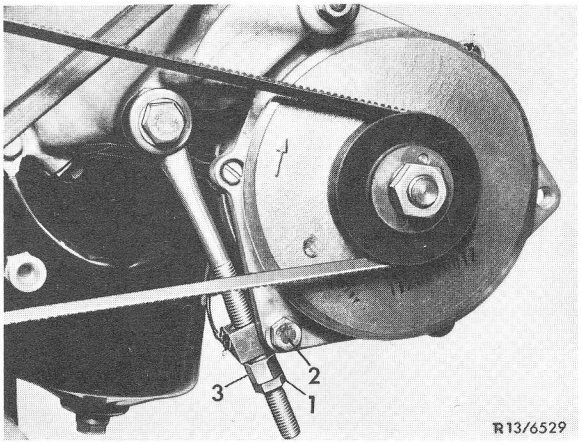
Engine M 100.981 / 983

V-belt	Deflection in mm with 6 kp load
A B C	approx. 10



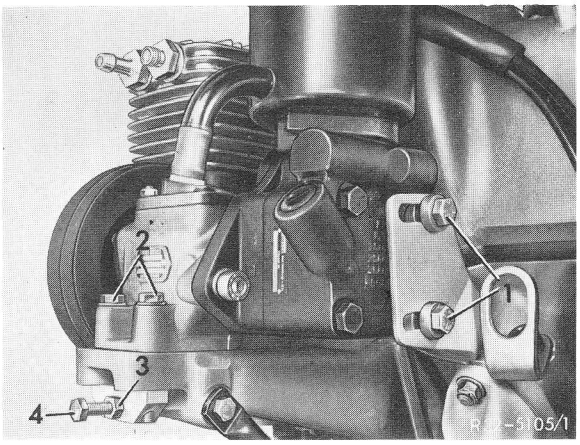
V-belt A

- Loosen counternut (1) and fixing bolt (2).
- Adjust V-belt tension with tensioning nut (3).
- Tighten fixing bolt and counternut.



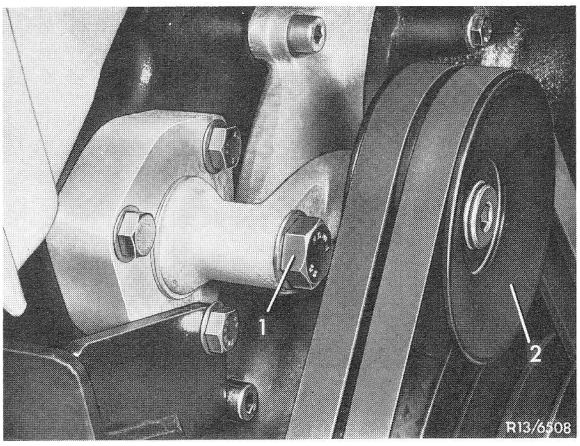
Double V-belt B

- Loosen fixing bolts (1) and the four fixing bolts (2) on the air compressor base, as well as the counternut (3).
- Tension V-belt with the adjustment screw (4).
- Tighten fixing bolts and counternut.



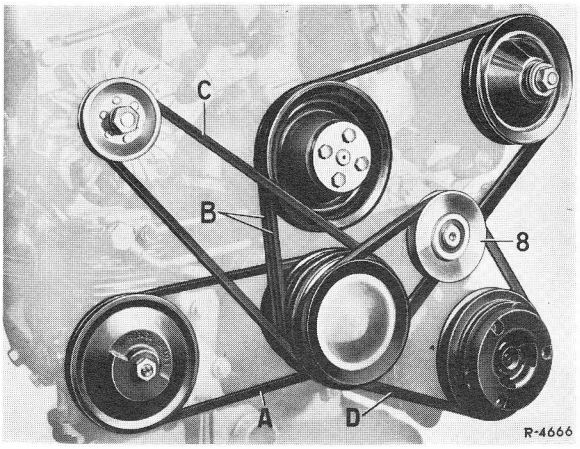
Double V-belt C

- Loosen fixing bolt (1) of the tensioner pulley (2).
- Adjust V-belt tension by repositioning tensioner pulley.
- Tighten fixing bolt.

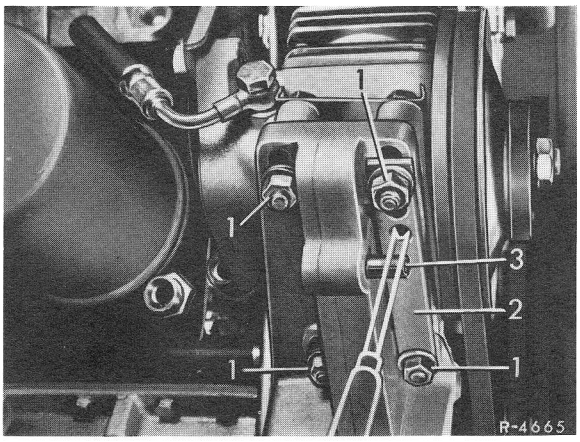


Engine M 116, 117

At the first maintenance job

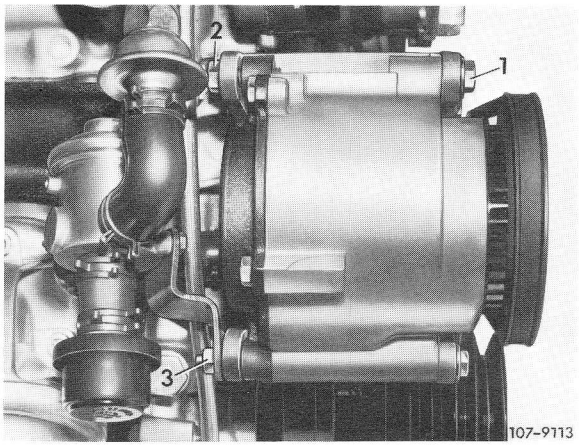


V-belt	Deflection in mm with 6 kp load
A B C	approx. 10
D	approx. 5



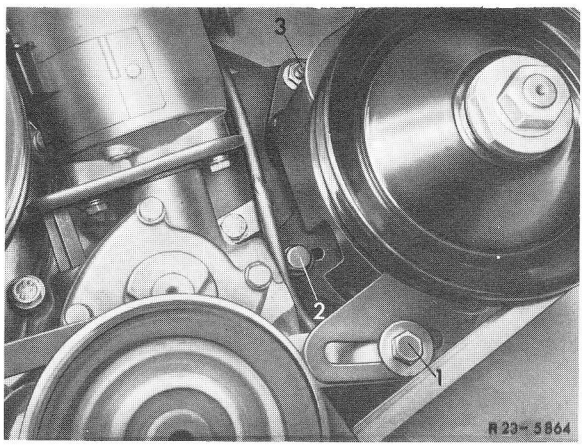
V-Belt A, Compressor Air Suspension

- Loosen the four fixing bolts (1) and the clamp for the air pipe bracket.
- Push a screwdriver or punch through the hole in plate (2), rest on bolt (3) and lever air compressor outwards.
- Tighten fixing bolts (1) and air pipe clamp.



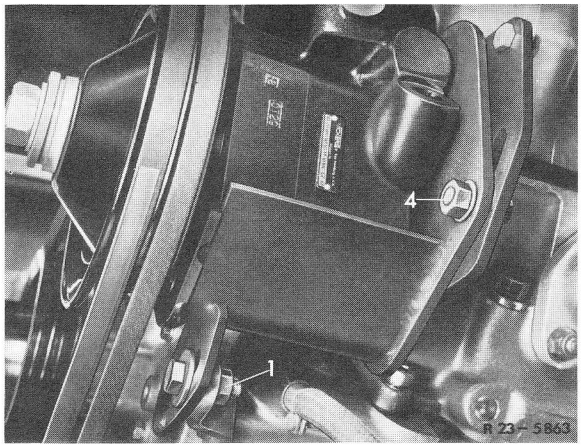
V-Belt A, Air Pump USA 74

- Loosen clamping screws 1 and 2, as well as fastening bolts 3.
- Push air pump outwards until V-belt is tensioned.
- Tighten clamping screws and fastening bolts.



Double V-belt B

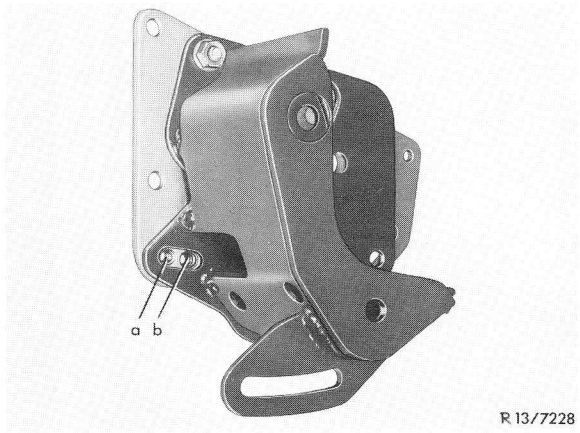
- Loosen fixing bolts (1, 2 and 4).
- Only loosen fixing bolt (3, pivot) slightly.
- Adjust tension of V-belt by moving high pressure pump outwards.
- Tighten fixing bolts.



Note

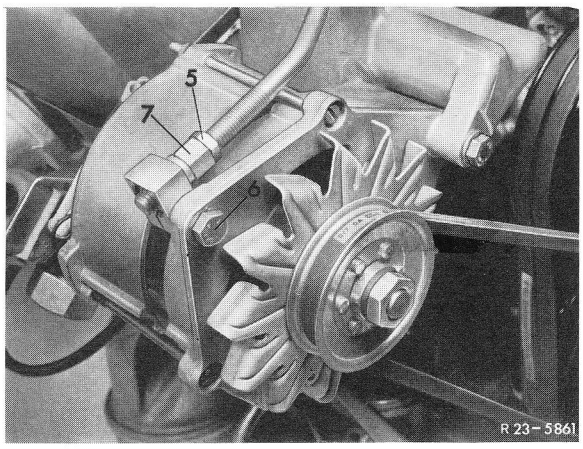
If adjustments can still be made but the adjusting possibilities of fastening bolts (1) are exhausted, transfer fastening bolt (2) from tapped hole "a" to tapped hole "b".

When replacing V-belts, return fastening bolt (2) again to hole "a".



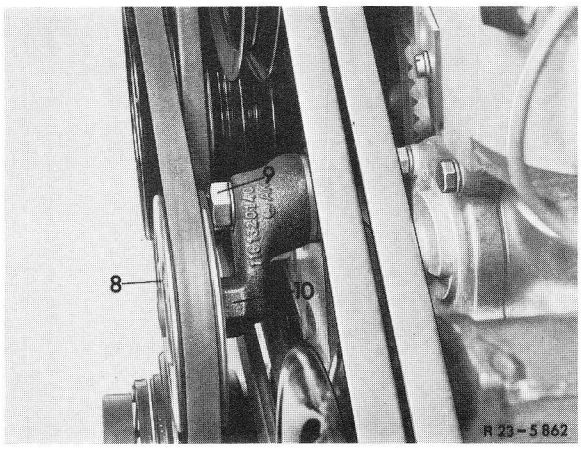
V-belt C

- Loosen counternut (5) and fixing bolt (6).
- Tension V-belt with tensioning nut (7).
- Lock tensioning nut with the couternut and tighten fixing bolt.



V-belt D

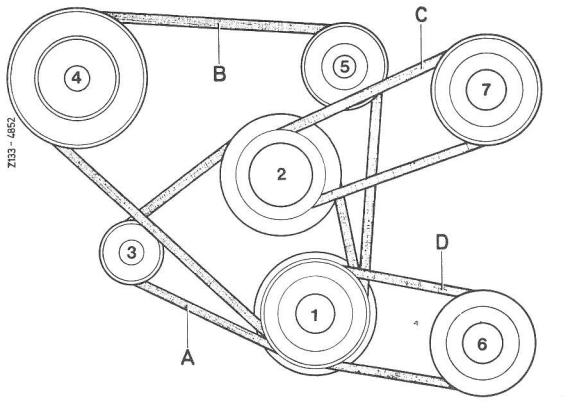
- Loosen fixing bolt (9) of the tensioner wheel (8).
- Adjust V-belt tension by moving tensioner wheel.
- Tighten fixing bolt.



M 114 115 130 180
OM 615 616

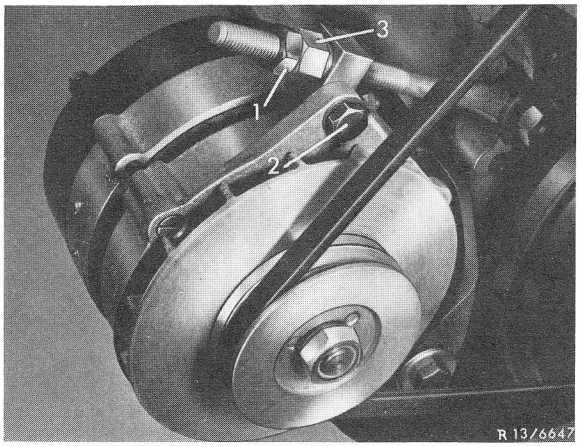
Alternator with Single Pulley

During first maintenance job



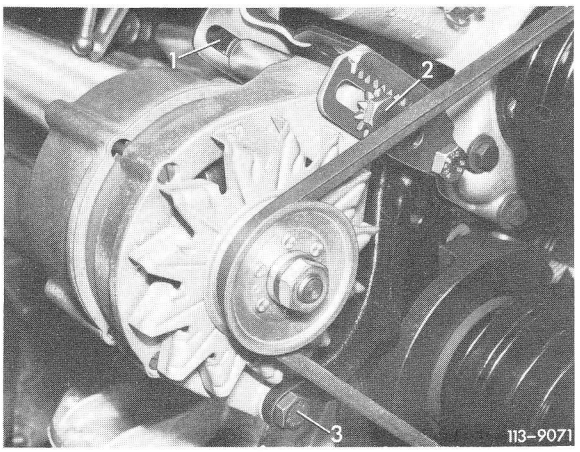
V-belt	Impression depth in mm at 6 kp load
A B C	approx. 10
D	approx. 5

1 Crankshaft
2 Water pump
3 Alternator
4 Refrigerant compressor
5 Tensioning pulley
6 High-pressure oil pump
7 Vacuum pump



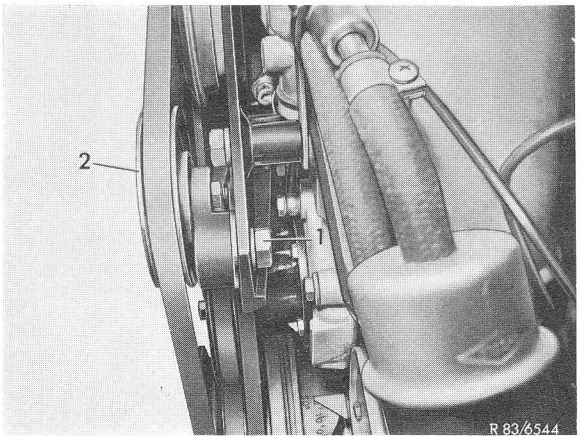
V-Belt A
Version up to August 73

- Loosen counter nut (1) and fastening bolt (2).
- Adjust V-belt tension with tensioning nut (3).
- Counterlock tensioning nut and tighten fastening bolt.



V-Belt A
Version as from August 73

- Loosen hex. nut (1) of tensioning screw (2) and fastening bolt (3).
- Adjust V-belt tension on hexagon of tensioning screw (2) and tighten hex. nut (1).
- Tighten fastening bolt (3).

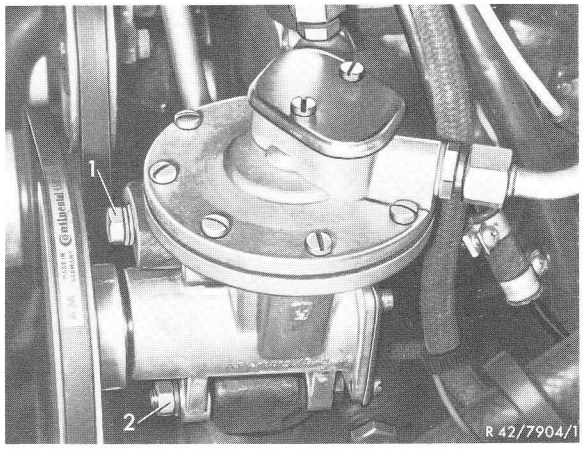


V-Belt B

- Loosen fastening bolt (1).
- Tension V-belt by swivelling tensioning pulley (2).
- Tighten fastening bolt.

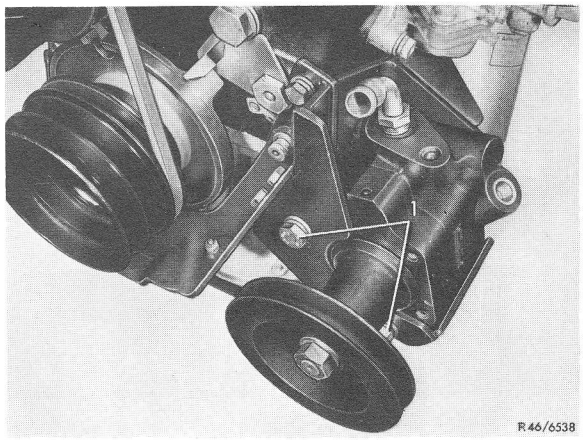
V-Belt C

- Loosen fastening bolts (1 and 2).
- Tension V-belt by swivelling vacuum pump.
- Tighten fastening bolts again.

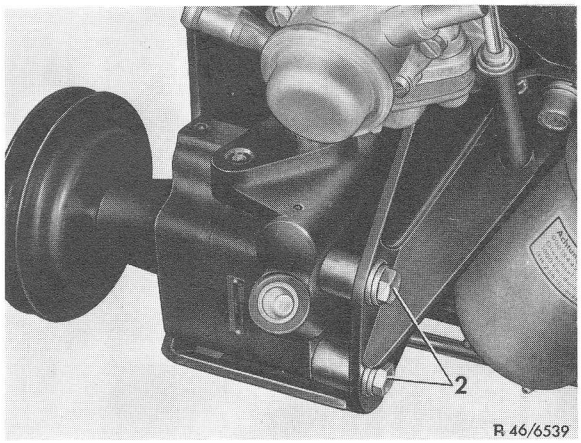


V-Belt D

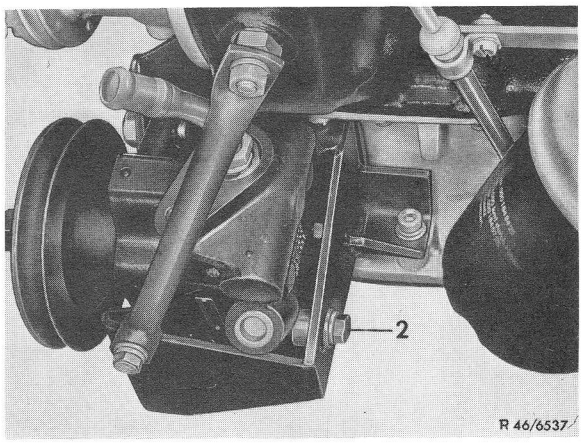
- Loosen fastening bolts on face of high-pressure pump (1) and at the rear (2).



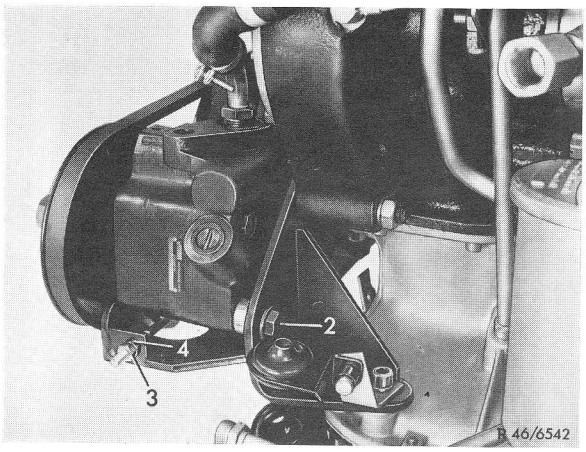
- On engines M 115, OM 615, 616, force high-pressure pump outwards with lever and tighten fastening bolts again.



Gasoline engine M 115

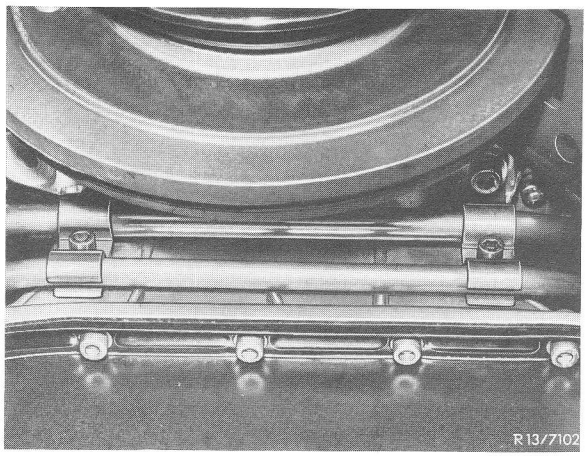


Diesel engine OM 615, 616



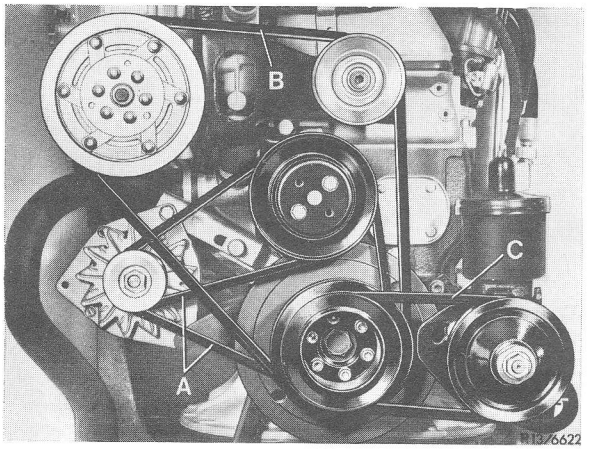
- On engines M 114, 130, 180 loosen counternut (3) and adjust V-belt tension with the adjusting nut (4).

- Tighten fixing bolts and couternut.

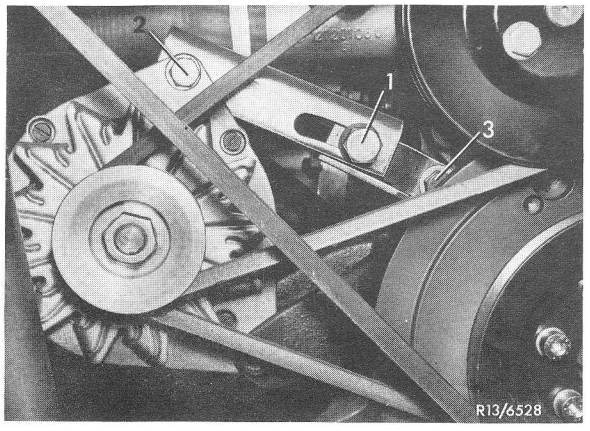


- On vehicles with engines M 114, 130, 180 **and righthanddrive** the two fastening bolts of the hose clamps must also be loosened and retightened after tensioning.

M 114 130 180 Alternator with Double Pulley



	During first maintenance job
V-belts	Impression depth in mm at 6 kp load
A B	approx. 10
C	approx. 5



Double V-belt A

- Loosen fixing bolt (1).

- Lever generator outwards. (With air conditioning system, from below.)

- Tighten fixing bolt (1) and retighten fixing bolts (2) and (3).

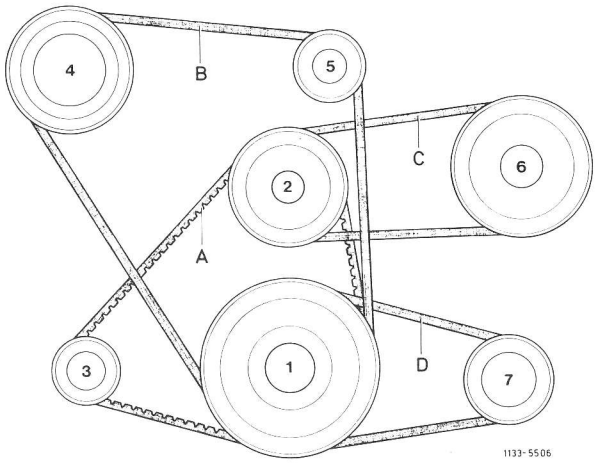
V-belts B and C, adjust as described under alternator with single pulley.

Special tools

Pin spanner insert SW 8 mm, 105 mm long, 1/2" square	000 589 34 07 00

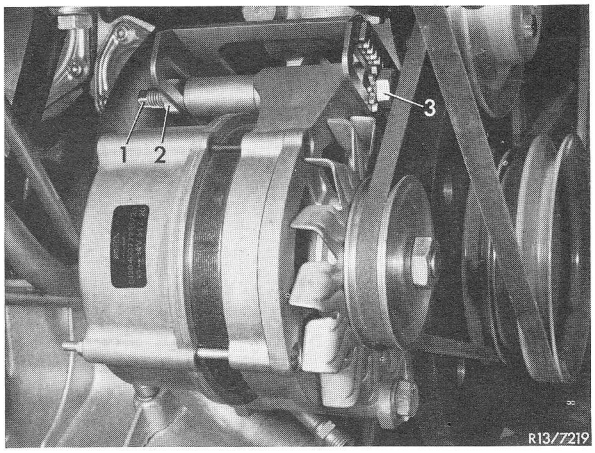
V-belts	Impression depth in mm at 6 kp load
A B C	approx. 10
D	approx. 5

1 Crankshaft
2 Water pump
3 Alternator
4 Refrigerant compressor
5 Tensioning pulley
6 Air pump
7 High-pressure oil pump



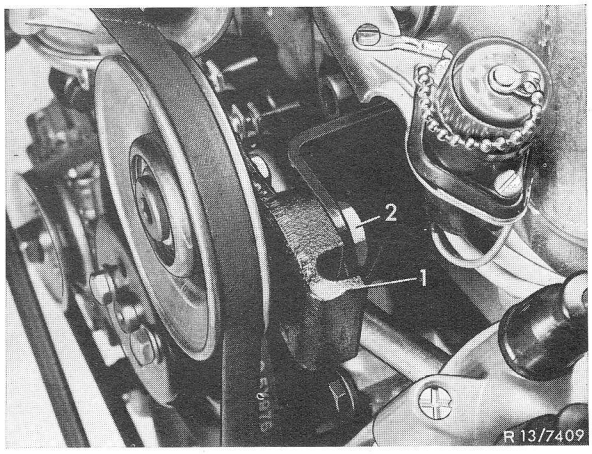
V-belt A

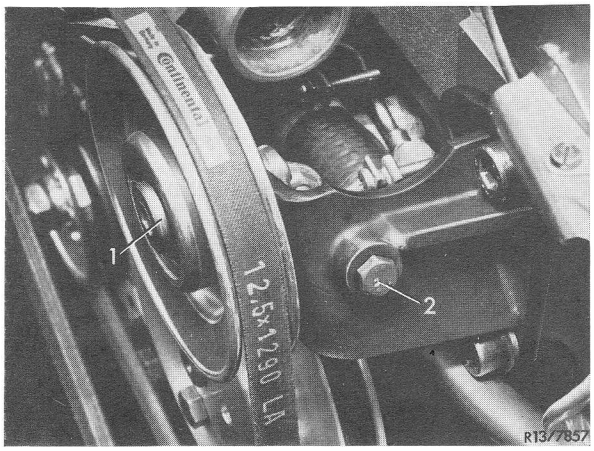
- Loosen hex. nut (2).
- Adjust tension on 6 mm square (1) or on hexagon SW 17 of tensioning screw (3).
- Tighten hex. nut (2).



V-belt B 1st version

- Introduce suitable tool of approx. 8 mm dia. into recess of bracket (1).
- Loosen fastening screw (2).
- Adjust V-belt tension by swiveling bracket (1).
- Tighten fastening screw (2).



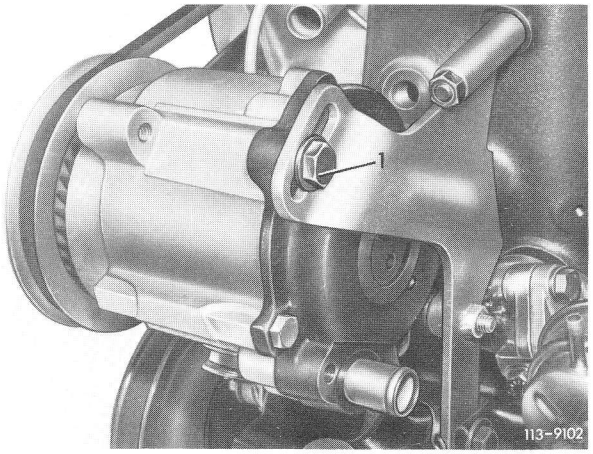


V-Belt B 2nd Version

- Loosen expanding screw (1).
- Adjust V-belt tension with adjusting screw (2).
- Tighten expanding screw (1) to 16 Nm (1.6 kpm).

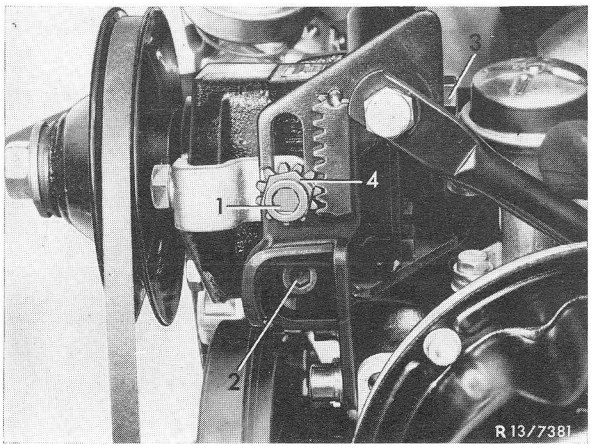
Note

A number of vehicles have been delivered with a counter nut on adjusting screw (2). For this version, the V-belt tension is adjusted at counter nut. But it will be of advantage to exchange adjusting screw M 6 x 90 for screw M 6 x 75 and to mount without counter nut.



V-Belt C USA Model Year 74

- Loosen fastening bolt (1).
- Adjust V-belt tension by swivelling air pump outwards.
- Tighten fastening bolt (1).



V-Belt D

- Loosen hex. socket screw (2) with socket wrench insert SW 8 x 105.
- Loosen hex. socket screw (1) and hex. screw (3).
- Adjust tension on hexagon SW 17 of toothed washer (4).
- Tighten hex. socket screws (1 and 2).
- Tighten fastening bolt (3).

V-Belt D USA Model Year 74

- Loosen fastening bolt (1).

- Adjust V-belt tension by swivelling high-pressure oil pump outwards.

- Tighten fastening bolt (1).