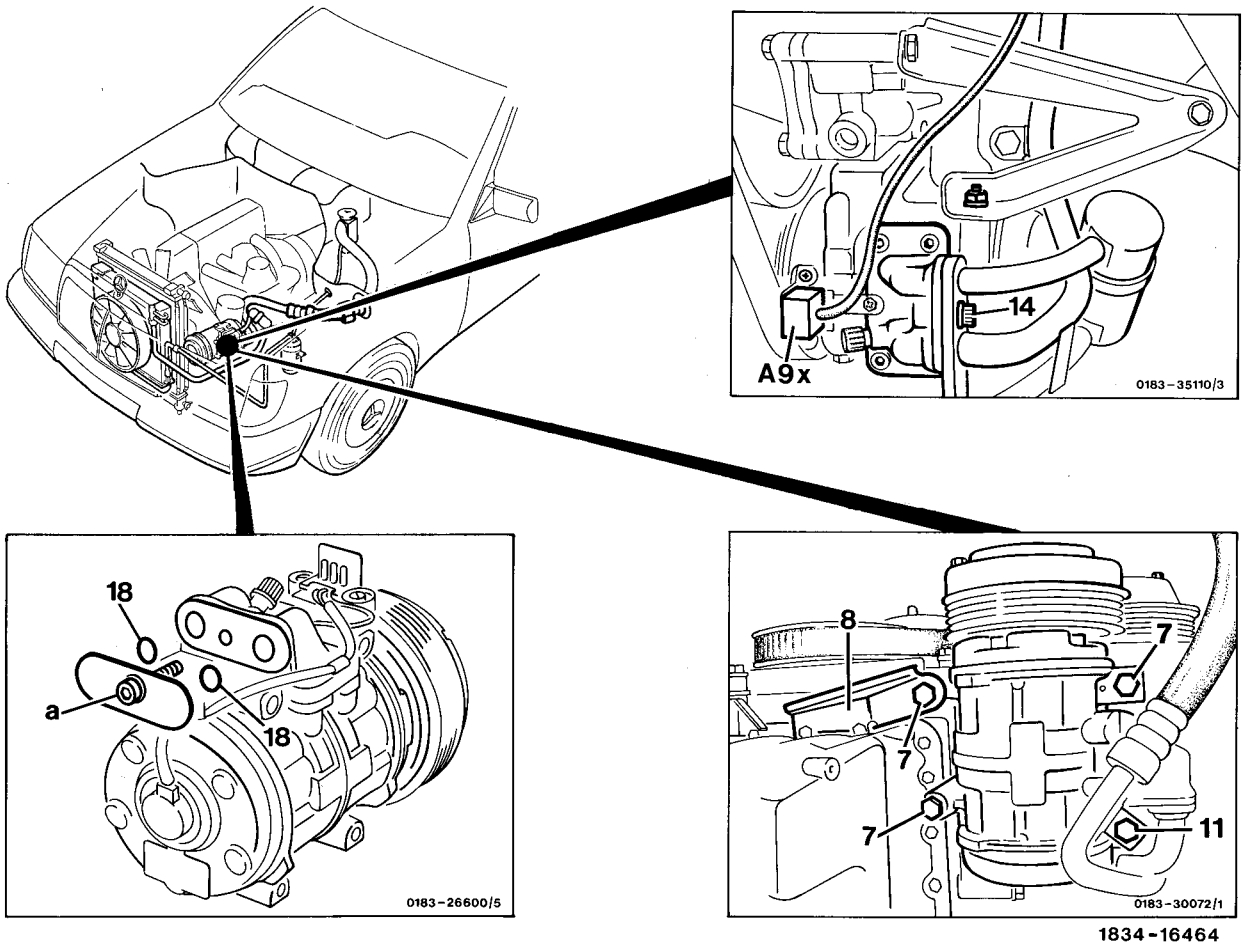


83-530 Removal and installation of A/C compressor

Operation number of operation texts and work units or standard texts and flat rates
83-0620

A. Engine 102

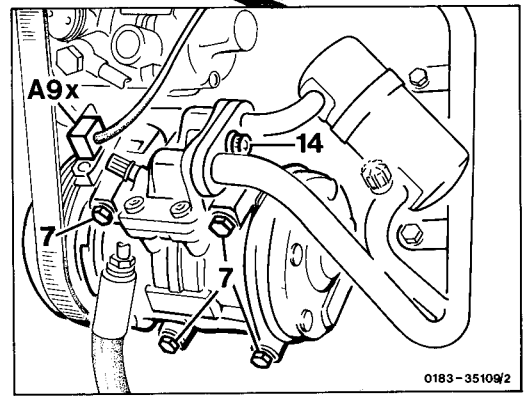
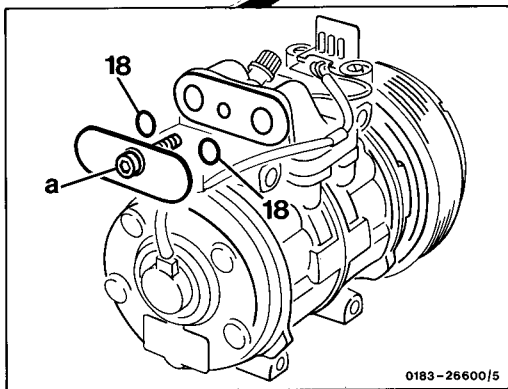
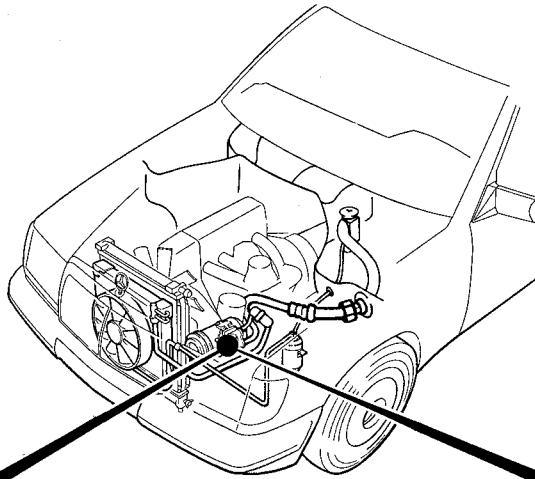


Air conditioner	empty (recycling).
Lower engine compartment panelling	remove.
Poly-V-belt	loosen and remove.
3 pole connector (A9x)	disconnect.
Screw (14)	screw out, tighten to 23 ± 2.3 Nm.
Mount (8)	remove/install.

Screws (7 and 11)	unscrew, tighten to 23 ± 2.3 Nm and remove A/C compressor downward.
Plug connections with dummy plate (a) part no. 601 131 00 21	before installing new compressor drain refrigerant slowly at service valve (arrow).
Correct oil level in A/C compressor	(83-525); fill new A/C compressors with 120 cm^3 of refrigeration oil (see Specifications for Service Products sheet no. 362 for approved refrigeration oils).
O-rings (18)	replace, if A/C compressor is not replaced.
Reinstall in reverse order	and observe the following: If the A/C compressor has been replaced due to internal damage (e.g. seizing or damage to the valve plates) the piping at the compressor and the expansion valve (83-552) must also be replaced. Moreover check the function and direction of rotation of the auxiliary fan (clockwise) via the 16 and 20 bar and $100 \text{ }^\circ\text{C}$ switches (83-560).
Fluid reservoir	replace (83-540).
Air conditioner	evacuate and recharge.
Air conditioner	Switch on and allow engine to idle for approx. 4 minutes.
Check air conditioner for proper function and leakage	(83-512); assure that the air outlet temperature at center nozzle is not below $+5 \text{ }^\circ\text{C}$, replace evaporator temperature sensor if required (83-546).



B. Engines 103 and 104



1834-16465

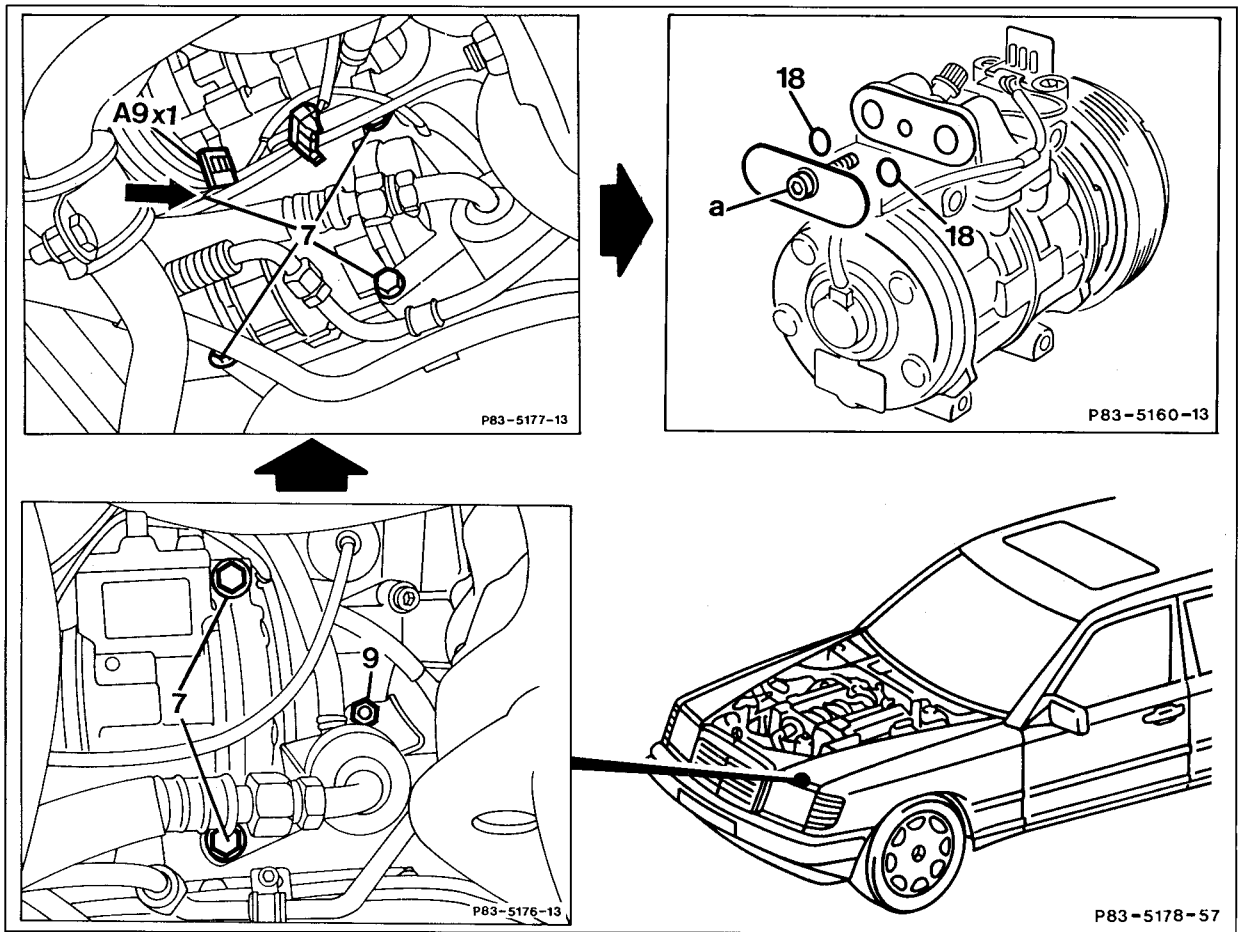
Air conditioner	drain (recycling).
Lower engine compartment panelling	remove.
Poly-V-belt	slacken and remove (13-342).
3-pin plug connection (A9x)	disconnect.
Screw (14)	screw out, tighten to 23 ± 2.3 Nm.
Screw (7)	screw out, tighten to 23 ± 2.3 Nm and remove A/C compressor downward.

Plug connections with dummy plate (a) part no. 601 131 00 21	before installing new compressor drain refrigerant slowly at service valve (arrow).
Correct oil level in A/C compressor	(83-525); fill new A/C compressors with 120 cm ³ of refrigeration oil (see Specifications for Service Products page no. 362 for approved refrigeration oils).
O-rings (18)	replace, if A/C compressor is not replaced.
Reinstall in reverse order	and observe the following: If the A/C compressor has been replaced due to internal damage (e.g. seizing or damage to the valve plates) the piping at the compressor and the expansion valve (83-552) must also be replaced. The operation and direction of rotation of the auxiliary fan (clockwise) is to be checked via the 16 or 20 bar switch and temperature sensor for automatic climate control (KLA/TAU) B11/7 or B10/8 (83-554).
Fluid reservoir	replace (83-540).
Air conditioner	evacuate and recharge.
Air conditioner	switch on and allow engine to idle for approx. 4 minutes.
Check air conditioner for proper function and leakage	(83-508); assure that the air outlet temperature at the center nozzle is not below +5 °C, replace evaporator temperature sensor if required (83-548).



Parts which have come into contact with compressor oil for R12 or R134a may only be installed in systems operating with the same refrigerant.

C. Engine 119




Air conditioner	empty (recycling).
Lower engine compartment lining	remove.
Poly-V-belt	release tension and remove (13-342).
Air supply pipe for the left engine bearing	remove (3 screws).
Left engine compartment lining	remove.
attachment points (A9x1)	disconnect.
Level line to pump and oil pan	remove.
Torsion bar at the front fixing	remove (2 clamps, 4 self-locking nuts).

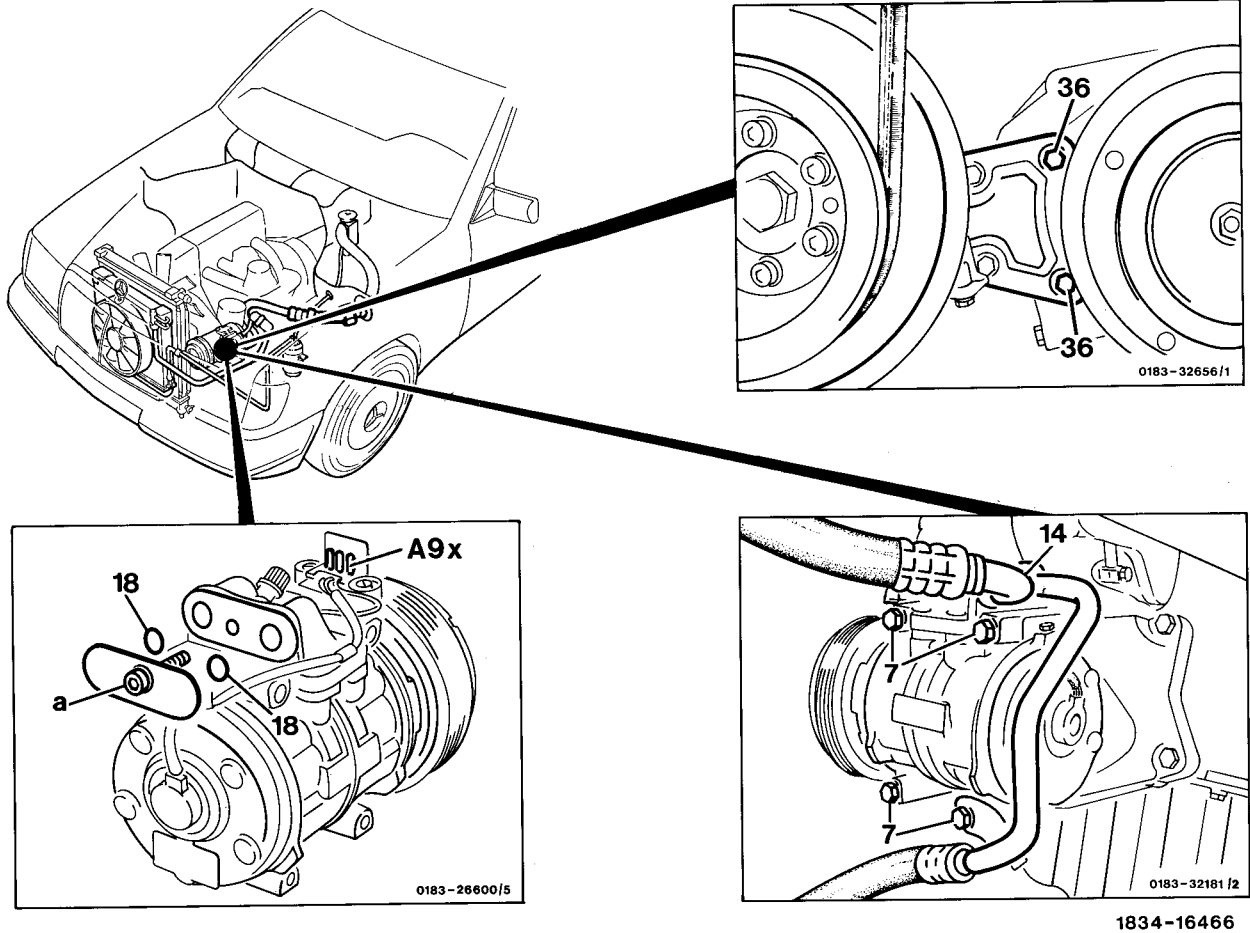


Self-locking nuts and bolts are always to be replaced with new ones when removed.

Oil line for engine oil cooler	remove (2 screws).
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Pipe group	remove from A/C compressor by unscrewing nut (9) and unscrewing bolt a and 1 bolt (7) on A/C compressor, tighten to 23 ± 2.3 Nm.
Bolts (7)	unscrew, tighten to 23 ± 2.3 Nm and remove A/C compressor downwards.
Connections with dummy plate (a) parts kit 140 830 01 27	seal. Before installing a new compressor, drain refrigerant at the service valve (arrow) slowly.
Oil level in A/C compressor	correct (83-525). New A/C compressors are to be filled with 120 cm ³ compressor oil or, in the case of A/C compressors for refrigerant R134a, with 160 cm ³ compressor oil (for approved compressor oils, see Specifications for Service Products, sheet no. 362)
O-rings (18)	replace, if A/C compressor has not been replaced.
Re-install in reverse order	and observe the following: if the A/C compressor has been replaced due to internal damage (e.g. freezing or damage to the valve plates) the piping at the compressor and the expansion valve (83-552) must also be replaced. Moreover the operation and direction of rotation of the auxiliary fan (clockwise) is to be checked via the 16 or 20 bar switch and temperature sensor for automatic climate control (KLA/TAU) B11/7 or B10/8 (83-544).
	
	Parts which have come into contact with compressor oil for R12 or R134a may only be installed in systems operating with the same refrigerant.
Fluid reservoir	replace (83-540).
Air conditioner	evacuate and refill.
Air conditioner	switch on and allow engine to run at idle for approx. 4 minutes.
Check air conditioner for function and leakage ...	(83-508) ensuring that the air outlet temperature at the center nozzles is not below +5°C, replace evaporator temperature sensor if required (83-546).

D. Engines 601, 602 and 603



Air-conditioner	empty (recycling).
Acoustic capsule - bottom section	remove, install.
Poly-V-belt	loosen and remove.
3-pin plug connection (A9x)	disconnect.
Screw (14)	unscrew, tighten to 23 ± 2.3 Nm.
On vehicles with engine 601, both screws (36) ..	unscrew, tighten to 23 ± 2.3 Nm.
Screw (7)	unscrew, tighten to 23 ± 2.3 Nm and remove A/C compressor downward.



Parts which have come into contact with compressor oil for R12 or R134a may only be installed in systems operating with the same refrigerant.

Plug connections with dummy plate (a) part No. 601 131 00 21	before installing new compressor drain refrigerant slowly at service valve (arrow).
Correct oil level in A/C compressor	(83-525); fill new A/C compressors with 120 cm ³ of cold flowing oil (see specifications for Service Products sheet no. 362 for approved cold flowing oils).
O-rings (18)	replace, if A/C compressor is not replaced.
Reinstall in reverse order	and observe the following: If the A/C compressor has been replaced due to internal damage (e.g. seizing or damage to the valve plates) the piping at the compressor and the expansion valve (83-552) must also be replaced. Moreover the function and direction of rotation of the auxiliary fan (clockwise) is to be checked via the 16 and 20 bar switch and temperature sensor for automatic climate control (KLA/TAU) B11/7 or B10/8 (83-544).
Fluid reservoir	replace (83-540).
Air-conditioner	evacuate and recharge.
Air-conditioner	switch on and allow engine to run at idle for approx. 4 minutes.
Check air-conditioner for proper function and leakage	(83-508); assure that the air outlet temperature at center nozzle is not below +5 °C, replace evaporator temperature sensor if required (83-546).