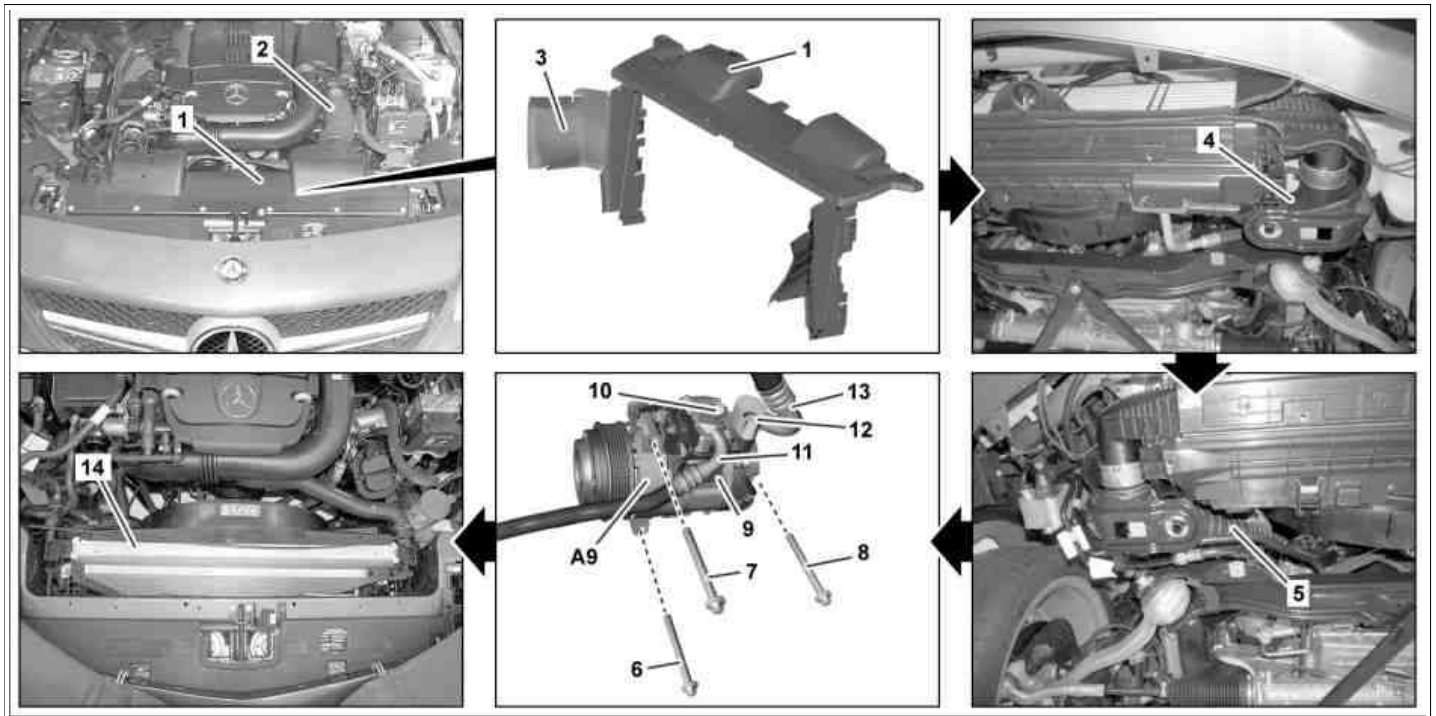


- Engine 271, 274, 276 in model 172.4
with code 580 (Air-conditioning system)
- Engine 271, 274, 276 in model 172.4
with code 581 (Automatic air conditioning)
- Engine 276 in model 207
with code 580 (Air-conditioning system)
- Engine 276 in model 207
with code 581 (Automatic air conditioning)

Modification notes








| | | | |
|------------|------------------------|--------------------|--|
| 05.10.2016 | Safety note added | AS83.00-Z-0006-01A | |
| 30.09.2016 | Safety note added | AS83.00-Z-0007-01A | |
| 30.09.2016 | "Technical note" added | AH54.00-P-0001-01A | |
| 30.09.2016 | General note added | AH83.30-P-0003-02A | |



P83.55-2198-09

Shown on MODEL 172 with ENGINE 271.861

- | | | | | | |
|---|-----------------|----|----------------------|----|------------------------|
| 4 | Charge air hose | 8 | Screw/bolt | 12 | Screw/bolt |
| 5 | Charge air hose | 9 | Electrical connector | 13 | Low pressure pipe |
| 6 | Screw/bolt | 10 | Screw/bolt | 14 | Radiator |
| 7 | Screw/bolt | 11 | High pressure pipe | A9 | Refrigerant compressor |

| | | | |
|---|---|--|---|
| | Risk of poisoning caused by inhaling overheated refrigerant vapors from an air conditioning system containing R134a. Risk of injury to skin and eyes caused by contact with liquid R134a refrigerant and when working on pressurized parts | Never perform welding work on or near a closed air conditioning system. No smoking or open flames. Wear safety glasses and protective gloves. Work only in well ventilated rooms. Carry out repair work on the air conditioning system circuit only after the system has been evacuated. Engine 271, 274, 276 in model 172.4 with code 580 (Air-conditioning system) except code 2U8 (Alternative refrigerant) Engine 271, 274, 276 in model 172.4 with code 581 (Automatic air conditioning) except code 2U8 (Alternative refrigerant) Engine 276 in model 207 with code 580 (Air-conditioning system) Engine 276 in model 207 with code 581 (Automatic air conditioning) | AS83.00-Z-0006-01A |
| | Risk of fire due to ignition of R1234yf refrigerant on hot components. Risk of poisoning caused by inhaling overheated refrigerant vapors. Risk of injury to skin and eyes caused by contact with escaped R1234yf refrigerant and when working on pressurized parts. Risk of explosion due to formation of ignitable refrigerant/air mixtures | Never perform welding work on or near a closed air conditioning system. No smoking or open flames. Wear safety glasses and protective gloves. Work only in well ventilated rooms. Carry out repair work on the air conditioning system circuit only after the system has been evacuated. Engine 271, 274, 276 in model 172.4 with code 2U8 (Alternative refrigerant) with code 580 (Air-conditioning system) Engine 271, 274, 276 in model 172.4 with code 2U8 (Alternative refrigerant) with code 581 (Automatic air conditioning) | AS83.00-Z-0007-01A |
|  | Information on preventing damage to electronic components due to electrostatic discharge | | AH54.00-P-0001-01A |
|  | Procedure for a damaged or leaky air conditioning system | | AH83.30-N-0004-01A |
|  | Protect air conditioning circuit and components from moisture when carrying out repair work | Engine 276 in model 207 with code 580 (Air-conditioning system) Engine 276 in model 207 with code 581 (Automatic air conditioning) | AH83.30-P-0005-01A |
|  | Notes on handling refrigerant R1234yf | Engine 271, 274, 276 in model 172.4 with code 2U8 (Alternative refrigerant) with code 580 (Air-conditioning system) Engine 271, 274, 276 in model 172.4 with code 2U8 (Alternative refrigerant) with code 581 (Automatic air conditioning) | AH83.30-P-0003-02A |
|  | Notes on handling refrigerant R134a | Engine 271, 274, 276 in model 172.4 with code 580 (Air-conditioning system) except code 2U8 (Alternative refrigerant) Engine 271, 274, 276 in model 172.4 with code 581 (Automatic air conditioning) except code 2U8 (Alternative refrigerant) Engine 276 in model 207 with code 580 (Air-conditioning system) Engine 276 in model 207 with code 581 (Automatic air conditioning) | AH83.30-N-0003-01A |
|  | Remove/install | | |
| 1  | Perform initial startup of refrigerant compressor (A9) | When installing new refrigerant compressor (A9). | AD00.00-P-2000-04A |
| 2 | Drain air conditioning system | Engine 271, 274, 276 in model 172.4 with code 580 (Air-conditioning system) Engine 271, 274, 276 in model 172.4 with code 581 (Automatic air conditioning) Engine 276 in model 207 with code 580 (Air-conditioning system) Engine 276 in model 207 with code 581 (Automatic air conditioning) | AR83.30-P-1760V AR83.30-P-1760CW |
| 3 | Slacken the poly-V-belt and remove from belt pulley of the refrigerant compressor (A9) | Engine 276 in model 172.4 with code 580 (Air-conditioning system) Engine 276 in model 172.4 with code 581 (Automatic air conditioning) Engine 276.9 in model 207 with code 580 (Air-conditioning system) Engine 276.9 in model 207 with code 581 (Automatic air conditioning) | AR13.22-P-1202W AR13.20-P-0001FH |

| | | | |
|----|--|---|--|
| | | <p>Engine 276.8 in model 207 with code 580 (Air-conditioning system) Engine 276.8 in model 207 with code 581 (Automatic air conditioning) Engine 271 in model 172 with code 580 (Air-conditioning system) Engine 271 in model 172 with code 581 (Automatic air conditioning) Engine 274 in model 172 with code 580 (Air-conditioning system) Engine 274 in model 172 with code 581 (Automatic air conditioning)</p> | <p>AR13.20-P-0001ELS AR13.20-P-0001CW AR13.20-P-0001MR</p> |
| 4 | Remove bottom engine compartment paneling at front | <p>Engine 271, 274, 276 in model 172.4 with code 580 (Air-conditioning system) Engine 271, 274, 276 in model 172.4 with code 581 (Automatic air conditioning) Engine 276 in model 207 with code 580 (Air-conditioning system) Engine 276 in model 207 with code 581 (Automatic air conditioning)</p> | <p>AR61.20-P-1105W AR61.20-P-1105EW</p> |
| 5 | Remove charge air hoses (4, 5) | <p>Engine 271 in model 172.4 with code 580 (Air-conditioning system) Engine 271 in model 172.4 with code 581 (Automatic air conditioning)</p> | |
| 6 | Release and detach electrical connector (9) from refrigerant compressor (A9) | | |
| 7 | Remove screws/bolts (6, 7, 8) from A/C compressor (A9) | <p>i A/C compressor (A9) must be secured against falling down. Nm Engine 271 in model 172.4 with code 580 (Air-conditioning system) Engine 271 in model 172.4 with code 581 (Automatic air conditioning) Bolt, refrigerant compressor to timing case/ crankcase/engine support Nm Engine 274 in model 172 with code 580 (Air-conditioning system) Engine 274 in model 172 with code 581 (Automatic air conditioning) Engine 276 in model 172.4, 207 with code 580 (Air-conditioning system) Engine 276 in model 172.4, 207 with code 581 (Automatic air conditioning) Screw/bolt, refrigerant compressor to timing case/crankcase/engine support</p> | <p>*BA83.55-P-1003-01G *BA83.55-P-1001-01M</p> |
| 8 | Unscrew bolt (12) | <p>Nm Engine 271 in model 172.4 with code 580 (Air-conditioning system) Engine 271 in model 172.4 with code 581 (Automatic air conditioning) Bolt, refrigerant lines to refrigerant compressor Nm Engine 274 in model 172 with code 580 (Air-conditioning system) Engine 274 in model 172 with code 581 (Automatic air conditioning) Engine 276 in model 172.4, 207 with code 580 (Air-conditioning system) Engine 276 in model 172.4, 207 with code 581 (Automatic air conditioning) Bolt, refrigerant line to refrigerant compressor</p> | <p>*BA83.55-P-1002-01G *BA83.55-P-1003-01M</p> |
| 9 | <p>BB Remove low-pressure line (13) from A/C compressor (A9) Compressor oils (specification 362.1)</p> | <p>i Installation: Sealing ring of low-pressure line (13) must be replaced and moistened with compressor oil.</p> | <p>BB00.40-P-0362-01A</p> |
| 10 | Seal openings of low-pressure line (13) and A/C compressor (A9) using suitable stop plugs | <p>i The openings of the low-pressure line (13) and refrigerant compressor (A9) must be sealed. Otherwise, penetrating dirt and moisture will damage the air conditioning system. S Record plug</p> | <p>*129589009100</p> |

| | | | |
|----------|---|---|---|
| 11 | Remove screw/bolt (10) | <p>Nm Engine 271 in model 172.4 with code 580 (Air-conditioning system) Engine 271 in model 172.4 with code 581 (Automatic air conditioning) Bolt, refrigerant lines to refrigerant compressor</p> <p>Nm Engine 274 in model 172 with code 580 (Air-conditioning system) Engine 274 in model 172 with code 581 (Automatic air conditioning) Engine 276 in model 172.4, 207 with code 580 (Air-conditioning system) Engine 276 in model 172.4, 207 with code 581 (Automatic air conditioning) Bolt, refrigerant line to refrigerant compressor</p> | <p>*BA83.55-P-1002-01G</p> <p>*BA83.55-P-1003-01M</p> |
| 12 | Remove high-pressure line (11) from A/C compressor (A9) Compressor oils (specification 362.1) | <p>i Installation: Sealing ring of high-pressure line (11) must be replaced and moistened with compressor oil.</p> | BB00.40-P-0362-01A |
| 13 | Seal openings of high-pressure line (11) and A/C compressor (A9) using suitable stop plugs | <p>i The openings of the high-pressure line (11) and refrigerant compressor (A9) must be sealed. Otherwise, penetrating dirt and moisture will damage the air conditioning system.</p> <p>☑ Record plug</p> | *129589009100 |
| 14 | Lift radiator (14), pull towards the front and fasten in place | <p>Engine 271, 276 in model 172.4 with code 580 (Air-conditioning system) Engine 271, 276 in model 172.4 with code 581 (Automatic air conditioning) Engine 276 in model 207 with code 580 (Air-conditioning system) Engine 276 in model 207 with code 581 (Automatic air conditioning)</p> | |
| 15 | Remove refrigerant compressor (A9) upwards out of the engine compartment | | |
| 16 | Install in the reverse order | | |
| ◀ | Check | | |
| 17 | Evacuate the air conditioning system, refill it, and then check the system to make sure that it functions correctly and does not leak | <p>Engine 271, 274, 276 in model 172.4 with code 580 (Air-conditioning system) Engine 271, 274, 276 in model 172.4 with code 581 (Automatic air conditioning) Engine 276 in model 207 with code 580 (Air-conditioning system) Engine 276 in model 207 with code 581 (Automatic air conditioning)</p> | <p>AR83.30-P-1760V</p> <p>AR83.30-P-1760CW</p> |

Nm Refrigerant compressor

| Number | Designation | | Engine 274 | Engine 276 |
|--------------------|--|----|------------|------------|
| BA83.55-P-1001-01M | Screw/bolt, refrigerant compressor to timing case/crankcase/engine support | Nm | 20 | 20 |

Nm Refrigerant compressor

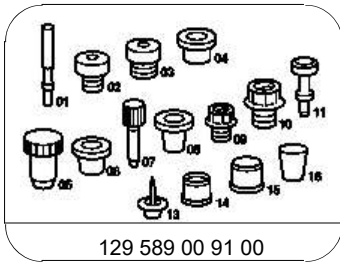
| Number | Designation | | Engine 271 in model 171, 172, 203, 209, 211, 212 |
|--------------------|---|----|--|
| BA83.55-P-1002-01G | Bolt, refrigerant lines to refrigerant compressor | Nm | 20 |

Nm Refrigerant compressor

| Number | Designation | | Engine 271 in model 171, 172, 203, 209, 211, 212 |
|--------------------|--|----|--|
| BA83.55-P-1003-01G | Bolt, refrigerant compressor to timing case/crankcase/engine support | Nm | 20 |

Nm Refrigerant compressor

| Number | Designation | | | Engine 274 | Engine 276 |
|--------------------|---|----|----|------------|------------|
| BA83.55-P-1003-01M | Bolt, refrigerant line to refrigerant compressor M8 | M8 | Nm | 20 | 20 |



Record plug