Document title Remove/install rack-and-pinion steering

Document number ar4620p0600el

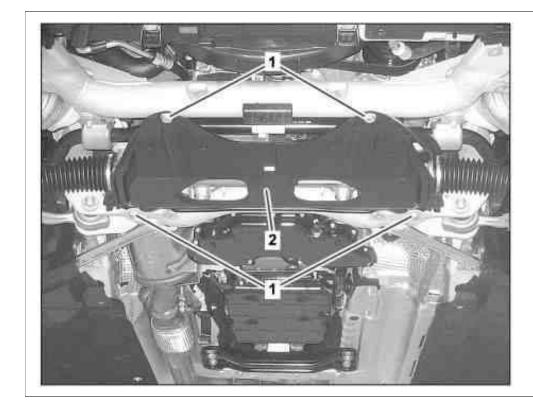
Model 204, 207, 212

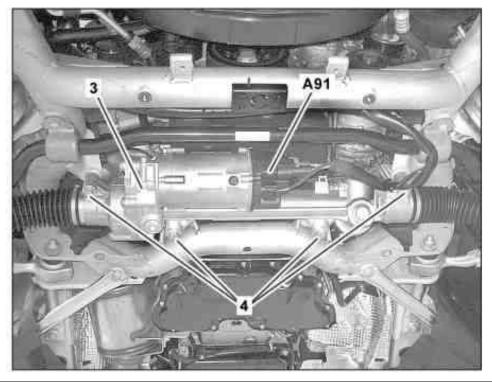
with code 211 (Direct-Steer system)

Model 218

Modification notes

20.07.2015 Basic data corrected Operation step 8





P46.20-2417-08

- 1 Bolts (model 207, 212 except code M005 (4MATIC), model 218)
- 2 Mounting plate (model 207, 212 except code M005 (4MATIC), model 218)
- 3 Electrical power steering
- 4 Bolts (model 207, 212 except code M005 (4MATIC), model 218)
- A91 Electric power steering electromechanical controller unit

- 5 Bolts (model 204, model 207, 212 with code M005 (4MATIC))
- 6 Bolt (model 204, model 207, 212 with code M005 (4MATIC))



P46.20-2428-03



P46.20-2443-11

| | Notes on self-locking nuts and bolts | | AH00.00-N-0001-01A |
|-----|--|--|--------------------|
| | Information on preventing damage to electronic components due to electrostatic discharge | | AH54.00-P-0001-01A |
| | Evaluating steering gear when repairing accident vehicles | | AH46.20-P-9409-01A |
| XX | Remove/install | | |
| 1 | Switch off ignition and remove transmitter key or KEYLESS-GO stop/start button | | |
| 2 | Deactivate easy entry/exit feature | Model 204, 207, 212 with code 211 (Direct-Steer system) with code 275 (Memory package) Model 218 with code 275 (Memory package) | |
| 3 | Turn steering wheel into center position (front wheels in straight-ahead position) and fix in position with retaining device | The steering wheel must not be turned when detaching steering coupling. Otherwise the clock spring contact will be destroyed. Retainer device | *129589012100 |
| 4 | Remove front wheels | | |
| ₩AP | | Model 212 with code 211 (Direct-Steer system) Model 218 | AP40.10-P-4050EW |
| ₩AP | | Model 204, 207 with code 211 (Direct-Steer system) | AP40.10-P-4050CW |
| 5.1 | Remove center and rear section of lower engine compartment paneling | Model 204.0/2 with engine 156, 271, 272, 274, 276 with code 211 (Direct-Steer system) Model 204.3 with engine 156, 271, 274, 276 with code 211 (Direct-Steer system) Model 204.9 with code 211 (Direct-Steer system) Model 207 with engine 271, 272, 273, 274, 276, 278 with code 211 (Direct-Steer system) Model 212 with engine 156, 157, 271, 272, 273, 274, 276, 278 with code 211 (Direct-Steer system) Model 218 with engine 157, 274, 276, 278 Model 204.0/2 with engine 156, 271, 272, 274, 276 with code 211 (Direct-Steer system) Model 204.3 with engine 156, 271, 274, 276 with code 211 (Direct-Steer system) Model 207 with engine 271, 272, 273, 274, 276, 278 with code 211 (Direct-Steer system) Model 212 with engine 156, 157, 271, 272, 273, 274, 276, 278 with code 211 (Direct-Steer system) Model 212 with engine 156, 157, 271, 272, 273, 274, 276, 278 with code 211 (Direct-Steer system) Model 218 with engine 157, 274, 276, 278 | AR61.20-P-1105EW |
| | | Model 204.9 with code 211 (Direct-Steer system) | AR61.20-P-1105CY |

| 5.2 | Remove center and rear bottom sections of soundproofing | Model 204.0/2 with engine 642, 646, 651 with code 211 (Direct-Steer system) Model 204.3 with engine 651 with code 211 (Direct-Steer system) Model 207, 212 with engine 642, 651 with code 211 (Direct-Steer system) Model 218 with engine 642, 651 | AR94.30-P-5300EW |
|------|--|--|---------------------|
| 6 | Remove tie rods from steering knuckles | | AR46.40-P-0200-02CW |
| | Themese he read from electing kindekies | Self-locking nut, tie rod to steering knuckle | *BA46.40-P-1001-01N |
| | | Total G 11 G | |
| | | Y Press | *163589034300 |
| | | Thrust piece | *171589003400 |
| | | S Model 204, 212 | *221589003300 |
| | | with code 211 (Direct-Steer system) für Spurstangengelenk ohne EdelstahllaufringModel 218für Spurstangengelenk ohne Edelstahllaufring Puller | |
| | | Model 204, 207, 212 with code 211 (Direct-Steer system)für Spurstangengelenk mit Edelstahllaufring Puller | *221589053300 |
| 7 | Detach steering coupling from electric power | Model 212 | AR46.10-P-8000EW |
| | steering (3) | with code 211 (Direct-Steer system) | |
| | | Model 218 | |
| | | Model 204, 207 | AR46.10-P-8000CW |
| 8 | Unscrew bolts (1) and remove mounting plate (2) | with code 211 (Direct-Steer system) | |
| 0 | Officiew boils (1) and remove mounting plate (2) | with code 211 (Direct-Steer system) except code M005 (4MATIC) Model 212 with code 211 (Direct-Steer system) | |
| | | except code M005 (4MATIC) Model 218 | *BA33.10-P-1003-01M |
| | | Bolt, mounting plate/steering plate to front axle carrier | BA33. 10-P-1003-01W |
| 9 | Disconnect electrical connectors on electric power steering electromechanical control unit (A91) | | |
| 10 | Detach retaining clip (7) and place electrical wiring harness (8) to one side | If installed. | |
| 11 | Support electric power steering (3) and secure to prevent it from falling down | | |
| 12.1 | Remove bolts (4) and detach electric power steering (3) from front axle carrier | Model 207 with code 211 (Direct-Steer system) except code M005 (4MATIC) Model 212 with code 211 (Direct-Steer system) except code M005 (4MATIC) Model 218 | |
| | | Bolt, electric rack-and-pinion steering to front axle carrier | *BA46.20-P-1011-01N |
| 12.2 | Unscrew bolts (5) and then bolts (6), and remove | | |
| 12.2 | electric power steering (3) downwards | with code 211 (Direct-Steer system) Model 207 with code 211 (Direct-Steer system) with code M005 (4MATIC) Model 212 with code 211 (Direct-Steer system) with code M005 (4MATIC) | |
| | | Bolt, electric rack-and-pinion steering to | *BA46.20-P-1011-01N |
| 12 | Enter now steering goes number of electric | front axle carrier | |
| 13 | Enter new steering gear number of electric power steering (3) in online vehicle data card using Vehicle Documentation system (VeDoc) | When replacing the electric power steering (3). | |
| | | i Redocumentation is compulsory! | |
| 14 | Install in the reverse order | | |
| 15 | Check and adjust front axle toe | Model 204 | AR40.20-P-0200CW |
| | | with code 211 (Direct-Steer system) Model 207, 212 with code 211 (Direct-Steer system) Model 218 | AR40.20-P-0200EW |

Nm Front axle carrier

| Number | Designation | | | Model 207 | Model 212 |
|--------------------|---|-----|----|-----------|-----------|
| BA33.10-P-1003-01M | Bolt, mounting plate/steering plate to front axle carrier | M10 | Nm | 55 | 55 |
| | | M12 | Nm | 110 | 110 |

Nm Front axle carrier

| Number | Designation | | | Model 218 |
|--------------------|---|-----|----|-----------|
| BA33.10-P-1003-01M | Bolt, mounting plate/steering plate to front axle carrier | M10 | Nm | 55 |
| | | M12 | Nm | - |

Nm Steering gear

| Number | Designation | | | | Model 204 (except 204.08/09/28/29/38/90 4/937/98/99) with code 211 (Direct-Steer system) | 04/937/98/99 |
|--------------------|--|-----------|---------|--------|--|--------------|
| BA46.20-P-1011-01N | Bolt, electric rack-and- pinion steering to front as carrier | M8 kle | Stage 1 | Nm | 20 | 20 |
| | | | Stage 2 | خ ک | 90 | 90 |
| | | M12 | Stage 1 | Nm | 80 | 80 |
| | | | Stage 2 | خ ک | 90 | 90 |

Nm Steering gear

| Number | Designation | | | Model 207 (except 207.367/388) with code 211 (Direct-Steer system | Model 207.367/388 |
|--------------------|---|---------|------------|--|-------------------|
| BA46.20-P-1011-01N | Bolt, electric rack-and- M8 pinion steering to front axle carrier | Stage 1 | Nm | 20 | - |
| | | Stage 2 | Δ° | 90 | - |
| | M12 | Stage 1 | Nm | 80 | 80 |
| | | Stage 2 | <u>خ</u> ° | 90 | 90 |

Nm Steering gear

| Number | Designation | | | | 93/094/097/099/267/2 | Model 212.067/08/090/091/0 93/094/097/099/267/2 8/291/293/294/297/29 9 |
|--------------------|--|----------|---------|----|----------------------|--|
| BA46.20-P-1011-01N | Bolt, electric rack-and- pinion steering to front ax carrier | M8 le | Stage 1 | Nm | 20 | - |
| | | | Stage 2 | ∡° | 90 | - |
| | | M12 | Stage 1 | Nm | 80 | 80 |
| | | | Stage 2 | Δ° | 90 | 90 |

Nm Steering gear

| Number | Designation | | | | Model 218.367/368/391/393/ 394/967/968/991/993/ 994 |
|--------------------|---|---------|----|----|--|
| BA46.20-P-1011-01N | Bolt, electric rack-and- M8 pinion steering to front axle carrier | Stage 1 | Nm | 20 | - |
| | | Stage 2 | ∡° | 90 | - |
| | M12 | Stage 1 | Nm | 80 | 80 |
| | | Stage 2 | Δ° | 90 | 90 |

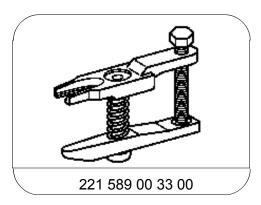
Nm Tie rod

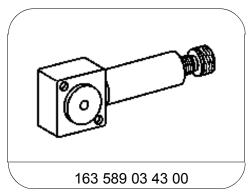
| Number | Designation | Model 204 | Model 207 |
|--------|-------------|-----------|-----------|

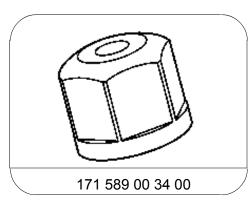
| BA46.40-P-1001-01N | Self-locking nut, tie rod to steering knuckle | Stage 1 | Nm | 50 | 50 |
|--------------------|---|---------|--------|----|----|
| | | Stage 2 | ے م | 60 | 60 |

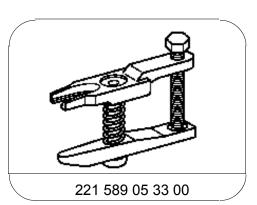
Nm Tie rod

| Number | Designation | | | Model 212 | Model 218 |
|--------------------|---|---------|----|-----------|-----------|
| BA46.40-P-1001-01N | Self-locking nut, tie rod to steering knuckle | Stage 1 | Nm | 50 | 50 |
| | | Stage 2 | ۷° | 90 | 90 |

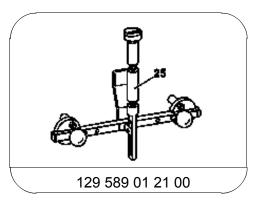








Puller Press Thrust piece Puller



Retainer device