

ENGINES 611.962 in MODEL 203.004 /204 /006 /206 /706

ENGINES 612.962 in MODEL 203.016 /216

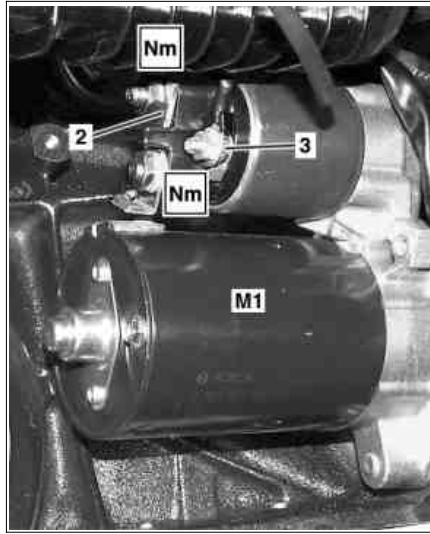
ENGINES 612.967 in MODEL 209.316

ENGINES 612.990 in MODEL 203.018 /218 /718

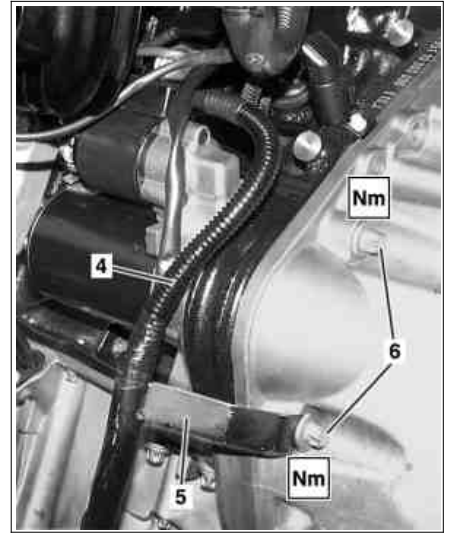
**Shown on engine 611.962
in model 203.006**

- 2 Electric line circuit 30
- 3 Electric cable circuit 50
- 4 Cable harness
- 5 Bracket
- 6 Bolts

M1 Starter



P15.30-2037-02



P15.30-2038-02

Modification notes

3.9.03	Check ring gear - added	Step 11	
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	Remove/install		
⚠	Danger!	Risk of death caused by vehicle slipping or toppling off the lifting platform.	Align vehicle between columns of lifting platform and position four support plates at the lifting platform support points specified by vehicle manufacturer.
⚠	Danger!	Risk of explosion caused by escaping oxyhydrogen gas. Risk of injury caused by caustic burns to eyes, skin and mucous membranes from battery electrolyte (contains diluted sulfuric acid) or metal spatter due to short circuit. Risk of burn injuries caused by short circuit. Risk of poisoning caused by swallowing battery electrolyte (contains diluted sulfuric acid) or absorption of lead over the skin or orifices	No fire, sparks, open flames or smoking. Wear acid-resistant gloves and clothing and safety glasses with side guards. Do not place any conductive objects on the battery and avoid any short circuit from battery positive to ground. Only fill liquid battery electrolyte (diluted sulfuric acid) into suitable and appropriately marked containers.
ⓘ		Notes on self-locking nuts and bolts	AH00.00-N-0001-01A
1		Disconnect ground line from battery	ⓘ Do not connect quiescent current retention unit. Risk of short circuit! Model 203 Model 209
ⓘ		Notes on battery	AR54.10-P-0003P AR54.10-P-0003Q AH54.10-P-0001-01A
2.1		Remove bottom sections of soundproofing	Engine 612.962/967, 611.962 AR94.30-P-5300P
2.2		Remove engine compartment paneling	Engine 612.990 AR61.20-P-1105P
3		Remove rear engine crossmember with rear engine mount	Nm *BA22.10-P-1003-01D
4.1		Remove transverse bridge on floor shift	Vehicles with manual transmission AR26.60-P-0600-01A
5		Support exhaust system with transmission jack	
6		Unhook exhaust system on exhaust suspensions	
7		Detach electrical line circuit 30 (2)	Nm *BA15.30-N-1002-01G
8		Detach electrical line circuit 50 (3)	Nm *BA15.30-N-1003-01G
9		Remove bolts (6)	Nm *BA15.30-N-1001-01G
10		Place holder (5) and cable harness (4) to one side	
11		Remove starter (M1) from below	
12.1		Check ring gear at flywheel for wear and damage	When replacing the starter on vehicles fitted with manual transmission ⓘ Rotate engine at crankshaft in direction of rotation.

12.2	Check ring gear on drive plate for wear and damage	When replacing starter on vehicles fitted with automatic transmission i Rotate engine at crankshaft in direction of rotation.	
13	Install in the reverse order		
14	Carry out function check		
15	Render electrical system operational	See: ↓ Perform basic programming Model 203 Model 209	AR00.19-P-0200P AR00.19-P-0200Q
16	Read out fault memory and erase	i When the work is complete, stored faults must be worked on in the diagnostic trouble code memories and erased. ↓ Connect STAR DIAGNOSIS and read out fault memory	AD00.00-P-2000-04A

Nm Starter

Number	Designation		Engine 611.961/ 611.962	Engine 612.961/ 962/963/ 967	Engine 612.965/ 966/981/ 990
BA15.30-N-1001-01G	Bolt connecting starter to crankcase	Nm	42	42	40
BA15.30-N-1002-01G	Nut, connection for circuit 30	Nm	14	14	14
BA15.30-N-1003-01G	Nut, connection for circuit 50	Nm	6	6	6

Nm Engine suspension, engine mounts, engine supports

Number	Designation		Engine 611.962 in model 203	Engine 612.962 in model 203	Engine 612.967 in model 209.316
BA22.10-P-1003-01D	Bolt/nut, rear engine crossmember to body	Nm	40	40	45

Nm Engine suspension, engine mounts, engine supports

Number	Designation		Engine 612.990 in model 203
BA22.10-P-1003-01D	Bolt/nut, rear engine crossmember to body	Nm	40