Document title

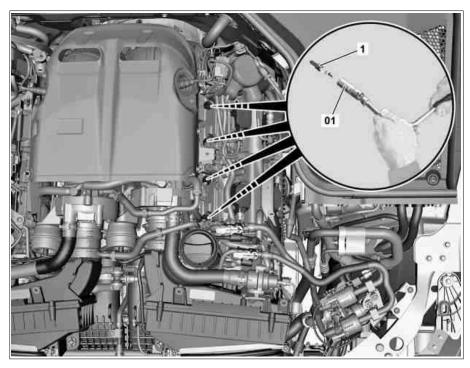
Replace spark plugs

Document number ap1510p1580c

Engine176 in model 167, 217, 222Engine176 in model 463Engine177 in model 205, 213, 217, 222, 253, 290Engine177 in model 463

Shown on engine 177.980 in model 213.088, left cylinder bank

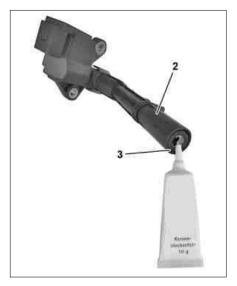
- 01 Spark plug wrench
- 1 Spark plug



P15.10-2612-06

Shown on ignition coil in engine 157.980

- 2 Spark plug connector
- 3 Sealing lip



P15.10-2579-02

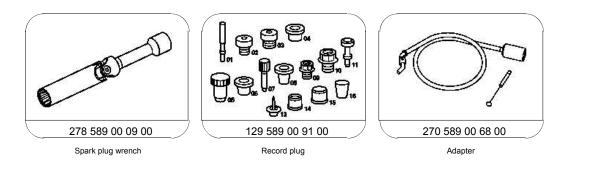
⚠ Warning	Risk of injury . Skin or eye injuries may result when handling hot or glowing objects.	Wear protective gloves, protective clothing and safety glasses, if necessary.	AS00.00-Z-0002-01A
	Risk of death caused by contact with parts conducting high voltages.	Do not touch parts which conduct high voltages. People who have electronic implants (e.g. cardiac pacemakers) may not perform any work on the ignition system.	AS15.10-Z-0001-01A
	Information on avoiding damage when replacing spark plugs		AH15.10-P-0002-02A
2	Remove		
1	Remove ignition coils.		
₩AR		Engine 176 in model 167, ignition coils of left cylinder bank	AR15.12-P-2008MNO
₩AR		Engine 176 in model 167, ignition coils of right cylinder bank	AR15.12-P-2009MNO

₩ F AR		Engine 176 in model 217, 222, ignition coils of	AR15.12-P-2008MNL
₩ĨAR		left cylinder bank Engine 176 in model 217, 222, ignition coils of	AR15.12-P-2009MNL
		right cylinder bank	
₩ AR		Engine 176 in model 463 up to model year 2019	AR15.12-P-2003MNA
₩AR		Engine 177 in model 205 Engine 176 in model 463 as of model year	AR15.12-P-2008XGA
		2019, ignition coils of left cylinder bank	AR 13. 12-F -2000AGA
₩ F AR		Engine 176 in model 463 as of model year 2019, ignition coils of right cylinder bank	AR15.12-P-2009XGA
₩ AR		Engine 177 in model 213, ignition coils of left	AR15.12-P-2008MNE
₩AR		cylinder bank Engine 177 in model 213, ignition coils of right	AR15.12-P-2009MNE
₩AR		cylinder bank Engine 177 in model 217, 222 ignition coils of	AR15 12-P-2008MNM
		left cylinder bank	
₩ AR		Engine 177 in model 217, 222 ignition coils of right cylinder bank	
₩ AR		Engine 177 in model 253, ignition coils for left cylinder bank	AR15.12-P-2008MNG
₩ AR		Engine 177 in model 253, ignition coils for righ	AR15.12-P-2009MNG
₩ĨAR		cylinder bank Engine 177 in model 290, ignition coils of left	AR15.12-P-2008MNI
₩AR		cylinder bank Engine 177 in model 290, ignition coils of right	AR15 12-R-2000MNI
		cylinder bank	
₩ AR		Engine 177 in model 463 as of model year 2019, ignition coils of left cylinder bank	AR15.12-P-2008XGC
₩AR		Engine 177 in model 463 as of model year 2019, ignition coils of right cylinder bank	AR15.12-P-2009XGC
	Clean		
2	Use compressed air to blow out any dirt residue in the spark-plug recesses.		
	residue in the spark-plug recesses.	Seal openings with lint-free rags. Damage can otherwise occur.	
		S Record plug	*129589009100
	Remove	[=4]	
3	Remove spark plugs (1) from cylinder heads using spark plug wrench (01).	Spark plug wrench	*278589000900
1. And the second se	Clean		
4	Vacuum spark plug wells using vacuum cleaner attachment.	Bemove metal insert at end of bose	
4		Remove metal insert at end of hose. Damage can otherwise occur.	
4	cleaner attachment.	Remove metal insert at end of hose.	*270589006800
4 X 5	cleaner attachment.	Remove metal insert at end of hose. Damage can otherwise occur.	
4 <u>X</u> 5	cleaner attachment.	Remove metal insert at end of hose. Damage can otherwise occur. Adapter Spark plug to cylinder head	*270589006800 *BA15.10-P-1001-01H
5	cleaner attachment. Install Screw new spark plugs (1) into cylinder heads using spark plug wrench (01).	Remove metal insert at end of hose. Damage can otherwise occur.	
4 <u>X</u> 5 6	cleaner attachment. Install Screw new spark plugs (1) into cylinder heads using spark plug wrench (01). Check	Remove metal insert at end of hose. Damage can otherwise occur. Image can otherwise occur.	*BA15.10-P-1001-01H
5	cleaner attachment. Install Screw new spark plugs (1) into cylinder heads using spark plug wrench (01). Check Check the spark plug connectors (2), ignition coils and ignition lines for damage,	Remove metal insert at end of hose. Damage can otherwise occur. Adapter Spark plug to cylinder head	*BA15.10-P-1001-01H
5	cleaner attachment. Install Screw new spark plugs (1) into cylinder heads using spark plug wrench (01). Check Check the spark plug connectors (2), ignition	Remove metal insert at end of hose. Damage can otherwise occur. Image can otherwise occur.	*BA15.10-P-1001-01H
5	cleaner attachment. Install Screw new spark plugs (1) into cylinder heads using spark plug wrench (01). Check Check the spark plug connectors (2), ignition coils and ignition lines for damage,	Remove metal insert at end of hose. Damage can otherwise occur. Adapter Spark plug to cylinder head Spark plug wrench If problems are determined, rectify the problems.	*BA15.10-P-1001-01H
5 6	cleaner attachment. Install Screw new spark plugs (1) into cylinder heads using spark plug wrench (01). Check Check the spark plug connectors (2), ignition coils and ignition lines for damage, deformation and crack formation.	Remove metal insert at end of hose. Damage can otherwise occur. Adapter Spark plug to cylinder head Spark plug wrench If problems are determined,	*BA15.10-P-1001-01H
5	cleaner attachment. Install Screw new spark plugs (1) into cylinder heads using spark plug wrench (01). Check Check the spark plug connectors (2), ignition coils and ignition lines for damage, deformation and crack formation. Install Install	Remove metal insert at end of hose. Damage can otherwise occur. Adapter M Spark plug to cylinder head Spark plug wrench If problems are determined, i After obtaining special order.	*BA15.10-P-1001-01H
5 6	cleaner attachment. Install Screw new spark plugs (1) into cylinder heads using spark plug wrench (01). Check Check the spark plug connectors (2), ignition coils and ignition lines for damage, deformation and crack formation. Install Apply coating of spark plug connector grease to sealing lips (3) of spark plug connectors (2)	Remove metal insert at end of hose. Damage can otherwise occur. Adapter Spark plug to cylinder head Spark plug wrench If problems are determined, rectify the problems.	*BA15.10-P-1001-01H *278589000900
5 6 X 7 8	cleaner attachment. Install Screw new spark plugs (1) into cylinder heads using spark plug wrench (01). Check Check the spark plug connectors (2), ignition coils and ignition lines for damage, deformation and crack formation. Install Apply coating of spark plug connector grease	Remove metal insert at end of hose. Damage can otherwise occur. Adapter M Spark plug to cylinder head Spark plug wrench If problems are determined, i After obtaining special order.	*BA15.10-P-1001-01H *278589000900
5 6 X 7	cleaner attachment. Install Screw new spark plugs (1) into cylinder heads using spark plug wrench (01). Check Check the spark plug connectors (2), ignition coils and ignition lines for damage, deformation and crack formation. Install Apply coating of spark plug connectors (2) before installation.	Remove metal insert at end of hose. Damage can otherwise occur. Adapter M Spark plug to cylinder head Spark plug wrench If problems are determined, rectify the problems. After obtaining special order. Spark plug connector grease Engine 176 in model 167, ignition coils of left	*BA15.10-P-1001-01H *278589000900 *BR00.45-Z-1102-06A
5 6 X 7 8	cleaner attachment. Install Screw new spark plugs (1) into cylinder heads using spark plug wrench (01). Check Check the spark plug connectors (2), ignition coils and ignition lines for damage, deformation and crack formation. Install Apply coating of spark plug connectors (2) before installation.	Remove metal insert at end of hose. Damage can otherwise occur. Adapter M Spark plug to cylinder head Spark plug wrench If problems are determined, rectify the problems. After obtaining special order. Spark plug connector grease Engine 176 in model 167, ignition coils of left cylinder bank Engine 176 in model 167, ignition coils of right	*BA15.10-P-1001-01H *278589000900 *BR00.45-Z-1102-06A AR15.12-P-2008MNO
5 4 6 7 8 № AR 	cleaner attachment. Install Screw new spark plugs (1) into cylinder heads using spark plug wrench (01). Check Check the spark plug connectors (2), ignition coils and ignition lines for damage, deformation and crack formation. Install Apply coating of spark plug connectors (2) before installation.	Remove metal insert at end of hose. Damage can otherwise occur. Adapter M Spark plug to cylinder head Spark plug wrench If problems are determined, rectify the problems. After obtaining special order. Spark plug connector grease Engine 176 in model 167, ignition coils of left cylinder bank Engine 176 in model 167, ignition coils of right cylinder bank	*BA15.10-P-1001-01H *278589000900 *BR00.45-Z-1102-06A AR15.12-P-2008MNO AR15.12-P-2009MNO
5 6 X 7 8 SAR SAR SAR SAR	cleaner attachment. Install Screw new spark plugs (1) into cylinder heads using spark plug wrench (01). Check Check the spark plug connectors (2), ignition coils and ignition lines for damage, deformation and crack formation. Install Apply coating of spark plug connectors (2) before installation.	Remove metal insert at end of hose. Damage can otherwise occur. Adapter M Spark plug to cylinder head Spark plug wrench If problems are determined, rectify the problems. After obtaining special order. Spark plug connector grease Engine 176 in model 167, ignition coils of left cylinder bank Engine 176 in model 167, ignition coils of right cylinder bank Engine 176 in model 217, 222, ignition coils of left cylinder bank	*BA15.10-P-1001-01H *278589000900 *BR00.45-Z-1102-06A AR15.12-P-2008MNO AR15.12-P-2009MNO AR15.12-P-2008MNL
5 6 X 7 8 Maria R Maria R Maria R Maria R Maria R Maria A	cleaner attachment. Install Screw new spark plugs (1) into cylinder heads using spark plug wrench (01). Check Check the spark plug connectors (2), ignition coils and ignition lines for damage, deformation and crack formation. Install Apply coating of spark plug connectors (2) before installation.	Remove metal insert at end of hose. Damage can otherwise occur. Adapter Spark plug to cylinder head Spark plug wrench If problems are determined, rectify the problems. After obtaining special order. Spark plug connector grease Engine 176 in model 167, ignition coils of left cylinder bank Engine 176 in model 167, ignition coils of right cylinder bank Engine 176 in model 217, 222, ignition coils of left cylinder bank Engine 176 in model 217, 222, ignition coils of right cylinder bank	*BA15.10-P-1001-01H *278589000900 *BR00.45-Z-1102-06A AR15.12-P-2008MNO AR15.12-P-2009MNO AR15.12-P-2008MNL AR15.12-P-2009MNL
5 6 X 7 8 SAR SAR SAR SAR	cleaner attachment. Install Screw new spark plugs (1) into cylinder heads using spark plug wrench (01). Check Check the spark plug connectors (2), ignition coils and ignition lines for damage, deformation and crack formation. Install Apply coating of spark plug connectors (2) before installation.	Remove metal insert at end of hose. Damage can otherwise occur. Adapter M Spark plug to cylinder head Spark plug wrench If problems are determined, rectify the problems. After obtaining special order. Spark plug connector grease Engine 176 in model 167, ignition coils of left cylinder bank Engine 176 in model 167, ignition coils of right cylinder bank Engine 176 in model 217, 222, ignition coils of left cylinder bank Engine 176 in model 217, 222, ignition coils of right cylinder bank Engine 176 in model 217, 222, ignition coils of right cylinder bank Engine 176 in model 217, 222, ignition coils of right cylinder bank Engine 176 in model 217, 222, ignition coils of right cylinder bank Engine 176 in model 217, 222, ignition coils of right cylinder bank Engine 176 in model 217, 222, ignition coils of right cylinder bank Engine 176 in model 217, 222, ignition coils of right cylinder bank	*BA15.10-P-1001-01H *278589000900 *BR00.45-Z-1102-06A AR15.12-P-2008MNO AR15.12-P-2009MNO AR15.12-P-2008MNL
5	cleaner attachment. Install Screw new spark plugs (1) into cylinder heads using spark plug wrench (01). Check Check the spark plug connectors (2), ignition coils and ignition lines for damage, deformation and crack formation. Install Apply coating of spark plug connectors (2) before installation.	Remove metal insert at end of hose. Damage can otherwise occur. Adapter Spark plug to cylinder head Spark plug wrench If problems are determined, If problems are determined, After obtaining special order. Spark plug connector grease Engine 176 in model 167, ignition coils of left cylinder bank Engine 176 in model 167, ignition coils of right cylinder bank Engine 176 in model 217, 222, ignition coils of left cylinder bank Engine 176 in model 217, 222, ignition coils of right cylinder bank Engine 176 in model 217, 222, ignition coils of right cylinder bank Engine 176 in model 217, 222, ignition coils of right cylinder bank Engine 176 in model 217, 222, ignition coils of right cylinder bank Engine 176 in model 217, 222, ignition coils of right cylinder bank Engine 176 in model 205	*BA15.10-P-1001-01H *278589000900 *BR00.45-Z-1102-06A AR15.12-P-2008MNO AR15.12-P-2009MNO AR15.12-P-2009MNL AR15.12-P-2009MNL AR15.12-P-2003MNA
5 6 X 7 8 Maria R Maria R Maria R Maria R Maria R Maria A	cleaner attachment. Install Screw new spark plugs (1) into cylinder heads using spark plug wrench (01). Check Check the spark plug connectors (2), ignition coils and ignition lines for damage, deformation and crack formation. Install Apply coating of spark plug connectors (2) before installation.	Remove metal insert at end of hose. Damage can otherwise occur. Adapter Spark plug to cylinder head Spark plug wrench If problems are determined, rectify the problems. After obtaining special order. Spark plug connector grease Engine 176 in model 167, ignition coils of left cylinder bank Engine 176 in model 167, ignition coils of right cylinder bank Engine 176 in model 217, 222, ignition coils of left cylinder bank Engine 176 in model 217, 222, ignition coils of right cylinder bank Engine 176 in model 217, 222, ignition coils of right cylinder bank Engine 176 in model 217, 222, ignition coils of right cylinder bank Engine 176 in model 217, 222, ignition coils of right cylinder bank Engine 176 in model 217, 222, ignition coils of right cylinder bank Engine 176 in model 217, 222, ignition coils of right cylinder bank Engine 176 in model 217, 222, ignition coils of right cylinder bank Engine 176 in model 217, 222, ignition coils of right cylinder bank	*BA15.10-P-1001-01H *278589000900 *BR00.45-Z-1102-06A AR15.12-P-2008MNO AR15.12-P-2009MNO AR15.12-P-2008MNL AR15.12-P-2009MNL

₩ AR	Engine 176 in model 463 as of model year AR15.12-P-2009XGA 2019, ignition coils of right cylinder bank
i≉ [®] AR	Engine 177 in model 213, ignition coils of left AR15.12-P-2008MNE cylinder bank
₩ĨAR	Engine 177 in model 213, ignition coils of right AR15.12-P-2009MNE cylinder bank
₩ĨAR	Engine 177 in model 217, 222 ignition coils of AR15.12-P-2008MNM left cylinder bank
₩ ^S AR	Engine 177 in model 217, 222 ignition coils of AR15.12-P-2009MNM right cylinder bank
i≉ A R	Engine 177 in model 253, ignition coils for left AR15.12-P-2008MNG cylinder bank
₩ A R	Engine 177 in model 253, ignition coils for rightAR15.12-P-2009MNG cylinder bank
₩ AR	Engine 177 in model 290, ignition coils of left AR15.12-P-2008MNI cylinder bank
⊯ [⊊] "A R	Engine 177 in model 290, ignition coils of right AR15.12-P-2009MNI cylinder bank
₩ AR	Engine 177 in model 463 as of model year 2019, ignition coils of left cylinder bankAR15.12-P-2008XGC
₩ AR	Engine 177 in model 463 as of model year AR15.12-P-2009XGC 2019, ignition coils of right cylinder bank AR15.12-P-2009XGC

Nm Spark plugs

Number	Designation		Engine 176	Engine 177
BA15.10-P-1001-01H	Spark plug to cylinder head	Nm	22	22



Repair materials

Number	Designation	Order number
BR00.45-Z-1102-06A	Spark plug connector grease	A 002 989 80 51