

**Group 3E RECOGNITION DOCUMENT**

A) Vehicle seen from 3/4 front



B) Vehicle seen from 3/4 rear



**1. GENERAL**

101. Manufacturer

**MERCEDES BENZ**

102. Commercial name(s) - Model and type

**A45 AMG 2016**

103. Engine capacity

**1991** cm<sup>3</sup> Corrected engine capacity **1991 x 1.7 = 3384.7** cm<sup>3</sup>

104. Type of car construction

a) Type

<input type="checkbox"/> separate chassis	<input checked="" type="checkbox"/> monocoque
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b) Material of chassis / bodyshell

**STEEL**

106. Number of seats

**5**

**2. DIMENSIONS, WEIGHT**

Minimum Racing Weight

**1480** kg

202. Overall length

**4359** mm ± 1 %

203. Maximum overall width

**2040** mm ± 1 % Where measured **MIRROR TO MIRROR**

204. Width of bodywork

a) At front axle

**1790** mm ± 1 %

b) At rear axle

**1770** mm ± 1 %

206. Wheelbase **2683** mm ± 1%

207. Maximum track

a) Front **1554** mm

b) Rear **1555** mm

**3. ENGINE**

(In case of rotary engine, see Art. 335 on additional form)

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**Make** Mercedes

**Model** A45 AMG 2016

**301. Location and position of the engine** FRONT

**302. Number of mounts** 2

Engine in its compartment



**304. Supercharging**

<input checked="" type="checkbox"/> yes	<input type="checkbox"/> no
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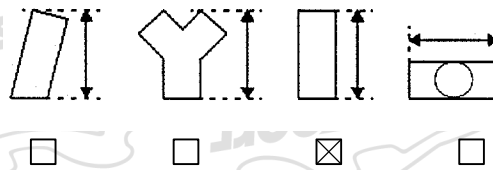
Maximum manifold pressure 1.8 BAR

Type and number of compressors 1 TURBOCHARGER MERCEDES AMG

**305. Number and layout of cylinders** 4 IN-LINE

**312. Cylinder block material** ALUMINIUM

**310. Maximum compression ratio** 8.6 : 1



**313. Sleeves**

a) 

<input checked="" type="checkbox"/> yes	<input type="checkbox"/> no
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b) Material STEEL

c) 

<input checked="" type="checkbox"/> wet	<input type="checkbox"/> dry
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**314. Bore** 83 +/- 0.1 mm

**316. Stroke** 92 +/- 0.1 mm

**321. Cylinderhead** a) Number 1 b) Material ALLOY

**324. Fuel feed by injection :** a) Make MERCEDES

b) Model DIRECT INJECTION

f) Position of Injectors:

f1) 

<input type="checkbox"/> Manifold	<input checked="" type="checkbox"/> Cylinderhead
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**325. Camshaft** a) Number 2 b) Location OVERHEAD  
 c) Drive system CHAIN f) Type of valve operation OVERHEAD CAM

**327. Intake**

a) Material of manifold ALLOY

b) Number of manifold elements 1

c) Number of valves per cylinder 4



Make Mercedes

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## 328. Exhaust

- a) Material of manifold **CAST IRON**
- b) Number of manifold elements **1**
- d) Number of valves per cylinder **2**
- p) External Diameter of exhaust pipe between manifold and first silencer **76.2** mm ± 5%

## 330. Ignition system

- a) Type **ELECTRONIC**
- b) Number of plugs per cylinder **1**
- c) Number of distributors **N/A**
- d) Number of coils **4**

## 331. Cooling system

Capacity **7.8** L

## 332. Cooling fan

- a) Number **1**
- b) Diameter of the fan **530** mm
- c) Material of the fan **PLASTIC**
- d) Number of blades **9**
- e) Type of drive **ELECTRIC MOTOR**
- f) Automatic cut in  yes  no

## 333. Lubrication system

- a) Type **WET**
- b) Number of oil pumps **1**
- c) Total capacity **5.5** L
- e) Location of the cooler(s) **IN LINE ENGINE BAY**
- f) Type of the cooler(s) **OIL TO WATER**

## 4. FUEL CIRCUIT

## 401. Fuel tank

- b) Location **UNDER CHASSIS FORWARD OF REAR WHEELS**
- d) Total capacity **56** L

## 402. Fuel pump(s)

- a)  Electrical  Mechanical
- b) Number **3**
- d) Location **INSIDE FUEL TANK**
- Fuel Pressure **9 BAR**

## 5. ELECTRICAL EQUIPMENT

## 502. Alternator

- a) Number **1**
- b) Type **INTERNALLY REGULATED**
- c) Drive system **BELT**
- d) Nominal power **175** Amp

## 503. Retractable headlights

- a)  yes  no
- b) Control system **N/A**

## 6. POWER TRAIN

## 601. Driven wheels

- front  yes  no
- rear  yes  no

## 602. Clutch

- a) Type **0**
- b) Control system **N/A**

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**603. Gearbox**

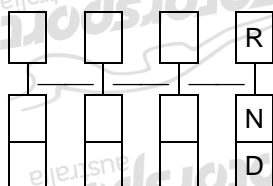
a) Location **FRONT BESIDE ENGINE** b) Make **AMG**

c) Type and location of control **PADDLESHIFT**

e) Ratios

	Number of teeth	Ratio	Constant Mesh	Synchro
1	_____	<u>3.86</u>	_____	_____
2	_____	<u>2.43</u>	_____	_____
3	_____	<u>2.90</u>	_____	_____
4	_____	<u>1.19</u>	_____	_____
5	_____	<u>0.87</u>	_____	_____
6	_____	<u>1.16</u>	_____	_____
7	_____	<u>0.94</u>	_____	_____
R	_____	<u>3.10</u>	_____	_____
Constant	_____	_____	_____	_____

f) Gear change gate



**604. Transfer box / Centre differential**

a) Ratios

\_\_\_\_\_

c) Control system of transfer box

**ELECTRONIC**

d) Type of central differential

\_\_\_\_\_

**605. Final drive**

a) Type of final drive

	Front	Rear
a) Type of final drive	<b>4MATIC</b>	<b>4MATIC</b>
b) Ratio	<u>4.13</u>	<u>4.13</u>
f) Oil Cooler	<input type="checkbox"/> yes	<input checked="" type="checkbox"/> no
g) Cooler Type	<b>N/A</b>	<b>N/A</b>

**606. Shafts**

- a) Type of longitudinal shafts **2**
- b) Material of longitudinal shafts **STEEL**
- c) Type of transversal half-shafts **CV**
- d) Material of transversal half-shafts **STEEL**



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**7. SUSPENSION**

**701. General**

Front		Rear	
a) Type of suspension		<b>MCPHERSON</b>	<b>MULTILINK</b>
<input checked="" type="checkbox"/> yes	<input type="checkbox"/> no	<input checked="" type="checkbox"/> yes	<input type="checkbox"/> no
<b>STEEL</b>		<b>STEEL</b>	

**702. Helical springs**

a) Material

**705. Other type of suspension**

See description on additional form

**706. Stabiliser**

b) Effective diameter

c) Material

Front	Rear
<b>25</b> mm	<b>22</b> mm
<b>STEEL</b>	<b>STEEL</b>

**707. Suspension Dampers**

a) Number per wheel

b) Type

c) Principle of operation

Front	Rear
<b>1</b>	<b>1</b>
<b>STRUT</b>	<b>STRUT</b>
<b>HYDRAULIC</b>	<b>HYDRAULIC</b>

**8. WHEELS**

**801. Wheels**

a) Diameter

b) Width

c) Offset

Front	Rear
<b>19"</b>	<b>19"</b>
<b>8"</b>	<b>8"</b>
<b>+45</b> mm	<b>+45</b> mm

**803. Brakes**

a) Braking system

b) Number of master cylinders

c) Servo-brakes

**HYDRAULIC**

**1**

yes  no

c1) Make and type

**TRW VACUUM ASSIST**



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**Make** Mercedes

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	Front	Rear
e) Number of cylinders per wheel	<u>4</u>	<u>2</u>
f) <b>Disc brakes</b>		
f1) Number of pads per wheel	<u>2</u>	<u>2</u>
f2) Number of calipers per wheel	<u>1</u>	<u>1</u>
f3) Caliper material	<u>STEEL/ALLOY</u>	<u>STEEL/ALLOY</u>
f4) Thickness of new disc	<u>32 ± 1 mm</u>	<u>22 ± 1 mm</u>
f5) External diameter of the disc	<u>350 ± 1.5 mm</u>	<u>330 ± 1.5 mm</u>
f9) Ventilated discs	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no

g) Parking brake: g1) Control system **ELECTRIC**

g2) Location of lever **BUTTON ADJ GEAR LEVER**

g3) On which wheels  Front  Rear

**804. Steering**

a) Type

Front	
<b><u>RACK AND PINION</u></b>	
<input checked="" type="checkbox"/> yes	<input type="checkbox"/> no
<b><u>ELECTRIC</u></b>	

b) Servo-assistance

Type of Assistance

**9. BODYWORK**

**901. Interior**

a) Ventilation

<input checked="" type="checkbox"/> yes	<input type="checkbox"/> no
<input checked="" type="checkbox"/> yes	<input type="checkbox"/> no

b) Heating

<input checked="" type="checkbox"/> yes	<input type="checkbox"/> no
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c) Air Conditioning

f) Optional sun roof

<input type="checkbox"/> yes	<input checked="" type="checkbox"/> no
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f1) Type **N/A**

f2) Control system **N/A**

g) Opening system for side windows

Front	Rear
<b><u>ELECTRIC</u></b>	<b><u>ELECTRIC</u></b>

X) Dashboard



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## 902. Exterior

a) Number of doors 5

b) Tailgate

 yes no

c) Door material

Front

Rear

STEELSTEEL

d) Front bonnet material

ALLOY

e) Rear bootlid / tailgate material

STEEL

f) Bodywork material

STEEL

h) Rear window material

GLASS

i) Rear quarter window material

GLASS

k) Side window material

Front

Rear

GLASSGLASS

l) Material of bumper

PLASTICPLASTIC

n) Exterior Rear wiper

 yes no

## XIII) NON METALLIC PARTS OF THE BODY

Number	Part	Material
1	Rear Wing	Plastic
2	Front Canards	Plastic
3	Front Splitter	Plastic
4	Side skirt	Plastic
5	Front bumper	Plastic
6	Rear bumper	Plastic

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Rear Wing



Front Bumper / Splitter



Canards



Side Skirt



Rear Bumper





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**COMPLEMENTARY INFORMATION**

