

**Group 3E Recognition FORM**

A) Vehicle seen from 3/4 front

B) Vehicle seen from 3/4 rear



**1. GENERAL**

- 101. Manufacturer BMW
- 102. Commercial name(s) - Model and type M140 I
- 103. Engine capacity 2988 cm<sup>3</sup> Corrected engine capacity 2988 x 1.7 = 5096 cm<sup>3</sup>
- 104. Type of car construction
 

a) Type	<input type="checkbox"/> separate chassis	<input checked="" type="checkbox"/> <b>monocoque</b>
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- b) Material of chassis / bodyshell STEEL
- 106. Number of seats 5

**2. DIMENSIONS, WEIGHT**

- Tare Weight 1418 kg RVD CPA Number. 43550-1181102
- Minimum Racing Weight 1418 kg
- 202. Overall length 4324 mm ± 1 %
- 203. Maximum overall width 1765 mm ± 1 % Where measured BODY
- 204. Width of bodywork
 

a) At front axle	<u>1765</u> mm ± 1 %
b) At rear axle	<u>1760</u> mm ± 1 %
- 206. Wheelbase 2690 mm ± 1 %

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**Make** BMW

**Model** F20 M140i LCI

207. Maximum track

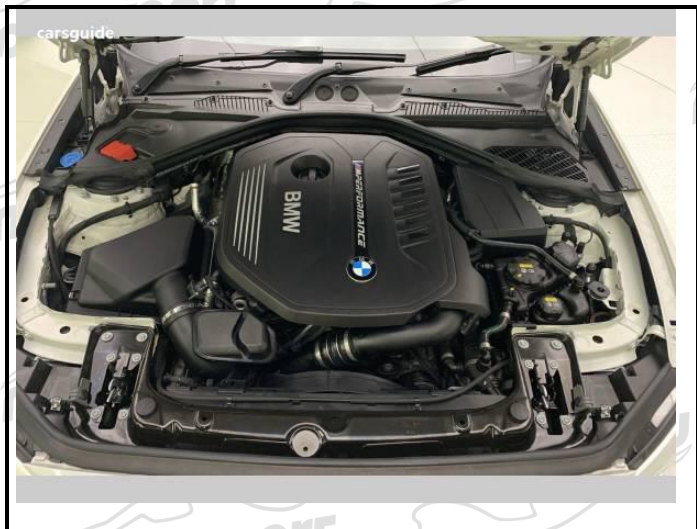
a) Front 1516 mm      b) Rear 1534 mm

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

301. Location and position of the engine FRONT

302. Number of mounts 2 ON ENGINE AND 2 ON GEARBOX

Engine in its compartment



304. Supercharging

<input checked="" type="checkbox"/> yes	<input type="checkbox"/> no
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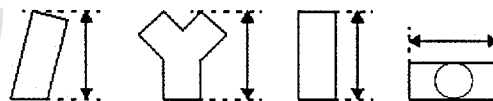
Maximum manifold pressure N/A

Type and number of compressors TURBO 1

305. Number and layout of cylinders 6 INLINE

312. Cylinder block material ALLOY

310. Maximum compression ratio 11.0 : 1



<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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313. Sleeves a)  yes  no      b) Material STEEL

<input type="checkbox"/> wet	<input type="checkbox"/> dry
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314. Bore 82 +/- 0.1 mm

316. Stroke 94.6 +/- 0.1 mm

321. Cylinderhead a) Number 1      b) Material ALLOY

324. Fuel feed by injection : a) Make BMW      b) Model HIGH PRESSURE

f) Position of Injectors:

f1) <input type="checkbox"/> Manifold	<input checked="" type="checkbox"/> Cylinderhead
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Make **BMW**Model **F20 M140i LCI**

325. Camshaft a) Number 2 b) Location DOHC  
 c) Drive system CHAIN f) Type of valve operation HYDRAULIC

## 327. Intake

a) Material of manifold PLASTIC  
 b) Number of manifold elements 1 c) Number of valves per cylinder 2

## 328. Exhaust

a) Material of manifold STEEL  
 b) Number of manifold elements 1 d) Number of valves per cylinder 2  
 p) External Diameter of exhaust pipe between manifold and first silencer 75 mm ± 5%

## 330. Ignition system

a) Type COMPUTER b) Number of plugs per cylinder 1  
 c) Number of distributors N/A d) Number of coils 6

## 331. Cooling system

Capacity 6.2 L

332. Cooling fan a) Number 1 b) Diameter of the fan 490 mm

c) Material of the fan PLASTIC d) Number of blades 9

e) Type of drive ELECTRIC f) Automatic cut in 

X	yes	<input type="checkbox"/>	no
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## 333. Lubrication system

a) Type BMW b) Number of oil pumps 1c) Total capacity 6.5 L

e) Location of the cooler(s) FRONT f) Type of the cooler(s) AIR

## 4. FUEL CIRCUIT

## 401. Fuel tank

b) Location CENTRE  
 d) Total capacity 52 L

## 402. Fuel pump(s)

a) 

<input checked="" type="checkbox"/>	Electrical	<input type="checkbox"/>	Mechanical
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b) Number 1d) Location TANK Fuel Pressure 100 BAR

## 5. ELECTRICAL EQUIPMENT

## 502. Alternator

a) Number 1 b) Type DENSOc) Drive system BELT d) Nominal power 180 Amp

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503. Retractable headlights a)  yes  no

b) Control system \_\_\_\_\_

**6. POWER TRAIN**

601. Driven wheels front  yes  no

rear  yes  no

602. Clutch a) Type N/A

b) Control system N/A

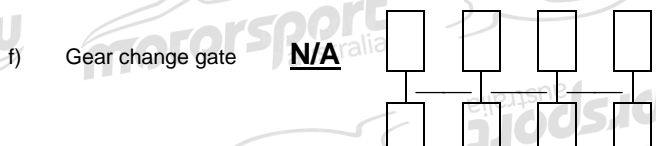
603. Gearbox a) Location CENTRE

b) Make BMW

c) Type and location of control ZF AUTOMATIC

e) Ratios

	Number of teeth	Ratio	Constant Mesh	Synchro
1	_____	<u>5.0</u>	_____	_____
2	_____	<u>3.2</u>	_____	_____
3	_____	<u>2.143</u>	_____	_____
4	_____	<u>1.72</u>	_____	_____
5	_____	<u>1.314</u>	_____	_____
6	_____	<u>1.0</u>	_____	_____
7	_____	<u>0.822</u>	_____	_____
8	_____	<u>0.64</u>	_____	_____
R	_____	<u>3.456</u>	_____	_____



604. Transfer box / Centre differential a) Ratios N/A

c) Control system of transfer box N/A d) Type of central differential N/A

605. Final drive

	Front	Rear
a) Type of final drive	<u>N/A</u>	<u>LSD</u>
b) Ratio	<u>N/A</u>	<u>2.81</u>



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- f) Oil Cooler  
g) Cooler Type

<input type="checkbox"/> yes	no	<input type="checkbox"/> yes	X no
<u>N/A</u>		<u>N/A</u>	

- 606. Shafts**  
a) Type of longitudinal shafts  
b) Material of longitudinal shafts  
c) Type of transversal half-shafts  
d) Material of transversal half-shafts

BMW  
STEEL  
BMW  
STEEL

**7. SUSPENSION**

- 701. General**  
a) Type of suspension

Front	Rear
<u>INDEPENDANT</u>	<u>INDEPENDANT</u>

- 702. Helical springs**  
a) Material

X yes	<input type="checkbox"/> no	X yes	<input type="checkbox"/> no
<u>STEEL</u>		<u>STEEL</u>	

- 703. Leaf springs**  
a) Material

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

- 704. Torsion bars**  
a) Material

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

- 705. Other type of suspension**

*See description on additional form*

- 706. Stabiliser**  
b) Effective diameter  
c) Material

Front	Rear
<u>22</u> mm	<u>15</u> mm
<u>STEEL</u>	

- 707. Suspension Dampers**  
a) Number per wheel  
b) Type  
c) Principle of operation

Front	Rear
<u>1</u>	<u>1</u>
<u>COIL OVER</u>	
<u>FLUID</u>	

**8. WHEELS**



**3-23-001A**

**Make** BMW

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**801. Wheels**

- a) Diameter
- b) Width
- c) Offset

Front	Rear
<u>19</u> "	<u>19</u> "
<u>7.5</u> "	<u>8.0</u> "
<u>+45</u> mm	<u>+52</u> mm

**803. Brakes**

- a) Braking system
- b) Number of master cylinders
- c) Servo-brakes

HYDRAULIC

1

yes  no

c1) Make and type

BMW

- e) Number of cylinders per wheel
- f) **Drum brakes**
  - f1) Internal diameter
  - f2) Number of linings per wheel
- g) **Disc brakes**
  - g1) Number of pads per wheel
  - g2) Number of calipers per wheel
  - g3) Caliper material
  - g4) Thickness of new disc
  - g5) External diameter of the disc
  - g9) Ventilated discs

Front	Rear
<u>4</u>	<u>2</u>
_____	_____
<u>2</u>	<u>2</u>
<u>1</u>	<u>1</u>
<u>ALLOY</u>	<u>ALLOY</u>
<u>30</u> ± 1 mm	<u>24</u> ± 1 mm
<u>370</u> ± 1.5 mm	<u>345</u> ± 1.5 mm
X yes <input type="checkbox"/> no	X yes <input type="checkbox"/> no

h) Parking brake: h1) Control system MANUAL

h2) Location of lever CENTRE

h3) On which wheels  Front  Rear

**804. Steering**

- a) Type
- b) Servo-assistance
- Type of Assistance

Front	Rear
<u>BMW</u>	<u>N/A</u>
X yes <input type="checkbox"/> no	<input type="checkbox"/> yes <input type="checkbox"/> no
<u>HYDRO ELECTRIC</u>	<u>N/A</u>

**9. BODYWORK**

**901. Interior**

- a) Ventilation
- c) Air Conditioning

yes  no  
 yes  no

b) Heating  yes  no

f) Optional sun roof  yes  no

f1) Type N/A f2) Control system \_\_\_\_\_



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

g) Opening system for side windows

X) Dashboard



Y) Sunroof



**902. Exterior**

a) Number of doors 5

b) Tailgate  yes  no

Front	Rear
<u>STEEL</u>	<u>STEEL</u>

c) Door material

d) Front bonnet material METAL

e) Rear bootlid / tailgate material STEEL

f) Bodywork material METAL

h) Rear window material GLASS

i) Rear quarter window material GLASS

Front	Rear
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k) Side window material

<u>GLASS</u>	<u>GLASS</u>
<u>PLASTIC</u>	<u>PLASTIC</u>

l) Material of bumper

X    yes	<input type="checkbox"/> no
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n) Exterior Rear wiper

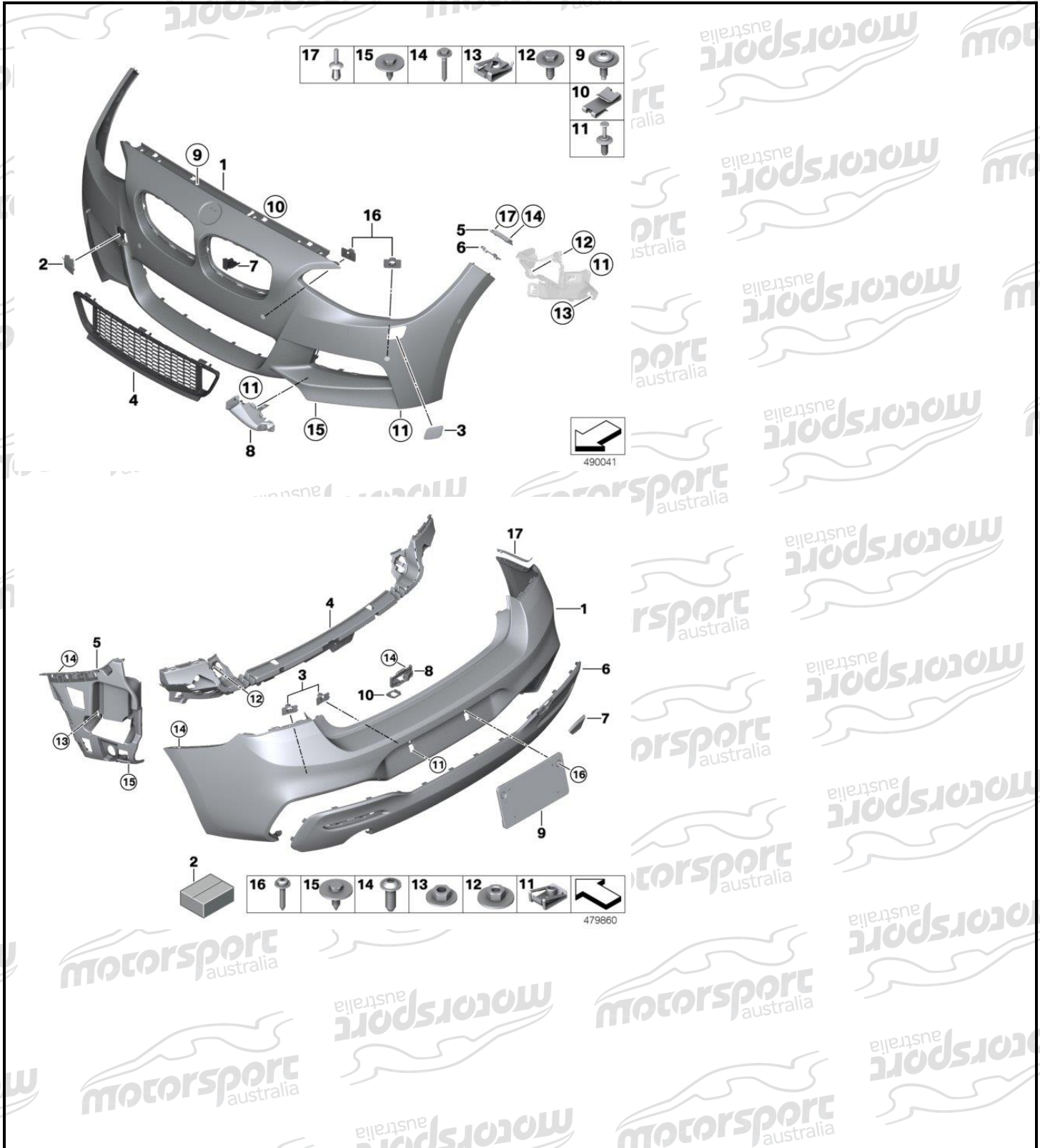
**XIII) NON METALLIC PARTS OF THE BODY**

Number	Part	Material
1	FRONT BUMPER	PLASTIC
1	REAR BUMPER	PLASTIC



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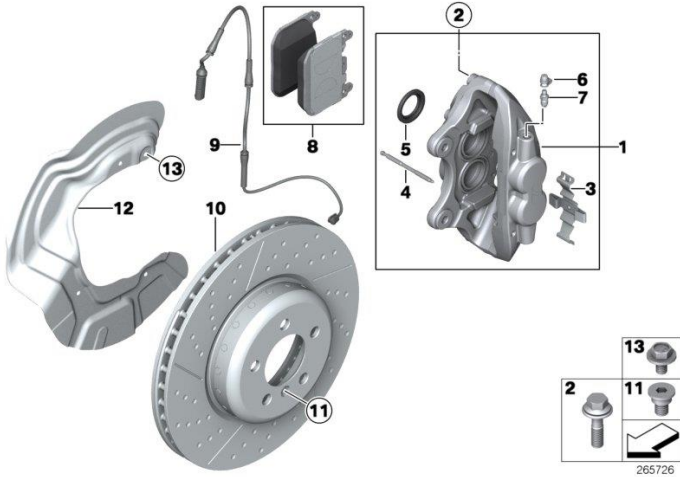
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**COMPLEMENTARY INFORMATION**

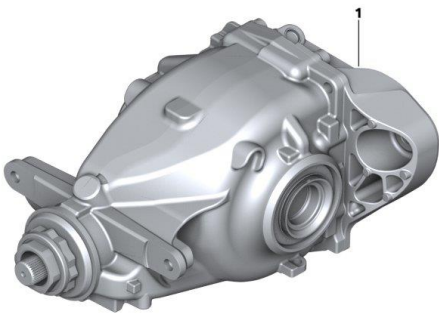
**Approved options**

**1. M Performance Brake upgrade**



Brake Disc 370mm x 30mm 34106797603

**2. M140i Mechanical self-locking differential**



BMW M Performance limited-slip diff For Automatic 33108659989  
Differential Ratio 2.81