



FEDERATION INTERNATIONALE  
DE L'AUTOMOBILE

Homologation N°

**F3-333**

FICHE D'HOMOLOGATION POUR MOTEUR DE FORMULE 3  
HOMOLOGATION FORM FOR FORMULA 3 ENGINE

Véhicule : Constructeur  
Vehicle : Manufacturer

Adam Opel GmbH/Vauxhall

Modèle et type  
Model and type

Zafira B

Homologation valable à partir du  
Homologation valid as from

01 AVR. 2006

MOTEUR (version standard)  
ENGINE (standard version)

Cycle  
Cycle four stroke

Nombre et disposition des cylindres  
Number and layout of the cylinders 4 in line

Mode de refroidissement  
Cooling system Liquid

Cylindrée  
Cylinder capacity Z 16 XEP Cylinder Block, coming from Zafira B 1,6

Unitaire Unitary	<u>399,5</u> cm3	Totale Total	<u>1598</u> cm3
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Matériau du bloc cylindres  
Cylinder block material cast Iron

Chemises  
Sleeves

<input type="checkbox"/> oui yes	<input checked="" type="checkbox"/> non no
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Type  
Type

<input type="checkbox"/> humides wet	<input type="checkbox"/> sèches dry
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Alésage Bore	<u>79,0</u> +/- 0.1 mm	Course Stroke	<u>81,5</u> +/- 0.1 mm
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Vilebrequin  
Crankshaft

Type de paliers  
Type of bearings plain bearings

Matériau des chapeaux de paliers  
Bearing cap material

cast iron

Fichas à classer.  
\* 2 exemplaires donnés à Pierre C.

Fédération Internationale de l'Automobile  
Chemin de Blonnet, 2  
CH-1216 GENEVE 15  
Tél.: 41 22 544 44 00  
Fax Sport: 41 22 544 44 50



Marque  
Make **OPEL**

Modèle  
Model **Zafira B**

**F3-333**

Culasse  
Cylinder head **Z 18 XER Cylinder head, coming from Zafira B 1,8**

Nombre  
Number **1** Emplacement  
Location **Top of Cylinder block**

Système de commande des soupapes  
Type of valve operation **Direct camshaft bucket tappets to valve**

Angle entre axe de la soupape d'admission et axe de la soupape d'échappement  
Angle between inlet valve axle and exhaust valve axle **43°**

Admission  
Inlet

Nombre de soupapes par cylindre  
Number of valves per cylinder **2** Type des ressorts de soupape  
Type of valve springs **coil spring**

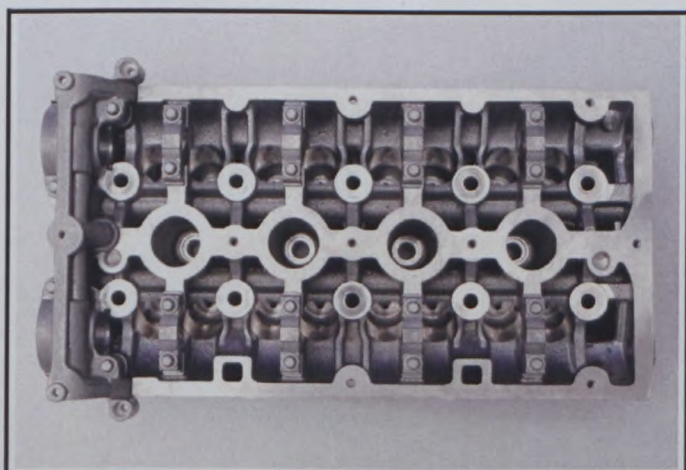
Echappement  
Exhaust

Nombre de soupapes par cylindre  
Number of valves per cylinder **2** Type des ressorts de soupape  
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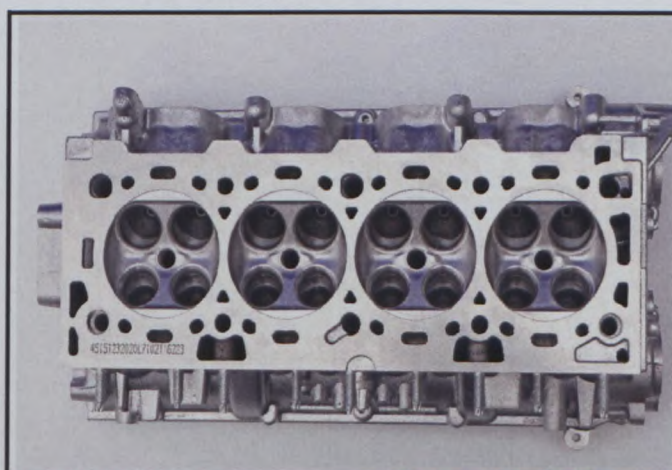
## PHOTOS

### Cylinderhead coming from Zafira B 1,8 Z 18 XER

Culasse nue vue de dessus  
Bare cylinder head seen from above



Culasse nue vue de dessous  
Bare cylinder head seen from below





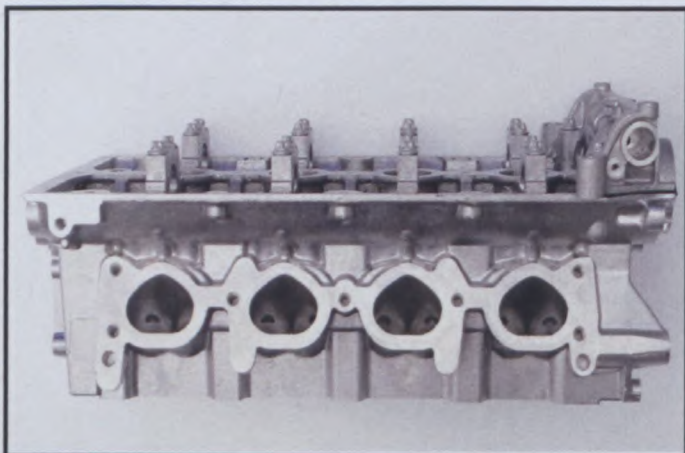
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Modèle  
Model **Zafira B**

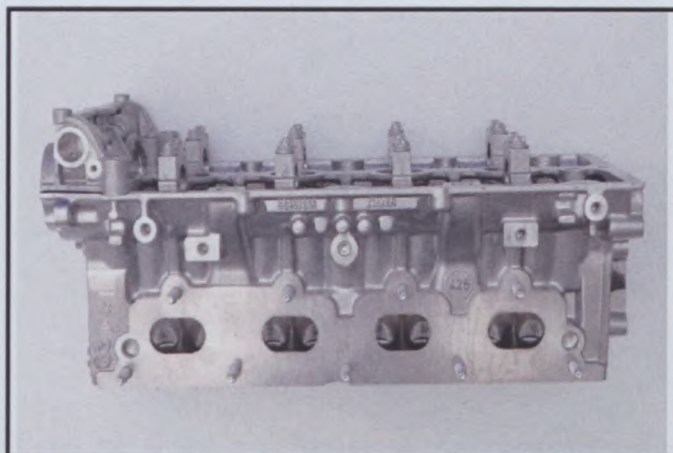
**F3-333**

**Cylinderhead coming from Zafira 1,8 Z 18 XER**

Profil droit de culasse nue  
Right hand view of bare cylinder head

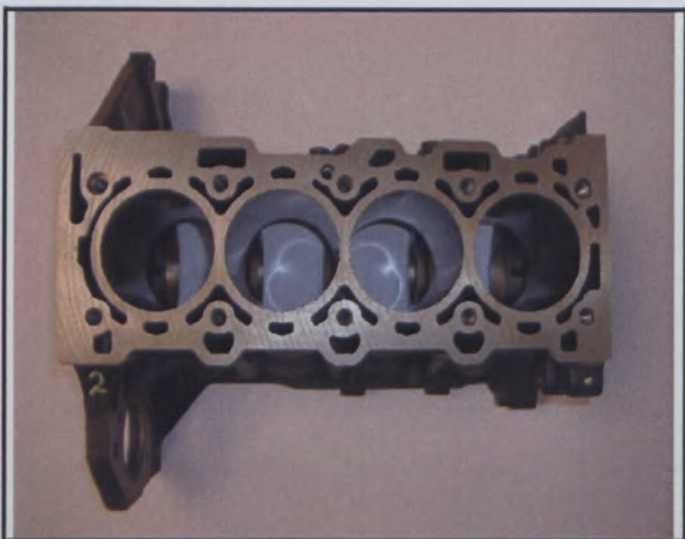


Profil gauche de culasse nue  
Left hand view of bare cylinder head

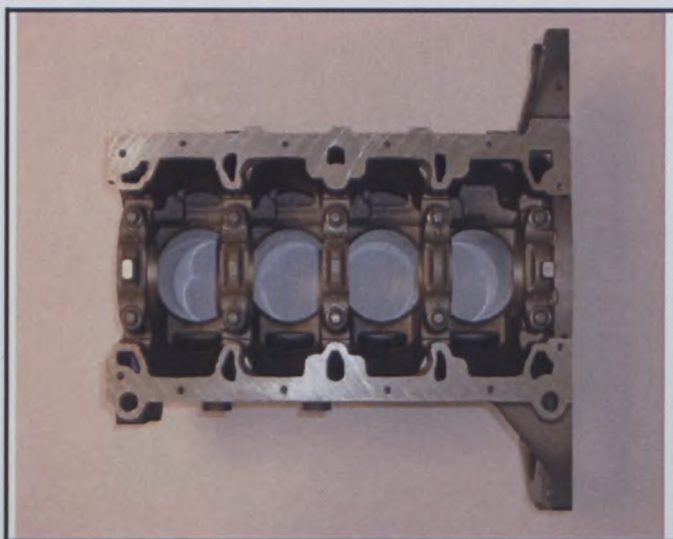


**Block coming from Zafira B 1,6 Z16 XEP**

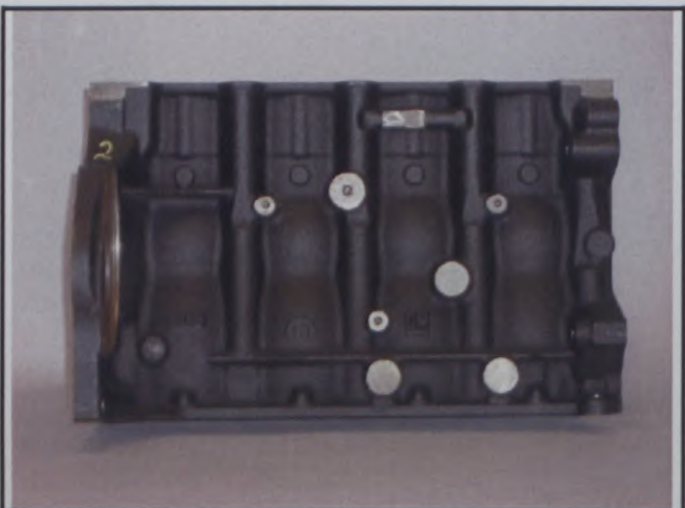
Bloc nu vu de dessus  
Bare block seen from above



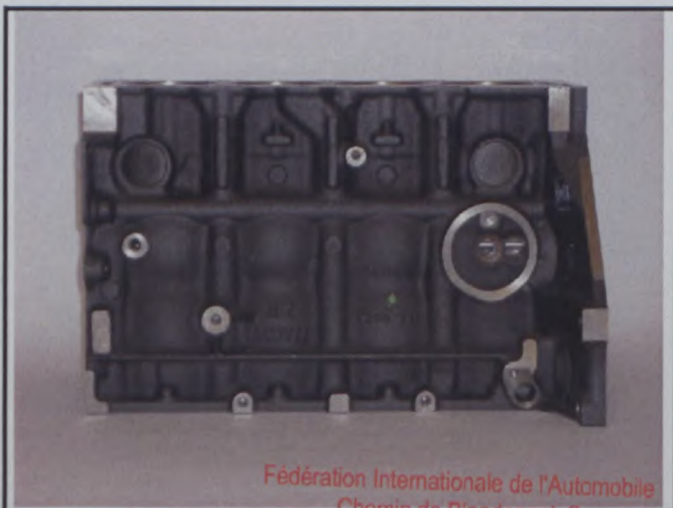
Bloc nu vu de dessous  
Bare block seen from below



Profil droit du bloc nu  
Right hand view of bare block



Profil gauche du bloc nu  
Left hand view of bare block







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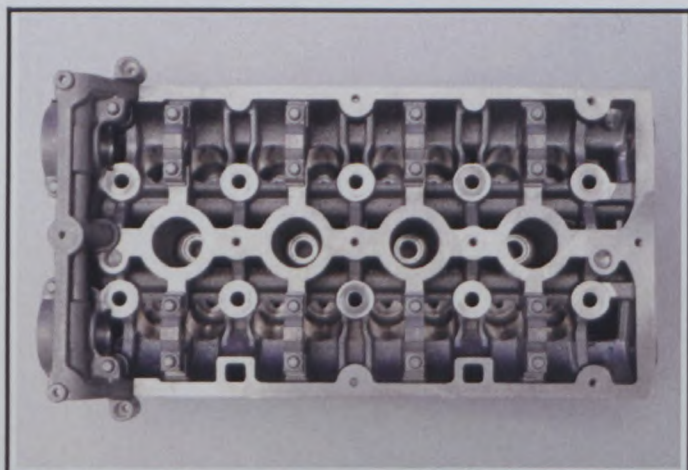
Echappement  
Exhaust

Nombre de soupapes par cylindre  
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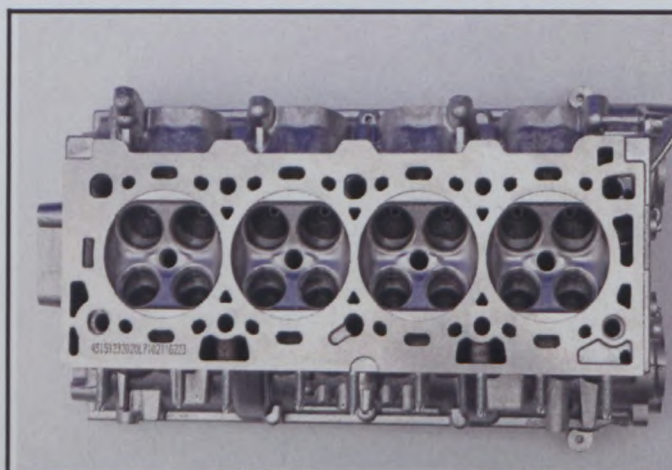
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Bare cylinder head seen from above



Culasse nue vue de dessous  
Bare cylinder head seen from below





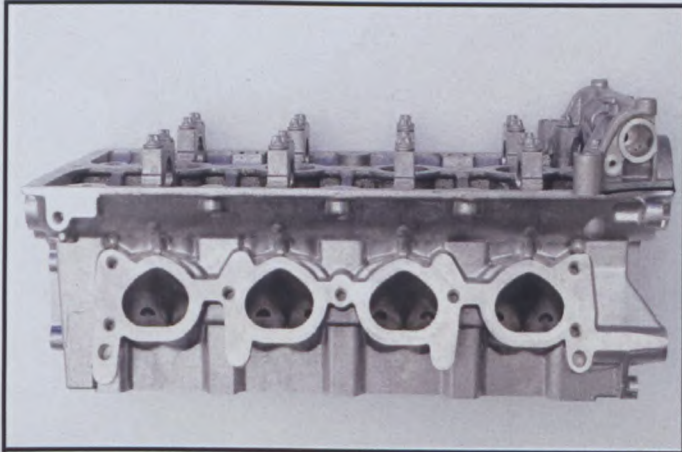
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Modèle  
Model **Zafira B**

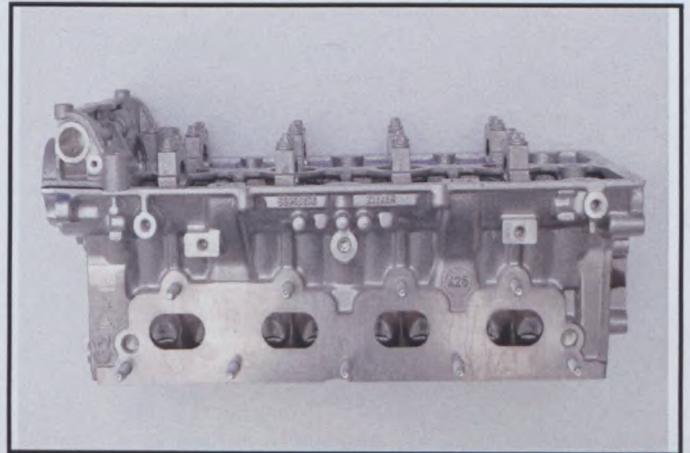
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**Cylinderhead coming from Zafira 1,8 Z 18 XER**

Profil droit de culasse nue  
Right hand view of bare cylinder head

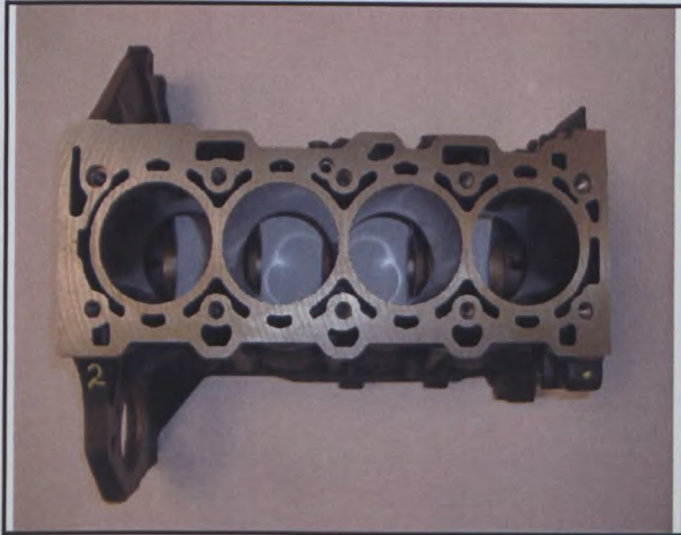


Profil gauche de culasse nue  
Left hand view of bare cylinder head



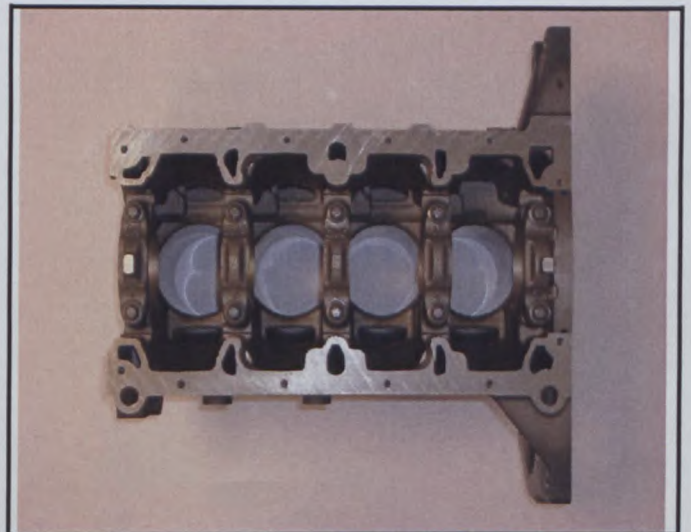
**Block coming from Zafira B 1,6 Z16 XEP**

Bloc nu vu de dessus  
Bare block seen from above

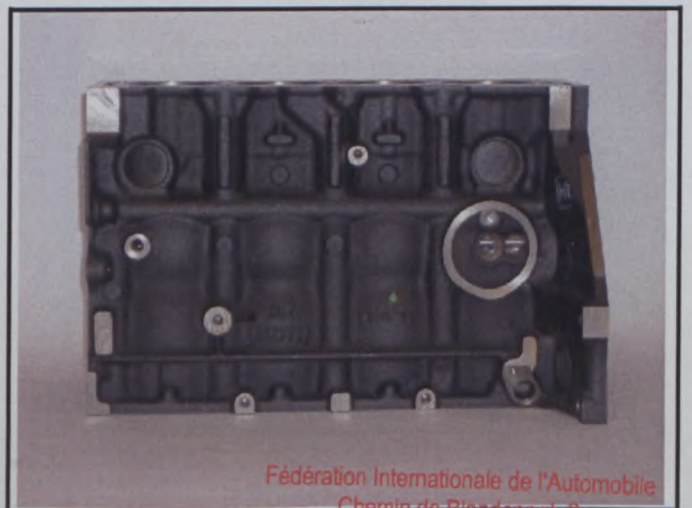
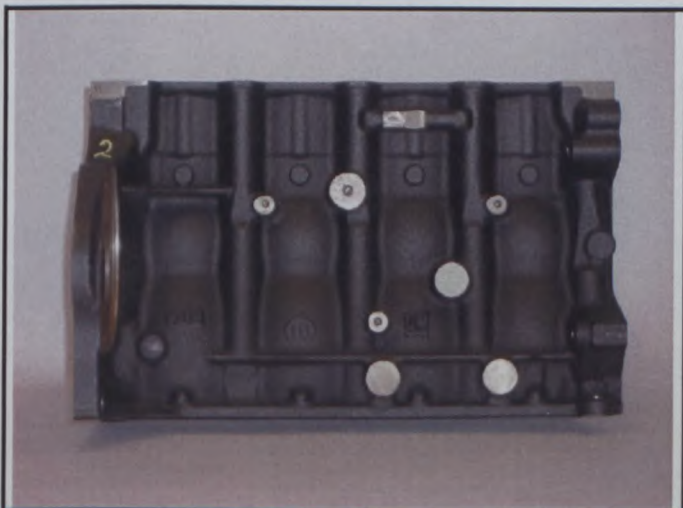


Profil droit du bloc nu  
Right hand view of bare block

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Bare block seen from below



Profil gauche du bloc nu  
Left hand view of bare block



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