***FMSCI HOMOLOGATION FORM***

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| ***Homologation valid as from*** |  |  |
|  | | Cadre réservé à l'usage exclusif de la FIA  *This cell is for the exclusive use of the FIA* |

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| **1. *GENERAL*** |

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| **101.** | ***Manufacturer*** |
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| **102.** | ***Model and type*** | | |
| a) *Model and type* |  | |
| b) *Typical chassis number\** |  | *\* For information purposes only* |

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| **103.** | ***Cylinder capacity*** | | | | | | |
| *Cylinder capacity* |  | | | cm3 | | |
| *Corrected cylinder capacity* |  | X |  | = |  | cm3 |

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| **104.** | ***Type of car construction*** | | | | |
| a) *Type* | ***Separated*** |  | ***Unitary construction*** |  |
| b) *Material of chassis / bodyshell* |  | | | |

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| **105.** | ***Number of volumes*** |  | **106.** | ***Number of places*** |
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| A1) *Car seen from 3/4 front* |  | A2) *Car seen from 3/4 rear* |
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| **2. *DIMENSIONS, WEIGHT*** |

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| **201.** | ***Minimum weight*** | | ***N*** |
|  | Kg | |

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| **202.** | ***Overall length*** | |
|  | Mm + 1% |

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| **203.** | ***Overall width*** | | **II-A1)** *Where measured* |
|  | Mm + 1% |  |

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| **204.** | ***Width of bodywork*** | | |
| a) A*t front axle centreline* |  | mm + 1% |
| b) A*t rear axle centreline* |  | mm + 1% |

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| **205.** | ***Min. height hub center / Wheel arch opening*** | | | ***N*** | |
| a) *Front* |  | mm | |  |
| b) *Rear* |  | mm | |
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| **206.** | ***Wheelbase*** | | |
|  |  | mm + 1% |

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| **207.** | ***Maximum track (at ground level)*** | | | ***N*** |
| a) *Front* |  | mm | |
| b) *Rear* |  | mm | |

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| **209.** | ***Overhang*** | | |
| a) *Front* |  | mm + 1% |
| b) *Rear* |  | mm + 1% |

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| **3. *ENGINE*** |

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| **301.** | ***Location and position of the engine*** | | | | | |
| a) *Location and orientation* |  | | | | |
| b) *Position* | **X** = |  | + 5 mm |  | *See scheme* **III-A1)** |
| **Y** = |  | + 5 mm |
| **Z** = |  | + 3 mm |
| c) *Inclination* |  |  | deg + 30' |

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| C1-1) *Dismounted engine – seen from the side* |  | C1-2) *Dismounted engine – seen from the side* |
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| C1-5) *Engine in its compartment* |  |  |
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| **III-A1) *POSITION OF THE ENGINE*** |
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| **302.** | ***Number of supports*** | ***N*** |
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| **303.** | ***Cycle*** |
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| **304.** | ***Supercharging*** | | | |
| ***Yes*** | ***No*** | *Type and number of compressors* |  |
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| **305.** | ***Number and layout of cylinders*** |
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| **306.** | ***Type of cooling*** |
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| **307.** | ***Cylinder capacity*** | | | | | | | |
| a) *Unitary* |  | cm3 | |  | | | |
| b) *Total* |  | cm3 | |  | | | |
| b1) *Total corrected* |  | X |  | | = |  | cm3 |
| c) *Maximum total allowed* |  | cm3 | | ***NOT VALID IN GROUP N*** | | | |

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| **308.** | ***Total minimum volume of a combustion chamber*** | | ***N*** |
|  | cm3 | |

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| **310.** | ***Compression ratio (in relation with the unit)*** | | | ***N*** | | |
| **Minimum\*** |  | **: 1** | **Maximum** |  | **: 1** |
| \* Diesel only |  | | | | |

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| **311.** | ***Cylinder block*** | | |
| a) *Material* |  | |
| **N** | b) *Diameter of crankshat bearings* |  | +0  - 0.1 mm |

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| C3-1) *Bare cylinder block seen from above* |  | C3-2) *Bare cylinder block seen from underneath* |
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| C3-3) *Bare cylinder block seen from right hand side* |  | C3-4) *Bare cylinder block seen from left hand side* |
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| C3-5) *Bare cylinder block seen from timing side* |  | C3-6) *Bare cylinder block seen from flywheel side* |
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| C3-7) *Crankshaft bearing caps* |  |  |
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| **312.** | ***Min. height of the cylinder block*** | | | | ***N*** |
| a) *Between sump and head*  *gasket planes* |  | mm | **III-C1)** *Height measurement* | |
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| b)*Between crankshaft centreline and head gasket plane* |  | mm |

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| **313.** | ***Sleeves*** | | | | |
| a) *Sleeved cylinder block* | ***Yes*** | ***No*** | |  |
|  |  | |
| **N** | b) *Material* |  | | C3-8) *Sleeve dismounted* | |
|  | | |  | |
|  | c) *Type* | ***Wet*** | ***Dry*** | |  |
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| **314.** | ***Bore*** | |
|  | +0  - 0.1 mm |

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| **315.** | ***Maximum bore allowed*** | | |
|  | mm | ***NOT VALID IN GROUP N*** |

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| **316.** | ***Stroke*** | |
|  | +0  - 0.1 mm |

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| **317.** | ***Piston*** | | | ***N*** | | | | | |
| a) *Material* |  | | | | | | | |
| b) *Number of rings* |  | | b1) *Thickness of rings* | |  | | | + 0.1 mm |
| c) *Minimum weight* |  | g | *With pin, clips and rings* | | | | | |
| d) *Distance from gudgeon pin center line to top of piston crown* | | |  | + 0.1 mm | | | | |
| e) *Distance top of piston at TDC / gasket plane of cylinder block* | | |  | + 0.15  - 0.30 mm | | *+ above*  *- below* | | |
| f) *Piston groove volume (top)* | | |  | + 0.5 cm3 | | | | |
| g) *Piston colling system* | | | ***Yes*** | ***No*** | | |  | |
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| C4-1) *Piston from ¾ top* |  | C4-2) *Piston from ¾ bottom* |
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| **III-D1)** *Piston pin* |  |  |
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| **318.** | ***Connecting rod*** | | | | | |
| a) *Material* |  | | b) *Big end type* | |  |
| c) *Interior diameter of the big end (without shell bearings)* | | |  | +0.1  - 0 mm | |
| d) *Length between axes* |  | + 0.1 mm | | | |
| e) *Minimum weight* |  | g | *With cap, bolts and shell bearings* | | |

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| C5-1) *Connecting rod from ¾ on big end side* |  | C5-2) *Connecting rod from ¾ rear on small end side* |
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| **319.** | ***Crankshaft*** | | | | | | | |
|  | a) *Type of manufacture* |  | | b) *Material* | | |  | |
| c) *Manufacturing process* | ***Cast*** |  | | ***Forged*** |  |  | |
| d) *Number of bearings* |  | | e) *Type of bearings* | | |  | |
| f) *Diameter of bearings* |  | | +0  - 0.1 mm | | | | |
| g) *Bearing caps material* |  | | h) *Min. weight of bare crankshaft* | | |  | g |
| **N** | i) Diamètre maximum des manetons  *Maximum diameter of crank pins* |  | | mm | | | | |

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| C6-1) *Crankshaft from ¾ front* |  | C6-2) *Crankshaft from ¾ rear* |
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| **320.** | ***Flywheel*** | | | | |
|  | ***Manual Gearbox*** | | ***Automatic Gearbox*** | |
| a) *Material* |  | |  | |
| b) *Minimum weight with starter ring* |  | g |  | g |
| *With fixings and starter ring* |  | | ***May be used with***  ***automatic gearbox only*** | |

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| C7-1) *Flywheel from ¾ front* |  | C7-2) *Flywheel from ¾ rear* |
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| **321.** | ***Cylinderhead*** | | |
|  | a) *Number* |  | |
|  | b) *Material* |  | |
| **N** | c) *Minimum height* |  | mm |
| **N** | d) *Where measured* |  | |
|  | e) *Angle between intake valve and cylinder head gasket plane* *and exhaust valve* |  | deg+30´ |
| f) *Angle between exhaust valve and cylinder head gasket plane* *and exhaust valve* |  | deg+30´ |
| **N** | g) *Minimum volume of a combustion chamber* *and exhaust valve* |  | cm3 |

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| C8-1) *Bare cylinderhead seen from top (camshaft side)* |  | C8-2) *Bare cylinderhead seen from underneath (chamber side)* |
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| C8-3) *Bare cylinderhead seen from intake side* |  | C8-4) *Bare cylinderhead seen from exhaust side* |
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| C8-5) *Bare cylinderhead seen from timing side* |  | C8-6) *Bare cylinderhead seen from flywheel side* |
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| C8-7) *Combustion chamber* |  |
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| **322.** | ***cylinderhead gasket*** | | |
| a) *Thickness of tightened cylinderhead gasket* |  | + 0.2 mm |

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| **324.** | ***Fuel feed by injection*** | | | | | | | | | |
| a) *Make and type* | |  | | | **Direct** | | | | **Indirect** |
|  | | | |  |
| b) *Model* | |  | | | | | | | |
| c) *Fuel measurement* | | ***Mechanical*** | | | ***Electronic*** | | | | ***Hydraulic*** |
|  | | |  | | | |  |
| d) *Dimensions of the intake pipe at the throttle valve* | | | | |  | + 0.25 mm | | | |
| e) *Number of effective fuel outlets* | | | | |  | | | | |
| f) *Injectors* | | f1) *Position* | | | ***Manifold*** | | | | ***Cylinder head*** |
|  | | | |  |
| g) *List of injection system sensors* | | | | | | | | | |
| **C1** |  | | **C6** |  | | | **C11** |  | |
| **C2** |  | | **C7** |  | | | **C12** |  | |
| **C3** |  | | **C8** |  | | | **c13** |  | |
| **C4** |  | | **C9** |  | | | **C14** |  | |
| **C5** |  | | **C10** |  | | | **C15** |  | |
| h) *List of injection system actuators* | | | | | | | | | |
| **A1** |  | | **A6** |  | | | **A11** |  | |
| **A2** |  | | **A7** |  | | | **A12** |  | |
| **A3** |  | | **A8** |  | | | **A13** |  | |
| **A4** |  | | **A9** |  | | | **A14** |  | |
| **A5** |  | | **A10** |  | | | **A15** |  | |

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| C9-1) *Injection system complete* |
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| **III-I1) *LOCATION OF SENSORS AND ACTUATORS*** |
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| **325.** | ***Camshaft*** | | | | | | | | |
| a) *Number* |  | | | | b) *Location* | | |  |
| c) *Drive system* |  | | | | d) *Number of bearings per shaft* | | |  |
| **N** | e) *Diameter of bearings* |  | | + 0.1 mm | | | | | |
|  | f) *Type of valve operation system* | | |  | | | | | |
|  |  | | | | | | | | |
| **N** | g) *Cam dimensions* | ***Intake*** | | | ***Exhaust*** | | |  | |
| **A =** |  | + 0.1 mm | |  | | + 0.1 mm |
| **B =** |  | + 0.1 mm | |  | | + 0.1 mm |
| ***The tolerances must be used with the same sign for A and B*** | | | | | | | | |

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| **326.** | ***Timing*** | | | | ***N*** | | | |
| a) *Theoretical clearance* | ***Intake*** |  | mm | | ***Exhaust*** |  | mm |
| b) *Cam lift in mm (dismounted camshaft)* | | | | | | | |

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| ***INTAKE*** | | | | |  | ***EXHAUST*** | | | | |
| *Rotation*  *angle in*  *degrees* | *Lift in mm*  (+ 0.05 mm) |  | *Rotation*  *angle in*  *degrees* | *Lift in mm*  (+ 0.05 mm) | *Rotation*  *angle in*  *degrees* | *Lift in mm*  (+ 0.05 mm) |  | *Rotation*  *angle in*  *degrees* | *Lift in mm*  (+ 0.05 mm) |
| 0 |  |  | | 0 |  |  | |
| - 5 |  | + 5 |  | - 5 |  | + 5 |  |
| - 10 |  | + 10 |  | -10 |  | + 10 |  |
| - 15 |  | + 15 |  | - 15 |  | + 15 |  |
| - 30 |  | + 30 |  | - 30 |  | + 30 |  |
| - 45 |  | + 45 |  | - 45 |  | + 45 |  |
| - 60 |  | + 60 |  | - 60 |  | + 60 |  |
| - 75 |  | + 75 |  | - 75 |  | + 75 |  |
| - 90 |  | + 90 |  | - 90 |  | + 90 |  |
| - 105 |  | + 105 |  | - 105 |  | + 105 |  |
| - 120 |  | + 120 |  | - 120 |  | + 120 |  |
| - 135 |  | + 135 |  | - 135 |  | + 135 |  |
| - 150 |  | + 150 |  | - 150 |  | + 150 |  |
| *A shift of +/- 2 degrees of* ***the whole measurement*** *is accepted* | | | | | | | | | | |

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|  | c) *Maximum valve lift* | ***Intake*** | | ***Exhaust*** | | ***with clearance according to Art. 326a*** |
|  | + 0.2 mm |  | + 0.2 mm |

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| **327.** | | ***Intake*** | | | | | | | | | | |
| a) *Material of manifold* |  | | | | | | | | | |
| b) *Number of manifold elements* |  | | | | | | | | | |
| c) *Number of valves per cylinder* |  | | | | | | | | | |
| d) *Maximum diameter of the valve head* |  | | | mm | d1) *Angle of valve head* | |  | | Deg | |
| e) *Diameter of valve stem in guide* |  | | | +0  -0.2 mm |  | | | | | |
| f) *Valve length* |  | | | + 1.5 mm |  | | | | | |
| g) *Type of valve springs* |  | | | | | | | | | |
| **N** | h) *Number of springs per valve* | | |  | | | | | | | | |
| **N** | i) *Max. length of the spring* | | |  | mm | | | *Under a load of* | |  | | N |
| **N** | j) *External diameter of springs* | | |  | + 0.2 mm | | | k) *Number of spring coils* | |  | | |
| **N** | l) *Diameter of spring wire* | | |  | + 0.1 mm | | | m) *Max. free length of springs* | |  | | mm |

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| C11-1) *Intake manifold - dismounted* |  | C11-2) *Intake manifold - dismounted* |
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| C11-3) *Throttle unit - dismounted* |  | C11-4) *Throttle unit - dismounted* |
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| ***INTAKE*** |
| ***Drawings of engine ports - tolerances on dimensions : -2%, +4%*** |
| **III-K1)** *Cylinderhead, manifold side* |
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| **III-K2)** *Manifold, cylinderhead side* |
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| **328.** | ***Exhaust*** | | | | | | | | |
| a) *Material of manifold* |  | | | b) *Number of manifold elements* | |  | | |
| c) *Internal dimensions of manifold exit* |  | | + 0.2 mm | + 2.0 mm *if raw or fabricated* | | | | |
| d) *Number of valves per cylinder* |  | | | | | | | |
| e) *Maximum diameter of the valve* |  | | mm | e1) *Angle of valve head* | |  | deg | |
| f) *Diameter of valve stem in guide* |  | | +0  -0.2 mm | g) *Valve length* | |  | + 1.5 mm | |
| h) *Type of valve springs* |  | | | | | | | |
| **N** | i) *Number of springs per valve* |  | | | | | | | |
| j) *Max. length of the spring* |  | mm | | *Under a load of* | |  | | N |
| k) *External diameter of springs* |  | + 0.2 mm | | l) *Number of spring coils* | |  | | |
| m) *Diameter of spring wire* |  | + 0.1 mm | | n) *Max. free length of springs* | |  | | mm |
| o) *Diameter of pipe between manifold and first silencer* | | | |  | mm + 5% | | | |

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| C12-1) *Exhaust manifold - dismounted* |  | C12-2) *Exhaust manifold - dismounted* |
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| ***EXHAUST*** |
| ***Drawings of engine ports - tolerances on dimensions : -2%, +4%*** |
| **III-L1)** *Cylinderhead, manifold side* |
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| **III-L2)** *Manifold, cylinderhead side* |
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| **329.** | ***Anti-pollution system*** | | ***N*** |
| a) *Description* |  | |

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| C12-3) *Complete exhaust system - dismounted* |
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| **330.** | ***Ignition system*** | | | | |
| **N** | a) *Type* |  | | d) *Number of coils* |  |
|  | b) *Number of plugs per cylinder* | |  | | |
| c) *Number of distributors* | |  | | |

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| **331.** | ***Cooling system*** | | | ***N*** |
| a) *Capacity* |  | litres | |

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| **332.** | ***Cooling fan*** | | ***N*** | | |
| a) *Number* |  | b) *Max.* d*iameter of the fan* |  | mm |
| c) *Material of the fan* |  | d) *Number of blades* |  | |
| e) *Type of drive* |  | f) *Automatic cut off* | **Yes** | **No** |
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| **III-M1)** *Dimensions of radiator cores* |
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| **333.** | ***Lubrication system*** | | | | |
| a) *Type* |  | | | |
| b) *Number of oil pumps* |  | | | |
| **N** |  | | | | |
| c) *Total Capacity* |  | litres | | |
| d) *Oil cooler(s)* | ***Yes*** | ***No*** | d1) *Number* |  |
|  |  |
| e) *Location of the coolers* |  | | f) *Type of the coolers* |  |

***DELETE THIS PAGE AND THIS HEADING IF ENGINE IS NOT SUPERCHARGED***

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| **334.** | ***Turbocharging*** | | | |
| a) *Make and type of the turbocharger* |  | | |
| b) *Turbine housing* | b1) *Number of exhaust gas entries* |  | |
| b2) *Material* |  | |
| c) Roue de turbine  *Turbine wheel* | c1) *Material* |  | |
| c2) *Number of blades* |  | |
| c3) *Height(s) of blades* |  | + 0.5 mm |
| c4) *Dimensions A, B, C, according to the sketch* |  | |
| A =  + 0.4 mm  B =  + 0.5 mm  C =  + 0.3 mm |
| c5) *Variable blades* | ***Yes*** | ***No*** |
|  |  |
| d) *Impeller housing* | d1) *Number of air entries (mixture)* |  | |
| d2) *Material* |  | |
| e) Impeller wheel | e1) *Material* |  | |
| e2) *Number of blades* |  | |
| e3) *Height(s) of blades* |  | + 0.5 mm |
| e4) *Dimensions A, B, C, according to the sketch* |  | |
| A =  + 0.4 mm  B =  + 0.5 mm  C =  + 0.4mm |
| e5) *Variable blades* | ***Yes*** | ***No*** |
|  |  |

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|  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | f) *Pressure regulation* | f1) *Type of pressure adjustment* | | | By-pass | | *Relief valve* | | | | *Other* |
|  | |  | | | |  |
| f2) *Type of pressure adjustment* | | |  | | | | | | |
| g) *Exhaust system* | g1) *Internal dimensions of the possible pipes between manifold and turbocharger* | | | | | | | | | |
|  | | | + 2mm | | | | | | |
| h) *Cooling of intake air* | h1) | ***Yes*** | | | | | ***No*** | | | |
|  | | | | |  | | | |
| h2) *System* | Air | *Air/Water* | | | | *Single-flow* | | *Double-flow* | |
|  |  | | | |  | |  | |
| h3) *Air inlet diameter* | | | |  | | | + 1mm | | |
| h4) *Air outlet diameter* | | | |  | | | + 1mm | | |
| i) *Maximum absolute supercharging pressure* | |  | | | mbar | | | | | |

|  |  |  |
| --- | --- | --- |
| **III-01)** *Exhaust gas inlet to the turbine housing* |  | **III-02)** *Exhaust gas outlet from the turbine housing* |
|  |  |  |

|  |  |  |
| --- | --- | --- |
| **III-03)** *Air (gas) inlet to the compressor housing* |  | **III-04)** *Air (gas) outlet from the compressor housing* |
|  |  |  |

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|  |  |  |
| --- | --- | --- |
| C15-1) *Plan view of complete turbocharger unit* |  | C15-2) *Front view of complete turbocharger unit* |
|  |  |  |

|  |  |  |
| --- | --- | --- |
| C15-3) *Side view of complete turbocharger unit* |  | C15-4) *Valve and by-pass installation of turbocharger* |
|  |  |  |

|  |  |
| --- | --- |
| C15-5) *Exhaust system between manifold and turbocharger* | |
|  |  |

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|  |  |  |
| --- | --- | --- |
| C15-6) *Compression housing of turbocharger - dismounted* |  | C15-7) *Turbine housing of turbocharger - dismounted* |
|  |  |  |

|  |  |  |
| --- | --- | --- |
| C15-8) *Intercooler - dismounted* |  | C15-9) *Intercooler - mounted in its location* |
|  |  |  |

|  |
| --- |
| **III-05)** *Drawing of the intercooler with dimensions of core (Width x Height x Thickness)* |
|  |

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|  |  |
| --- | --- |
| **III-06) *DEVICE REGULATING THE TURBOCHARGER PRESSURE*** | |
|  | |
| *Procedure for checking the pressure* |  |

|  |
| --- |
| **III-07) *INTERCOOLER COOLING SYSTEM*** |
|  |

|  |
| --- |
| **4. *FUEL CIRCUIT*** |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **401.** | ***Fuel tank*** | | | |
| a) *Number* |  | | |
| b) *Location* |  | | |
| c) *Material* |  | | |
| **N** |  | | | |
| d) *Total capacity* |  | litres |  |
| e) *Location of filler holes* |  | | |

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **402.** | ***Fuel pump(s)*** | | | ***N*** | | | |
| a) *Type* |  | | | | | |
| b) *Number* |  | | | | | |
| c) *Make and type* |  | | | | | |
| d) *Location* |  | | | | | |
| e) *Maximum flow* |  | l / mn | | *at* |  | volts |

|  |
| --- |
| **5. *ELECTRICAL EQUIPMENT*** |

|  |  |  |  |
| --- | --- | --- | --- |
| **501.** | ***Batteries*** | | |
| a) *Number* |  | |
| b) *Tension* |  | Volts |
| **N** |  | | |
| c) *Location* |  | |

|  |  |  |  |
| --- | --- | --- | --- |
| **502.** | ***Alternator*** | | ***N*** |
| a) *Type* |  | |
| b) *Number* |  | |
| c) *Drive system* |  | |
| d) *Nominal power* |  | Watts |

|  |  |  |  |
| --- | --- | --- | --- |
| **503.** | ***Retractable headlights*** | | ***N*** |
| a) *Control system* |  | |

|  |
| --- |
| **6. *POWER TRAIN*** |

|  |  |  |  |
| --- | --- | --- | --- |
| **601.** | ***Driven wheels*** | | |
|  | ***FRONT*** | ***REAR*** |
|  |  |

|  |
| --- |
| **VI-A1) *KINEMATIC TRAIN (4-wheel drive only)*** |
|  |

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **602.** | ***Clutch*** | | | ***N*** | | |
| a) *Type* |  | | b1) *Operation* | **Pushed** | **Pulled** |
|  |  |
|  |  | | d) *Diameter of the plate(s)* |  | + 2 mm |
|  |  | | | | | |
| b) *Control system* | |  | | | |
| c) *Number of plates* | |  | | | |

|  |  |  |
| --- | --- | --- |
| F1-1) *Clutch bell housing* |  |  |
|  |  |  |

|  |  |  |
| --- | --- | --- |
| F1-2) *Pressure unit dismounted with disc(s)* |  | F1-3) *Pressure unit dismounted with disc(s)* |
|  |  |  |

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **603.** | ***Gearbox*** | | | | | | | | | | | | | | |
| a) *Location* | | |  | | | | | | | | | | | |
| b) *Make* ***Manual*** | | |  | | | | | c) *Make* ***Automatic*** | | | |  | | |
| d) *Type and location of control* | | |  | | | | | | | | | | | |
|  | e) *Gear ratios* | | | | | | | | | | | | | | |
|  | ***Manual*** | | | | |  | | |  | ***Automatic*** | | | | |
| *Number of teeth* | *Ratio* | *Constant* | Synchro | | *Number of teeth* | | | *Ratio* | Synchro |
| **1** |  |  |  |  | | **1** |  | | |  |  |
| **2** |  |  |  |  | | **2** |  | | |  |  |
| **3** |  |  |  |  | | **3** |  | | |  |  |
| **4** |  |  |  |  | | **4** |  | | |  |  |
| **5** |  |  |  |  | | **5** |  | | |  |  |
| **6** |  |  |  |  | | **6** |  | | |  |  |
| **AR/*R*** |  |  |  |  | | **7** |  | | |  |  |
| ***Constant*** |  |  |  | | | **AR/*R*** |  | | |  |  |
|  | | | | | | | | | | | | | | |
| f) *Gear change gate* | | |  | | | | | | | | | | | |
| g) *Type of lubrication* | | |  | | | | | | | | | | | |
| **N** |  | | | | | | | | | | | | | | |
| h) *Oil cooler(s)* | | | ***Yes*** | | ***No*** | | h1) *Type* | | | |  | | | |
|  | |  | |

|  |  |  |
| --- | --- | --- |
| F2-1) *Gearbox casing and clutch bell housing* |  | F2-2) *Gearbox casing and clutch bell housing* |
|  |  |  |

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **604.** | ***Transfer box*** | | | | | | |
|  | **High** | | **Low** | |  | |
| b) *Ratios* |  | |  | |
| b1) *Number of teeth* |  | |  | |
| c) *Control system* |  | | | | | |
| d) *Type of central differential* |  | | | | | |
| **N** |  | | | | | | |
| e) *Torque distribution* | ***FRONT*** | | | ***REAR*** | | |
|  | % | |  | | % |
| e1) *Number of teeth* |  | | | | | |
| f) *Type of central differential limitation* |  | | | | | |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **605.** | ***Final drive*** | | | | |
|  | ***FRONT*** | | ***REAR*** | |
| a) *Type of final drive* |  | |  | |
| b) *Ratio* |  | |  | |
| c) *Number of teeth* |  | |  | |
| e) *Type of lubrication* |  | |  | |
| **N** |  | | | | |
| d) *Type of differential limitation* |  | |  | |
| d1) *Make* |  | |  | |
| f) *Oil cooler* | ***Yes*** | ***No*** | ***Yes*** | ***No*** |
|  |  |  |  |
| f1) *Type* |  | |  | |

|  |  |  |
| --- | --- | --- |
| F4-1) *Front differential casing* |  | F4-2) *Front differential casing* |
|  |  |  |

|  |  |  |
| --- | --- | --- |
| F4-3) *Front differential assembly* |  | F4-4) *Front differential dismounted* |
|  |  |  |

|  |
| --- |
| **VI-D1)** *Drawing of front differential rails with angles* |
|  |

|  |  |  |
| --- | --- | --- |
| F5-1) *Rear differential casing* |  | F5-2) *Rear differential casing* |
|  |  |  |

|  |  |  |
| --- | --- | --- |
| F5-3) *Rear differential assembly* |  | F5-4) *Rear differential dismounted* |
|  |  |  |

|  |
| --- |
| **VI-E1)** *Drawing of rear differential rails with angles* |
|  |

|  |  |  |  |
| --- | --- | --- | --- |
| **606.** | ***Transmission shafts*** | | |
|  | ***FRONT*** | ***REAR*** |
| a) *Type of longitudinal shafts and joints* |  |  |
| b) *Material of longitudinal shafts* |  |  |
| c) *Type of transversal half shafts and joints* |  |  |
| d) *Material of transversal half shafts* |  |  |

|  |
| --- |
| **7. *AXLES AND SUSPENSION*** |

|  |  |  |  |
| --- | --- | --- | --- |
| **701.** | ***General*** | | |
|  | ***FRONT*** | ***REAR*** |
| a) *Type of axle* |  |  |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **702.** | ***Helical springs*** | | | | |
|  |  | |  | |
| **N** |  | | | | |
|  | | ***FRONT*** | | ***REAR*** |
| a) *Material* | |  | |  |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **703.** | ***Learf springs*** | | | | |
|  |  | |  | |
| **N** |  | | | | |
|  | | ***FRONT*** | | ***REAR*** |
| a) *Material of main leaves* | |  | |  |
| a1) *Material of auxiliary leaf* | |  | |  |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **704.** | ***Torsion bars*** | | | | |
|  |  | |  | |
| **N** |  | | | | |
|  | | ***FRONT*** | | ***REAR*** |
| a) *Material* | |  | |  |

|  |  |  |
| --- | --- | --- |
| G1-1) *Complete* ***front*** *axle assembly - dismounted* |  | G1-2) *Complete* ***front*** *axle assembly - dismounted* |
|  |  |  |

|  |  |  |
| --- | --- | --- |
| H1-1) *Complete* ***rear*** *axle assembly - dismounted* |  | H1-2) *Complete* ***rear*** *axle assembly - dismounted* |
|  |  |  |

|  |  |  |  |
| --- | --- | --- | --- |
| G2-1) *Subframe for fixing the* ***front*** *axle parts - dismounted* |  | | G2-2) *Subframe for fixing the* ***front*** *axle parts - dismounted* |
|  |  |  | |

|  |  |  |  |
| --- | --- | --- | --- |
| H2-1) *Subframe for fixing the* ***rear*** *axle parts - dismounted* |  | | H2-2) *Subframe for fixing the* ***rear*** *axle parts - dismounted* |
|  |  |  | |

|  |  |  |  |
| --- | --- | --- | --- |
| **705.** | ***Other type of suspension*** | | |
|  | ***FRONT*** | ***REAR*** |
| a) *Type* |  |  |
| b) *Number of elastic elements* |  |  |
| c) *Type of elastic elements* |  |  |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **706.** | ***Stabilisers*** | | | | |
|  | ***FRONT*** | | ***REAR*** | |
| a) *Material* |  | |  | |
| b) *Effective length between bearings* |  | mm +1% |  | mm +1% |
| c) *Effective diameter (ext.* ***x*** *int.)* |  | mm |  | mm |

|  |  |  |
| --- | --- | --- |
| **VII-F1)** ***Front*** *stabiliser with dimensions* |  | **VIII-F1)  *Rear*** *stabiliser with dimensions* |
|  |  |  |

|  |  |  |  |
| --- | --- | --- | --- |
| **707.** | ***Shock absorbers*** | | |
|  | ***FRONT*** | ***REAR*** |
| a) *Number per wheel* |  |  |
| b) *Type* |  |  |
| c) *Principle of operation* |  |  |

|  |
| --- |
| **8. *RUNNING GEAR*** |

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **801.** | ***Wheels*** | | | | | | | | |
|  | | ***FRONT*** | | | | ***REAR*** | | |
| a) *Diameter* | |  | | mm | |  | | mm |
|  | | inches | |  | | inches |
| **N** |  | | | | | | | | |
|  | ***FRONT*** | | | | ***REAR*** | | | |
| b) *Width* |  | | mm | |  | | mm | |
|  | | inches | |  | | inches | |

|  |  |  |  |
| --- | --- | --- | --- |
| **802.** | ***Spare* w*heel*** | | |
| *Location* |  | J2-1) *Spare wheel in its location* |
|  | |  |

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **803.** | ***Brakes*** | | | | | | | | | |
| a) *Braking system* |  | | | | | | | | |
| b) *Number of master cylinders* |  | | | b1) *Bores* | | / | | | + 0.05 mm |
| c) *Servo brakes* | ***Yes*** | ***No*** | | c1) *Make and type* | |  | | | |
|  |  | |
| d) *Braking regulator* | ***Yes*** | ***No*** | | d1) *Location* | |  | | | |
|  |  | |
|  | | | d2) *Type* | |  | | | |
|  | | | ***FRONT*** | | | | ***REAR*** | | |
| e) *Number of cylinders per wheel* | | |  | | | |  | | |
| e1) *Bore* | | |  | | + 0.1 mm | |  | + 0.1 mm | |
| **f) *Drum brakes*** | | | | | | | | | |
| f1) *Internal diameter* | | |  | | +1.5 mm | |  | +1.5 mm | |
| f2) *Number of linings per wheel* | | |  | | | |  | | |
| f3) *Developed* *length of each lining* | | |  | | +1.5 mm | |  | +1.5 mm | |
| f4) *Width of each lining* | | |  | | + 1 mm | |  | + 1 mm | |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | **g) *Disc brakes*** | | | | |
| g1) *Number of pads per wheel* |  | |  | |
| g2) *Number of calipers per wheel* |  | |  | |
| g3) *Caliper material* |  | |  | |
| g4) *Thickness of new disc* |  | +1 mm |  | +1 mm |
| g5) *External diameter of disc* |  | +1.5 mm |  | +1.5 mm |
| g6) *External diameter of pads'rubbing surface* |  | +1.5 mm |  | +1.5 mm |
| g7) *Internal diameter of pads'rubbing surface* |  | +1.5 mm |  | +1.5 mm |
| g8) *Overall friction length of each pad* |  | +1.5 mm |  | +1.5 mm |
| g9) *Ventilated discs* | ***Yes*** | ***No*** | ***Yes*** | ***No*** |
|  |  |  |  |
| *Number of venting channels* |  | |  | |

|  |  |  |  |
| --- | --- | --- | --- |
|  | **h) *Parking brake*** | | |
| h1) *Control system* |  | |
| h2) *Location of control* |  | |
| h3) *On which wheels* | ***FRONT*** | ***REAR*** |
|  |  |
| h4) *Location of brake* |  | |

|  |  |  |
| --- | --- | --- |
| ***FRONT*** |  | ***REAR*** |

|  |  |  |
| --- | --- | --- |
| J3-1) *Complete brake assembly* |  | K3-1) *Complete brake assembly* |
|  |  |  |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **804.** | ***Steering*** | | | | |
| a) *Type* |  | | | |
| b) *Ratio* |  | | | Steering wheel / Wheels |
| c) *Power assisted* | ***Yes*** | ***No*** |  | |
|  |  |
| d) *Type of power assistance* |  | | | |
| e) *Location of power assistance* |  | | | |
| f) *Location of electronic control unit* |  | | | |

|  |  |  |
| --- | --- | --- |
| J9-3) *Steering rod - dismounted* |  | **X-C1)** *Steering rod – typical dimensions* |
|  |  |  |
| Ref : |

|  |
| --- |
| **9. *BODYWORK - CHASSIS (BODYSHELL)*** |

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **901.** | | ***Interior*** | | | | |
| a) *Heating* | ***Yes*** | ***No*** |  | |
|  |  |
| **N** | b) Climatisation  *Air conditioning* | | ***Yes*** | ***No*** |  | | |
|  |  |
|  | | c) *Optional sun roof* | ***Yes*** | ***No*** | c1) *Type* |  |
|  |  |
|  | | | c2) *Control System* |  |
| d) *Opening system for side windows* |  | | | |
| ***Interior dimensions as defined by the Homologation Regulations*** | | | | |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  |  | | | | **XII-A1)** |
| **B** | *Height above front seats* |  | mm |  |
| **C** | *Width at front seats* |  | mm |
| **D** | *Height above rear seats* |  | mm |
| **E** | *Width at rear seats* |  | mm |
| **F** | *Steering wheel - Brake pedal* |  | mm |  |
| **G** | *Steering wheel - Rear bulkhead* |  | mm |
| **H** | **F + G** |  | mm |

|  |
| --- |
| L1-1) *Dashboard* |
|  |

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **902.** | ***Exterior*** | | | | | |
| a) *Number of doors* |  | | b) *Tailgate* | ***Yes*** | ***No*** |
|  |  |
| **N** |  | | | | | |
| d) *Rear wiper* |  | | | | |
|  | c) *Windscreen* | | c1) *Heating / defrosting system* | | ***Yes*** | ***No*** |
|  |  |
| c3) *Minimum weight* | |  | kg |

|  |
| --- |
| **XIII-A1) *MATERIALS OF BODYWORK PANELS*** |

|  |  |  |
| --- | --- | --- |
| ***METALLIC MATERIALS*** | | |
| ***Label*** | ***Part*** | ***Material*** |
| **01** |  |  |
| **02** |  |  |
| **03** |  |  |
| **04** |  |  |
| **05** |  |  |
| **06** |  |  |

|  |  |  |
| --- | --- | --- |
| ***PLASTIC MATERIALS*** | | |
| ***Label*** | ***Part*** | ***Material*** |
| **11** |  |  |
| **12** |  |  |
| **13** |  |  |
| **14** |  |  |
| **15** |  |  |
| **16** |  |  |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| ***GLAZING*** | | | | |
| ***Label*** | ***Part*** | ***Material*** | ***Min. thickness*** | |
| **21** |  |  |  | mm |
| **22** |  |  |  | mm |
| **23** |  |  |  | mm |
| **24** |  |  |  | mm |
| **25** |  |  |  | mm |
| **26** |  |  |  | mm |

|  |
| --- |
| ***DRAWING*** |
|  |

|  |
| --- |
| M1-1) *Sunroof* |
|  |

|  |  |
| --- | --- |
| **903.** | ***Chassis (Bodyshell)*** |

|  |  |  |
| --- | --- | --- |
| N1-1) *Bare chassis – General view* |  | N1-2) *Bare chassis – General view* |
|  |  |  |

|  |  |  |
| --- | --- | --- |
| N1-3) *Bare chassis – Engine compartment* |  | N1-4) *Bare chassis – Cockpit seen from windscreen opening* |
|  |  |  |

|  |  |  |
| --- | --- | --- |
| N1-5) *Bare chassis – Cockpit seen from rear window opening* |  | N1-6) *Bare chassis – Roof seen from cockpit* |
|  |  |  |

|  |  |  |
| --- | --- | --- |
| N1-7) *Bare chassis – Luggage compartment* |  | N1-8) *Bare chassis – Seen from underneath* |
|  |  |  |

|  |
| --- |
| ***COMPLEMENTARY INFORMATION*** |