

## Group 3E HOMOLOGATION FORM

A) Vehicle seen from 3/4 front



B) Vehicle seen from 3/4 rear



**1. GENERAL**

101. Manufacturer

**FIAT GROUP AUTOMOBILES S.P.A.**

102. Commercial name(s) - Model and type

**ALFA 159 2.4 JTD**

103. Engine capacity

**2387 cm<sup>3</sup>**

Corrected engine capacity

**2387 x 1.5 = 3581 cm<sup>3</sup>**

104. Type of car construction

a) Type

separate chassis

monocoque

b) Material of chassis / bodyshell

**STEEL**

106. Number of seats

**5**

**2. DIMENSIONS, WEIGHT**

Minimum Racing Weight

**1540 kg**

202. Overall length

**4661 mm ± 1 %**

203. Maximum overall width

**1830 mm ± 1 %**

Where measured **AT THE DOOR**

204. Width of bodywork

a) At front axle

**1835 mm ± 1 %**

b) At rear axle

**1825 mm ± 1 %**

206. Wheelbase **2703 mm ± 1%**

207. Maximum track

a) Front **1579 mm**

b) Rear **1559 mm**

**3. ENGINE**

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

**3-09-002**

**Make** Alfa Romeo

**Model** 159 JTD

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

302. Number of mounts **4**

Engine in its compartment



304. Supercharging

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

Maximum manifold pressure

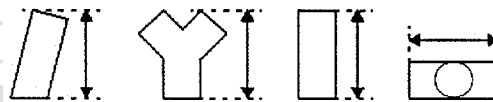
**SINGLE TURBOCHARGER**

Type and number of compressors

305. Number and layout of cylinders **5 - IN LINE**

312. Cylinder block material **CAST IRON**

310. Maximum compression ratio **17.45 : 1**



<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
-------------------------------------	--------------------------	--------------------------	--------------------------

313. Sleeves

a) <input type="checkbox"/> yes	<input checked="" type="checkbox"/> no	b) Material <b>N/A</b>
---------------------------------	--	------------------------

c) <input type="checkbox"/> wet	<input type="checkbox"/> dry
---------------------------------	------------------------------

314. Bore **82** +/- 0.1 mm

316. Stroke **90.4** +/- 0.1 mm

321. Cylinderhead

a) Number **1** b) Material **ALUMINIUM ALLOY**

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

b) Model **EDC**

f) Position of Injectors:

f1)  Manifold  Cylinderhead

325. Camshaft

a) Number **2** b) Location **HEAD**

c) Drive system **TOOTHED BELT** f) Type of valve operation **DIRECT**

327. Intake

a) Material of manifold **ALUMINIUM**

b) Number of manifold elements **1** c) Number of valves per cylinder **2**



Make **Alfa Romeo**Model **159 JTD**

3-09-002

## 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 **60** mm ± 5%

## 330. Ignition system

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

## 331. Cooling system

Capacity **7.35** L

## 332. Cooling fan

- a) Number **2**
- b) Diameter of the fan **315** mm
- c) Material of the fan **PLASTIC**
- d) Number of blades **6**
- e) Type of drive **ELECTRICAL**
- f) Automatic cut in 

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

## 333. Lubrication system

- a) Type **WET SUMP**
- b) Number of oil pumps \_\_\_\_\_
- c) Total capacity **6.4** L

- e) Location of the cooler(s) **RADIATOR SUPPORT PANEL**
- f) Type of the cooler(s) **AIR COOLED**

## 4. FUEL CIRCUIT

## 401. Fuel tank

- b) Location **UNDER REAR FLOOR, BEHIND THE REAR SEAT**
- d) Total capacity **70 + 10 RESERVE** L

## 402. Fuel pump(s)

- a) 

<input checked="" type="checkbox"/>	Electrical	<input checked="" type="checkbox"/>	Mechanical
-------------------------------------	------------	-------------------------------------	------------
- b) Number **2**

- d) Location **IN THE TANK & ON ENGINE**
- Fuel Pressure \_\_\_\_\_

## 5. ELECTRICAL EQUIPMENT

## 502. Alternator

- a) Number **1**
- b) Type **ROTOR & STATOR**
- c) Drive system **POY - VEE BELT**
- d) Nominal power **150** Amp

## 503. Retractable headlights

- a) 

<input type="checkbox"/>	yes	<input checked="" type="checkbox"/>	no
--------------------------	-----	-------------------------------------	----
- b) Control system **N/A**

## 6. POWER TRAIN

## 601. Driven wheels

- front 

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

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

## 602. Clutch

- a) Type **DRY SINGLE PLATE FRICTION CLUTCH**
- b) Control system **HYDRAULIC**

**3-09-002**

**Make** Alfa Romeo

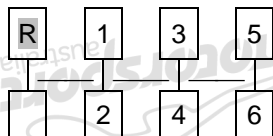
**Model** 159 JTD

**603. Gearbox**

- a) Location **ENGINE BAY**    b) Make **GM**  
 c) Type and location of control **LEVER ON THE TUNNEL**  
 e) Ratios

	Number of teeth	Ratio	Constant Mesh	Synchro
1	_____	<b>3.769:1</b>	_____	_____
2	_____	<b>2.040:1</b>	_____	_____
3	_____	<b>1.321:1</b>	_____	_____
4	_____	<b>0.954:1</b>	_____	_____
5	_____	<b>0.755:1</b>	_____	_____
6	_____	<b>0.623:1</b>	_____	_____
R	_____	<b>3.538:1</b>	_____	_____
Constant	_____	_____	_____	_____

f) Gear change gate



**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**

a) Type of final drive

	Front	Rear
a) Type of final drive	<b>CROWN WHEEL &amp; PINION</b>	<b>N/A</b>
b) Ratio	<b>3.545</b>	<b>N/A</b>
f) Oil Cooler	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no	<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 **N/A**  
 b) Material of longitudinal shafts **N/A**  
 c) Type of transversal half-shafts **HALF SHAFTS WITH CV JOINTS**  
 d) Material of transversal half-shafts **STEEL**



Make **Alfa Romeo**Model **159 JTD**

3-09-002

**7. SUSPENSION****701. General**

	Front	Rear
a) Type of suspension	<b><u>DUAL OSCILLATING ARMS</u></b>	<b><u>MCPHERSON MULTI-LINK</u></b>
<b>702. Helical springs</b>	<input checked="" type="checkbox"/> yes	<input type="checkbox"/> no
a) Material	<b><u>STEEL</u></b>	<b><u>STEEL</u></b>
<b>703. Leaf springs</b>	<input type="checkbox"/> yes	<input type="checkbox"/> no
a) Material	<b><u>N/A</u></b>	<b><u>N/A</u></b>
<b>704. Torsion bars</b>	<input type="checkbox"/> yes	<input type="checkbox"/> no
a) Material	<b><u>N/A</u></b>	<b><u>N/A</u></b>

**705. Other type of suspension**

See description on additional form

**706. Stabiliser**

	Front	Rear
b) Effective diameter	<b><u>22</u></b> mm	<b><u>21</u></b> mm
c) Material	<b><u>STEEL</u></b>	<b><u>STEEL</u></b>

**707. Suspension Dampers**

	Front	Rear
a) Number per wheel	<b><u>1</u></b>	<b><u>1</u></b>
b) Type	<b><u>TELESCOPIC</u></b>	<b><u>TELESCOPIC</u></b>
c) Principle of operation	<b><u>GAS/HYDRAULIC</u></b>	<b><u>GAS/HYDRAULIC</u></b>

**8. WHEELS****801. Wheels**

	Front	Rear
a) Diameter	<b><u>18</u></b> "	<b><u>18</u></b> "
b) Width	<b><u>8</u></b> "	<b><u>8</u></b> "
c) Offset	<b><u>+41</u></b> mm	<b><u>+41</u></b> mm

**803. Brakes**

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

**HYDRAULIC****1 TANDEM** yes  no

c1) Make and type

**BOSCH ISOVAC**

**Make** Alfa Romeo

**Model** 159 JTD

**3-09-002**

	Front	Rear
e) Number of cylinders per wheel	<u>4</u>	<u>1</u>
f) <b>Drum brakes</b>		
f1) Internal diameter	<u>N/A</u>	<u>N/A</u>
f2) Number of linings per wheel	<u>N/A</u>	<u>N/A</u>
g) <b>Disc brakes</b>		
g1) Number of pads per wheel	<u>2</u>	<u>2</u>
g2) Number of calipers per wheel	<u>1</u>	<u>1</u>
g3) Caliper material		
g4) Thickness of new disc	<u>28 ± 1 mm</u>	<u>22 ± 1 mm</u>
g5) External diameter of the disc	<u>330 ± 1.5 mm</u>	<u>292 ± 1.5 mm</u>
g9) Ventilated discs	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no

h) Parking brake: h1) Control system **LEVER & CABLE**

h2) Location of lever **CENTRE TUNNEL**

h3) On which wheels  Front  Rear

**804. Steering**

a) Type

	Front	Rear
	<b><u>RACK &amp; PINION</u></b>	<b><u>N/A</u></b>
	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no
	<b><u>HYDRAULIC</u></b>	<b><u>N/A</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

c) Air Conditioning

b) Heating

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

f) Optional sun roof

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

f1) Type **SLIDING GLASS PANEL**

f2) Control system **ELECTRICAL**

g) Opening system for side windows

Front	Rear
<b><u>ELECTRICAL</u></b>	<b><u>ELECTRICAL</u></b>

**3-09-002**

**Make** Alfa Romeo

**Model** 159 JTD

X) Dashboard

Y) Sunroof



**902. Exterior**

a) Number of doors **4**

b) Tailgate  yes  no

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

c) Door material

d) Front bonnet material

**STEEL**

e) Rear bootlid / tailgate material

**STEEL**

f) Bodywork material

**STEEL**

h) Rear window material

**GLASS**

i) Rear quarter window material **N/A**

k) Side window material

Front	Rear
<b><u>GLASS</u></b>	<b><u>GLASS</u></b>
<b><u>PLASTIC</u></b>	<b><u>PLASTIC</u></b>

l) Material of bumper

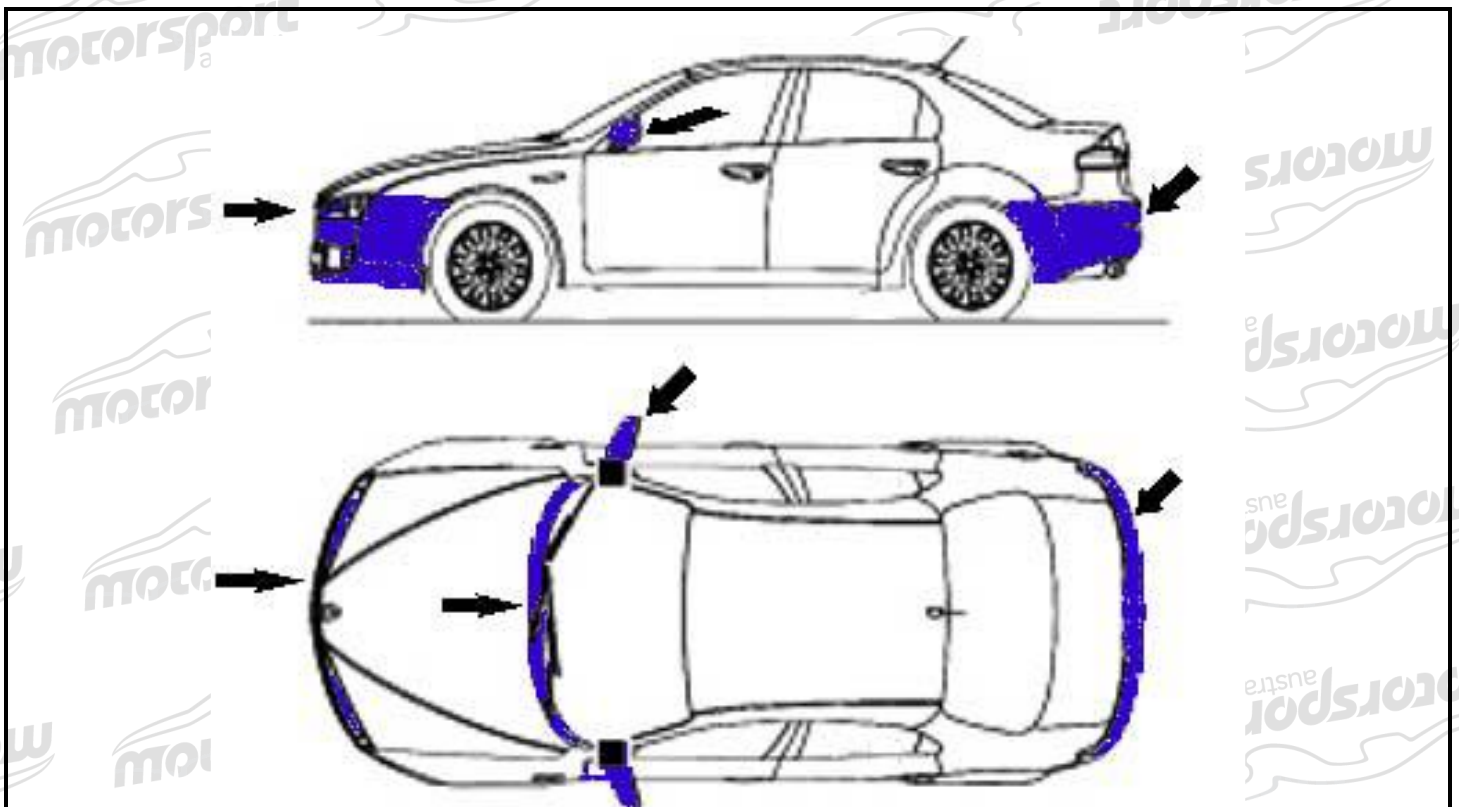
n) Exterior Rear wiper

yes  no



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

Number	Part	Material
1	Front Bumper Bar	Plastic
1	Rear Bumper Bar	Plastic
1	Plenum Chamber Cover	Plastic
2	Side Mirrors	Plastic & Glass
1	Fuel Filler Cover	Plastic
1	Sunroof (When Fitted)	Glass





**Make** Alfa Romeo**Model** 159 JTD**3-09-002****COMPLEMENTARY INFORMATION****Optional Wheels & Tyres:****Wheel 7½J x 17" – Offset +41mm – Tyre 225/50 R17****Wheel 8J x 19" – Offset +41mm – Tyre 235/40 ZR19**