

F.I.A. Recognition No **5465**.....
 Group **1**.....

FEDERATION INTERNATIONALE DE L' AUTOMOBILE

Form of recognition in accordance with
 Appendix J to the International Sporting Code.

Manufacturer **AB VOLVO**..... Cylinder-capacity **2980**.....cm3.....**182**.....in3
 Model **VOLVO 164 E**.....
 Serial No of chassis **52790**..... Manufacturer **AB VOLVO**.....
 engine **101**..... Manufacturer **AB VOLVO**.....
 Recognition is valid from **1/5/1972**..... List

The manufacturing of the model described in this recognition form was started on **Aug 9, 1971**
 and the minimum production of **5000**..... identical cars, in accordance with the specifica-
 tions of this form was reached on19 ..

Photograph A, 3/4 view of car from front



The vehicle described in this form has been subject to the following amendments

Variants

Normal evolution of the type

on	19..	rec.No	List	on	19..	rec.No.....	List.....
on	19..	rec.No	List	on	19..	rec.No.....	List.....
on	19..	rec.No	List	on	19..	rec.No.....	List.....
on	19..	rec.No	List	on	19..	rec.No.....	List.....
on	19..	rec.No	List	on	19..	rec.No.....	List.....

Stamp and signature of the
 National Sporting Authority

SVENSKA BILSPORTFÖRBUNDET
 THE SWEDISH AUTOMOBILE-SPORT FEDERATION

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Stamp and signature of the F.I.A.

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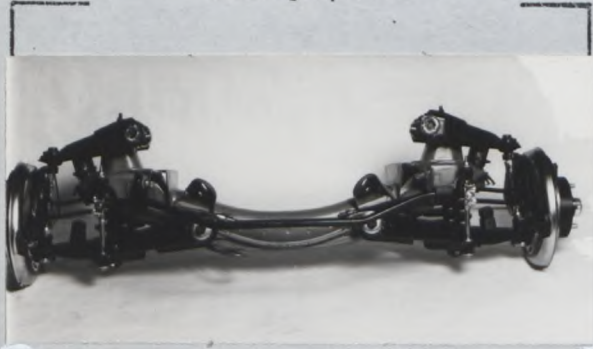
Photograph B



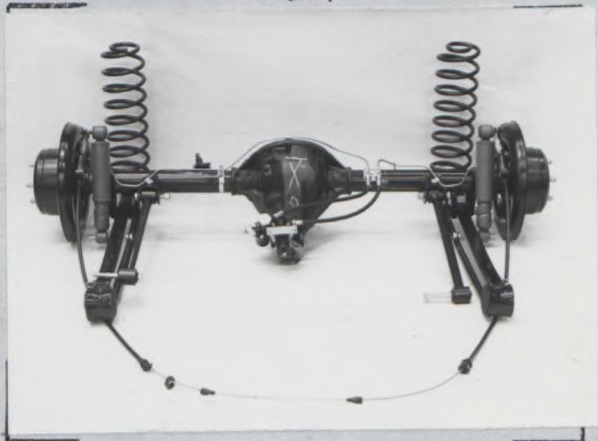
Photograph C



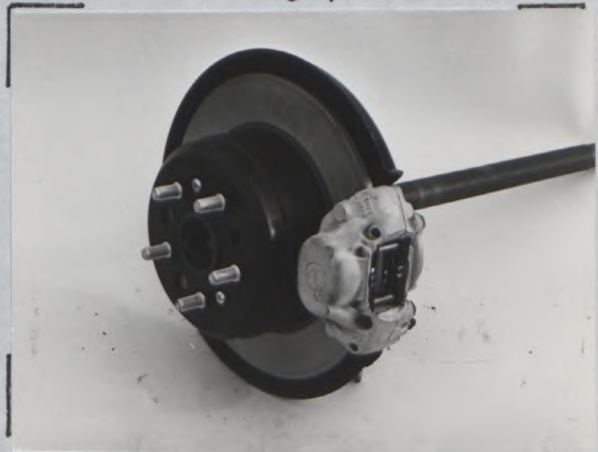
Photograph D



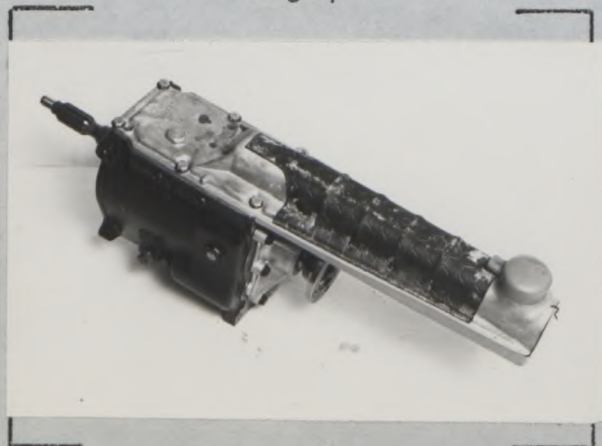
Photograph E



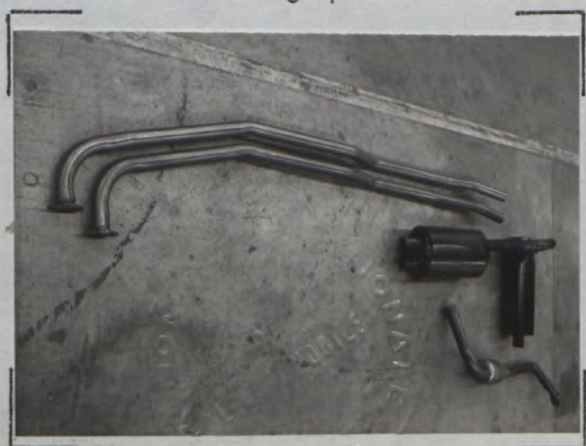
Photograph G



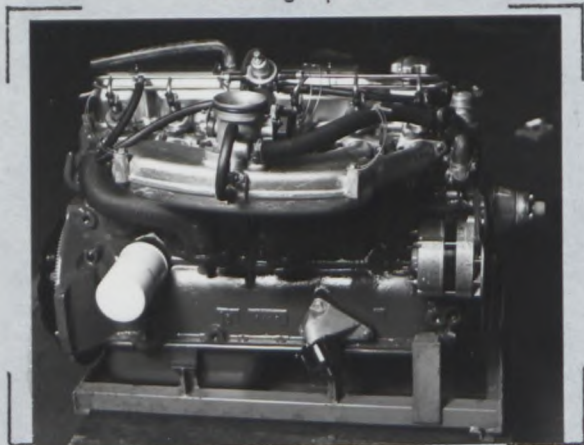
Photograph H



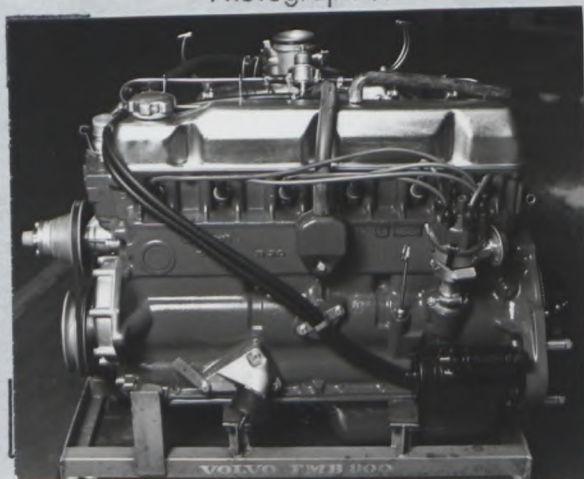
Photograph I



Photograph J



Photograph K



Photograph L



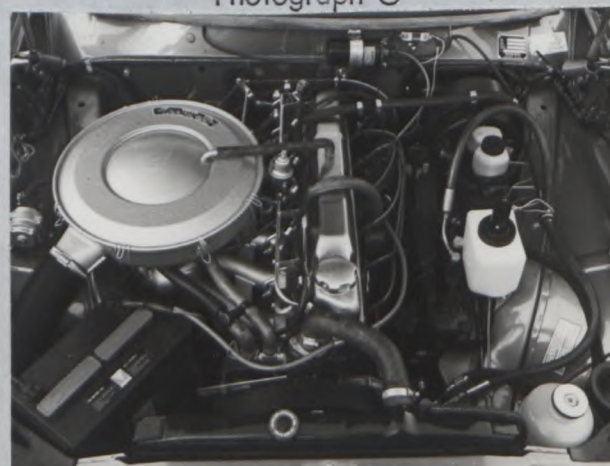
Photograph-M



Photograph N

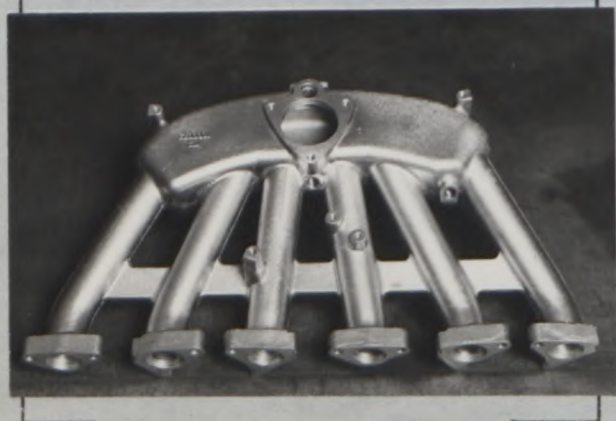
Carburettor (view from side of manifold)

Photograph O



Photograph P

Photograph Q

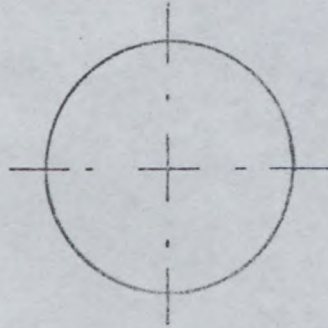


Make VOLVO

Model 164 E

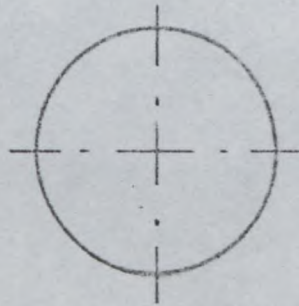
F.I.A. Rec.No 5465

Drawing inlet manifold ports, side of cylinder-head. Indicate scale or dimensions and manufacturing tolerance.



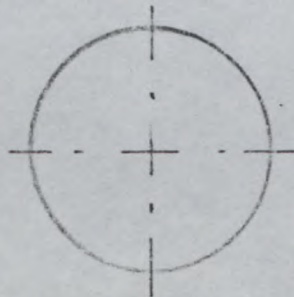
$\varnothing 41 H 12 \begin{matrix} +0.25 \\ -0 \end{matrix}$

Drawing of entrance to inlet port of cylinder-head. Indicate scale or dimensions and manufacturing tolerance.



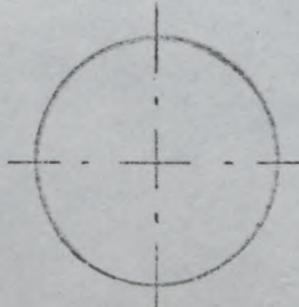
$\varnothing 37.5 H 12 \begin{matrix} +0.25 \\ -0 \end{matrix}$

Drawing exhaust manifold ports, side of cylinder-head. Indicate scale or dimensions and manufacturing tolerance.



$\varnothing 36 H 12 \pm 0.2$

Drawing of exit to exhaust port of cylinderhead. Indicate scale or dimensions and manufacturing tolerance.



$\varnothing 34 H 12 \begin{matrix} +0.25 \\ -0 \end{matrix}$



Make

VOLVO

Model

164 E

F.I.A. Rec.No

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IMPORTANT - the underlined items must be stated in two measuring systems, one of which must be the metric system. See conversion table hereafter.

CAPACITIES AND DIMENSIONS

1. <u>Wheelbase</u>	2720	mm	1063	inches	
2. <u>Front track</u>	1350	mm	532	inches *	
3. <u>Rear track</u>	1350	mm	532	inches *	
4. Overall length of the car	471.5	cm	185.6	inches	
5. Overall width of the car	170.5	cm	67.1	inches	
6. Overall height of the car	144	cm	56.7	inches	
7. <u>Capacity of fuel tank</u> (reserve included)			58		ltrs
	15	Gallon US	13		Gallon Imp.
8. Seating capacity	5				
9. <u>Weight</u> , total weight of the car with normal equipment, water, oil and spare wheel but without fuel nor repair tools:					
	1370	kg	3017	lbs	26.97 cwt

*) Differences in track caused by the use of other wheels with different rim widths must be stated when recognition is requested for the wheels concerned. Specify ground clearance in relation to the track and give drawing of two easily recognizable points at front and rear at which measurements are taken. These ground clearance dimensions are only for information when checking the track and can in no way affect the eligibility of the car.

Minimum Ground Clearance = Front axle member - ground = 16 cm
Rear axle casing - ground = 17 cm

Overall Width at front axle = 167 cm
at rear axle = 169 cm

CONVERSION TABLE

1 inch/pouce	-	2.54 cm	1 quart US	-	0.9464 ltrs
1 foot/pied	-	30.4794 cm	1 pint (pt)	-	0.568 ltrs
1 square inch/pouce carré	-	6.452 cm ²	1 gallon Imp.	-	4.546 ltrs
1 cubic inch/pouce cube	-	16.387 cm ³	1 gallon US	-	3.785 ltrs
1 pound/livre (lb)	-	453.593 gr.	1 hundred weight (cwt)	-	50.802 kg

Make

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CHASSIS AND COACHWORK (Photographs A, B and C)

20. Chassis/body construction : ~~separate~~ / unitary construction

21. Unitary construction, material (s) **Steel**

Separate construction

22. Material (s) of chassis

23. Material (s) of coachwork

Sheet-metal

24. Number of doors 4 Material (s)

Sheet-metal

25. Material (s) of bonnet

Sheet-metal

26. Material (s) of boot lid

Sheet-metal

27. Material (s) of rear-window

Tempered glass

28. Material (s) of windscreen

Laminated glass

29. Material (s) of front-door windows

Tempered glass

30. Material (s) of rear-door windows

Tempered glass

31. Sliding system of door windows

Window winders

32. Material (s) of rear-quarter light

Tempered glass

ACCESSORIES AND UPHOLSTERY

38. Interior heating : yes - ~~no~~

39. Air-conditioning : ~~yes~~ - no

40. Ventilation : yes - ~~no~~

41. Front seats, type of seat and upholstery **Separate seats, leather**

42. Weight of front seat (s), complete with supports and rails, out of the car :

20 kg

44.10 lbs

43. Rear seats, type of seat and upholstery **Bench, leather**

44. Front bumper, material (s) Anodized, alumin. Weight 7.92 kg lbs

45. Rear bumper, material (s) Anodized, alumin. Weight 7 kg lbs

WHEELS

50. Type **Disc wheels**

51. Weight (per wheel, without tyre) **9.6** kg lbs

52. Method of attachment **By 5 nuts**

53. Rim diameter **381** mm **15** inches

54. Rim width **140** mm **5.5** inches

STEERING

60. Type **Ball and nut**

61. Servo-assistance : yes - ~~no~~

62. Number of turns of steering wheel from lock to lock **3.7**

63. In case of servo-assistance **3.7**

SUSPENSION

70. Front suspension (photogr. D), type	Individual
71. Type of spring	Coil
72. Stabiliser (fitted)	Yes
73. Number of shock absorbers	2
74. Type	Telescopic
78. Rear suspension (photogr. E), type	Rigid axle
79. Type of spring	Coil
80. Stabiliser (if fitted)	NO
81. Number of shock absorbers	2
82. Type	Telescopic

BRAKES (photographs F and G)

90. Method of operation	Hydraulic, dual-circuit brake system
91. Servo-assistance (if fitted), type	Vacuum servo
92. Number of hydraulic master cylinders	Tandem master cylinder

		FRONT		REAR	
93. Number of cylinders per wheel	4			2	
94. Bore of wheel cylinder (s)	4x36	mm	in.	2x38mm	in.
Drum brakes					
95. Inside diameter		mm	in.	mm	in.
96. Length of brake linings		mm	in.	mm	in.
97. Width of brake linings		mm	in.	mm	in.
98. Number of shoes per brake					
99. Total area per brake		mm ²	sq.in.	mm ²	sq.in.
Disc brakes					
100. Outside diameter	272	mm	in.	295 mm	in.
101. Thickness of disc	24.0	mm	in.	9.6 mm	in.
102. Length of brake linings	80	mm	in.	61 mm	in.
103. Width of brake linings	48	mm	in.	43 mm	in.
104. Number of pads per brake	2			2	
105. Total area per brake	6766.6	mm ²	sq.in.	mm ²	sq.in.
				<u>6714.2</u>	

ENGINE (photographs J and K)

- 130. Cycle 4 stroke
- 131. Number of cylinders 6
- 132. Cylinder arrangement In line
- 133. Bore 88.9 ^{+0.01}/_{-0.0} mm 3.5 in.
- 134. Stroke 80.0 ^{+0.01} mm 3.5 in.
- 135. Capacity per cylinder 496.6 cm³ 30.3 cu.in.
- 136. Total cylinder-capacity 2980 cm³ 182.0 cu.in.
- 137. Material (s) of cylinder block Cast iron
- 138. Material (s) of sleeves (if fitted)
- 139. Cylinder-head, material (s) Cast iron Number fitted
- 140. Number of inlet ports 6
- 141. Number of exhaust ports 6
- 142. Compression ratio 10.0:1
- 143. Volume of one combustion chamber 47.5 cm³ cu.in.
- 144. Piston, material Light alloy
- 145. Number of rings 3
- 146. Distance from gudgeon pin centre line to highest point of piston crown
46 mm inches
- 147. Crankshaft : ~~casted~~ / stamped
- 148. Type of crankshaft : integral / (STEEL)
- 149. Number of crankshaft main bearings 7
- 150. Material of bearing cap Cast iron
- 151. System of lubrication : ~~dry sump~~ / oil in sump
- 152. Capacity, lubricant 6 ltrs pts quarts US
- 153. Oil cooler: yes/ ~~no~~
- 154. Method of engine cooling Water
- 155. Capacity of cooling system 13 ltrs pints quarts US
- 156. Cooling fan (if fitted), dia. 41 cm inches
- 157. Number of blades of cooling fan 6

Bearings Copper-lead-

- 158. Crankshaft main, type Ind. Dia. 63.464 mm in.
- 159. Connecting, rod big end, type " Dia. 54.112 mm in.

Weights

- 160. Flywheel (clean) 9.13 kg lbs
- 161. Flywheel with clutch (all turning parts) 15.07kg lbs
- 162. Crankshaft 22.4 kg lbs
- 163. Connecting rod 0.68 kg lbs
- 164. Piston with rings and pin 0.71kg lbs

FOUR STROKE ENGINES

170. Number of camshafts 1
 171. Location Cylinder block
 172. Type of camshaft drive Gears
 173. Type of valve operation Push rod

INLET (see page 4)*

180. Material (s) of inlet manifold Aluminium
 181. Diameter of valves 44 mm inches
 182. Max. valve lift 11 mm in.
 183. Number of valve springs 1
 184. Type of spring Coil
 185. Number of valves per cylinder 1
 186. Tappet clearance for checking timing (cold) 0.5 mm inches
 187. Valves open at (with tolerance for tappet clearance indicated) 29° B. T. D. C.
 188. Valves close at (with tolerance for tappet clearance indicated) 71° A. B. D. C.
 189. Air filter, type Paper

EXHAUST (see page 4)

195. Material (s) of exhaust manifold Cast iron
 196. Diameter of valves 35 mm inches
 197. Max. valve lift 11 mm in.
 198. Number of valve springs 1
 199. Type of spring Coil
 200. Number of valves per cylinder 1
 201. Tappet clearance for checking timing (cold) 0.5 mm inches
 202. Valves open at (with tolerance for tappet clearance indicated) 71° B. T. D. C.
 203. Valves close at (with tolerance for tappet clearance indicated) 29° A. B. D. C.

CARBURETION (photograph N)

210. Number of carburettors fitted
 211. Type
 212. Make
 213. Model
 214. Number of mixture passages per carburettor
 215. Flange hole diameter of exit port (s) of carburettor mm in.
 216. Minimum diameter of venturi / minimum diam. with piston at maximum height
 mm inches

INJECTION (if fitted)

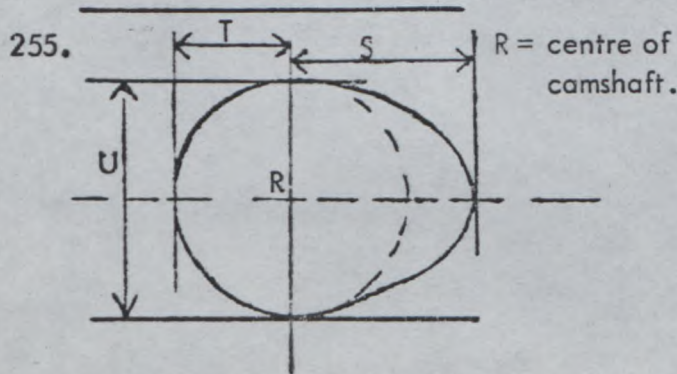
220. Make of pump Bosch (Feeding pump)
 221. Number of plungers
 222. Model or type of pump Rotor pump
 223. Total number of injectors 6 (electronically controlled)
 224. Location of injectors Cylinder head
 225. Minimum diameter of inlet pipe mm inches

ENGINE ACCESSORIES

- 230. Fuel pump : ~~mechanical~~ and/or electric
- 231. No fitted 1
- 232. Type of ignition system Coil
- 233. No of distributors 1
- 234. No of ignition coils 1
- 235. No of spark plugs per cylinder 1
- 236. Generator, type : dynamo/alternator - number fitted 1
- 237. Method of drive Belt driven
- 238. Voltage of generator 12 V volts
- 239. Battery, number 1
- 240. Location Engine room
- 241. Voltage of battery 12 V volts

ENGINE AND CAR PERFORMANCES (as declared by manufacturer in catalogue)

- 250. Max. engine output 160 (type of horsepower:) at 5.500 rpm
- 251. Maximum rpm 5.800 output at that figure
- 252. Maximum torque 23.5 at 2.500 rpm
- 253. Maximum speed of the car km/hour miles/hour



<u>Inlet cam</u>			
S =	21.3	mm	inches
T =	14.1	mm	inches
U =	-	mm	inches
<u>Exhaust cam</u>			
S =	21.3	mm	inches
T =	14.1	mm	inches
U =	-	mm	inches

Make

VOLVO

Model

164 E

F.I.A. Rec.No

5465

DRIVE TRAIN
CLUTCH

- 260. Type of clutch Dry disc
- 261. No of plates 1
- 262. Dia. of clutch plates 24.0 cm inches
- 263. Dia. of linings, inside 15.5 cm in. outside 24.0cm in.
- 264. Method of operating clutch Mechanical

GEAR BOX (photograph H)

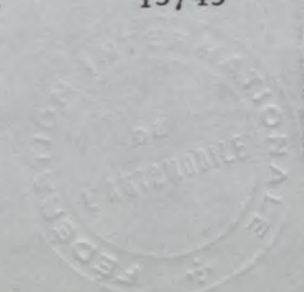
- 270. Manual type, make VOLVO M400 Method of operation
- 271. No of gear-box ratios forward 4
- 272. Synchronized forward ratios 4
- 273. Location of gear-shift Center floor lever
- 274. Automatic, make type
- 275. No of forward ratios
- 276. Location of gear-shift

277.	Manual		Automatic		Alternative manual/automatic			
	Ratio	No teeth	Ratio	No teeth	Ratio	No teeth	Ratio	No teeth
1	3.54:1	15/37						
2	2.12:1	23/34						
3	1.34:1	27/29						
4	1.0:1	-						
5								
6								
reverse	3.54:1	15/37						

- 278. Overdrive, type
- 279. Forward gears on which overdrive can be selected
- 280. Overdrive ratio

FINAL DRIVE

- 290. Type of final drive Hypoid
- 291. Type of differential Rigid axle
- 292. Type of limited slip differential (if fitted)
- 293. Final drive ratio 3.73:1 3.31:1
- Number of teeth 11/41 13/43



Make

VOLVO

Model

164 E

F.I.A. Rec.No 5465

IMPORTANT - The conformity of the car with the following items of the present recognition form is to be disregarded during the scrutineering, when the vehicle has been entered in group 2 (Touring cars) or 3 (Grand Touring cars) : 41, 72, 80, 91, 142, 143, 144, 145, 146, 153, 156, 157, 160, 161, 162, 163, 164, 182, 186, 187, 188, 189, 201, 202, 203, 212, 213, 215, 216, 222, 225, 230, 236, 250, 251, 252, 253, 255, and photographs I, M and N. and page 4.

During the scrutineering of cars entered in group 4 (Sportcars) only the following items of the present recognition form are to be taken into consideration : 1, 2, 3, 9, 20, 21, 22, 23, 24, 25, 26, 70, 71, 78, 79, 90, 130, 131, 132, 133, 134, 135, 136, 137, 138, 139, 140, 141, 147, 148, 149, 150, 158, 159, 170, 171, 172, 173, 185, 200, 270, 271, 274, 275, 290, 291, 292 and photographs A, B, D, E, F, G, H, J, K and O.

Optional equipment affecting preceding information. This to be stated together with reference number.



KUNGL AUTOMOBIL KLUBBEN
THE ROYAL SWEDISH AUTOMOBILE CLUB

Form of Recognition (normal development of original vehicle type)
Identifieringskort (normal utveckling av vagnstypen)

valid from 1.4.73
gällande fr. o. m.

upon documentation delivered by the manufacturer.
på grundval av från tillverkaren lämnade uppgifter.

Make VOLVO
Märke

Previously recognized type, to which this extension refers
Tidigare klassad typ, till vilken denna utökning hänföres

164 E

Date when the first vehicles in this stage of development were manufactured
Tillverkningsdatum för de första fordonen av denna vidareutveckling

7th of August 1972

Serial No. of the type inaugurating this extension
Nummerserie för denna utvecklade typ

74 450

The Modellen 164 E

recognized in Category
klassad i kategori

GROUP I

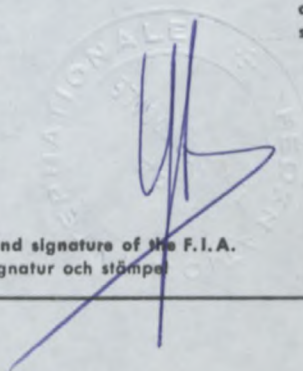
by the F.I.A. on the
av FIA den

List
Lista

as a normal
som normal

development of the original vehicle type.
utveckling av vagnstypen

Stamp and signature of the F.I.A.
FIA:s signatur och stämpel



DESCRIPTION OF MODIFICATIONS HAVING LED TO THIS RECOGNITION
BESKRIVNING AV DE ÄNDRINGAR, SOM LETT TILL DENNA KLASSNING

Concerns Group I

New type of grille

New type of rubber insert in
front bumper

Bonnet without Volvo emblem

New type of front fender emblem



Form of Recognition (Normal development of original vehicle type)

Identifieringskort (Normal utveckling av vagnstypen)

No.
Nr

Make
Märke

VOLVO

Type
Typ

164 E

Photographic documentation
Fotografier

Concerns Group I



New dashboard

New steering wheel



New rear lamps

New rear body panel

New type of rubber insert in rear bumper

New type of emblem

Stockholm den 28/11 1972

KUNGL AUTOMOBIL KLUBBEN

SVENSKA BILSPORTFÖRBUNDET

THE SWEDISH AUTOMOBILE SPORT FEDERATION

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F. I. A. Recognition No.
FIA Identifieringskort Nr

5465

2/2E

KUNGL AUTOMOBIL KLUBBEN
THE ROYAL SWEDISH AUTOMOBILE CLUB

Form of Recognition (normal development of original vehicle type)
Identifieringskort (normal utveckling av vagnstypen)

valid from
gällande fr. o. m.

1.1.72

upon documentation delivered by the manufacturer.
på grundval av från tillverkaren lämnade uppgifter.

Make
Märke

VOLVO

Previously recognized type, to which this extension refers
Tidigare klassad typ, till vilken denna utökning hänföres

164 E

Date when the first vehicles in this stage of development were manufactured
Tillverkningsdatum för de första fordonen av denna vidareutveckling

6th of August 1972

Serial No. of the type inaugurating this extension
Nummerserie för denna utvecklade typ

102 950

The
Modellen

164 E

recognized in Category
klassad i kategori

GROUP I

by the F.I.A. on the
av FIA den

1/5/72

List
Lista

as a normal
som normal

development of the original vehicle type.
utveckling av vagnstypen

Stamp and signature of the F.I.A.
FIA:s signatur och stämpel

DESCRIPTION OF MODIFICATIONS HAVING LED TO THIS RECOGNITION
BESKRIVNING AV DE ÄNDRINGAR, SOM LETT TILL DENNA KLASSNING

Concerns Group I

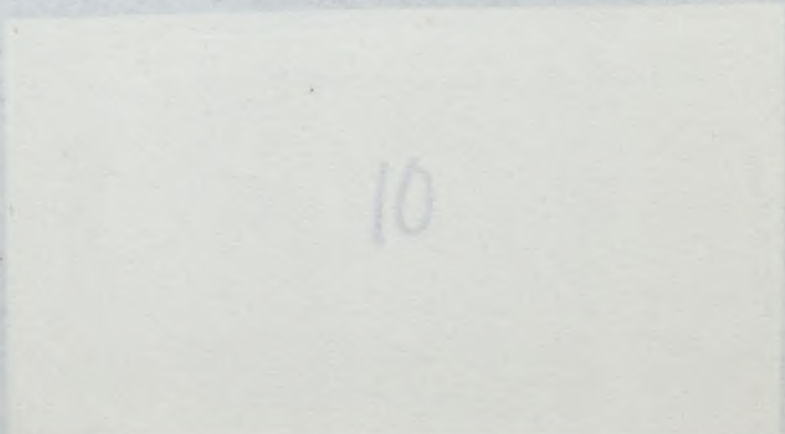


New type of front bumper



New type of rear bumper

COMMISSION SPORTIVE
01368 12.1173
INTERNATIONALE



Form of Recognition (Normal development of original vehicle type)

Identifieringskort (Normal utveckling av vagnstypen)

No.
Nr 5465

Make
Märke 164 E

Type
Typ 164 E

2/2E

Photographic documentation
Fotografier



Fuel filler cap under lid in
right hand rear fender



Front door without 3/4
light window

Capacities and dimensions

- 4. Overall length of the car 487 cm
- 7. Capacity of fuel tank (reserve included) 60 ltrs
- 9. Weight, total weight of the car 1380 kg
- 44. Front bumpers, weight 18.5 kg
- 45. Rear bumpers, weight 17.1 kg
- 158. Crankshaft main bearings, type lead bronze
- 159. Connecting rod, bearing big end, type lead bronze, diam. 54.0 mm
- 163. Weight of connecting rod 0.85 kg

Stockholm den 2/4 1970

KUNGL AUTOMOBIL KLUBBEN

SVENSKA BILSPORTFÖRBUNDET
THE SWEDISH AUTOMOBILE-SPORT FEDERATION

COMMISSION SPORTIVE
01368 12.1173
INTERNATIONALE

