

F.I.A. Recognition No5208.....
Group ...1... Tourisme de Série..

FEDERATION INTERNATIONALE DE L' AUTOMOBILE

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

Manufacturer A. B. Volvo Cylinder-capacity ... 1778 cm3 109 in3
Model 142S
Serial No of chassis 1 Manufacturer A. B. Volvo
engine 9688 Manufacturer A. B. Volvo
Recognition is valid from ... 1/1/68 ... List ... 68/1

The manufacturing of the model described in this recognition form was started on ... 18/5 .1967 .
and the minimum production of ... 5000 ... identical cars, in accordance with the specifica -
tions of this form was reached on ... 1/101967 .

Photograph A, 3/4 view of car from front




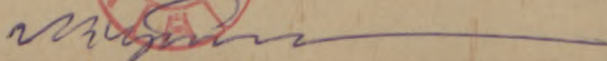
The vehicle described in this form has been subject to the following amendments

Variants

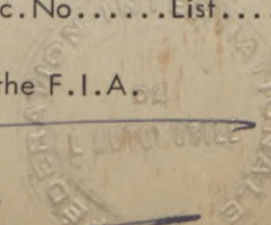
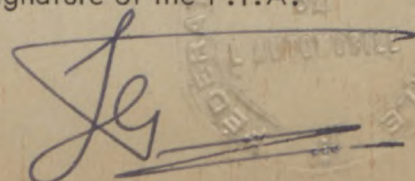
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on	19..	rec.No	List	on	19..	rec.No.....	List.....
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on	19..	rec.No	List	on	19..	rec.No.....	List.....
on	19..	rec.No	List	on	19..	rec.No.....	List.....

Normal evolution of the type

Stamp and signature of the
National Sporting Authority

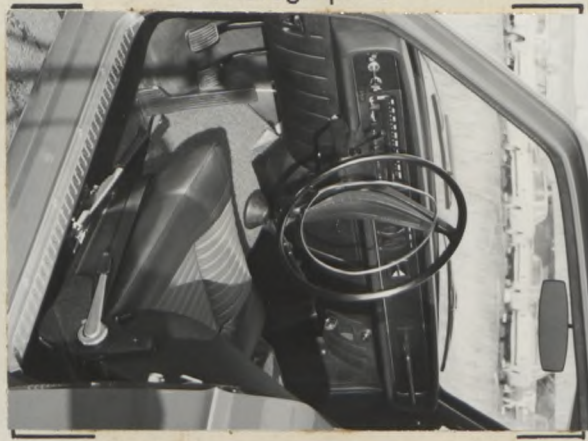
Stamp and signature of the F.I.A.

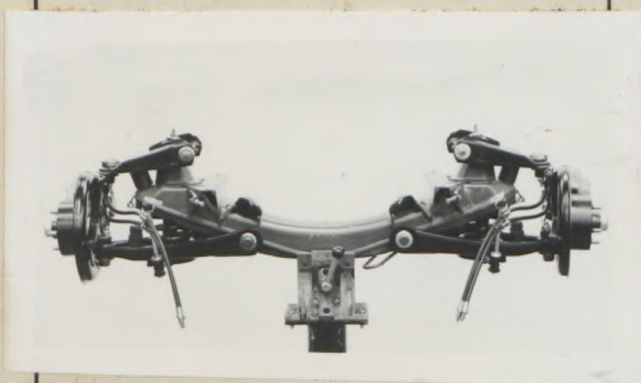
Photograph B



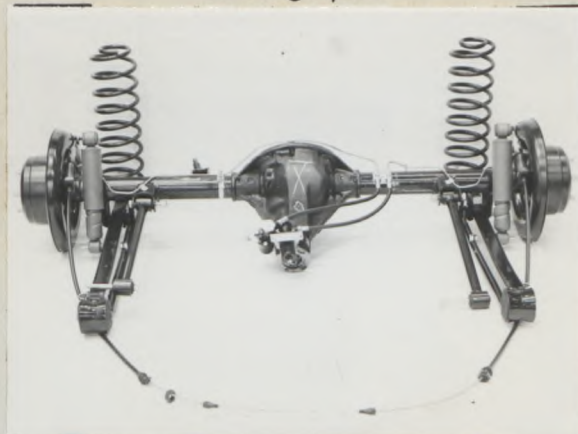
Photograph C



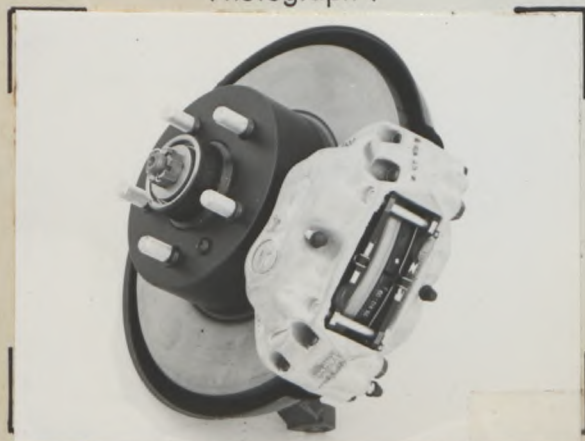
Photograph D



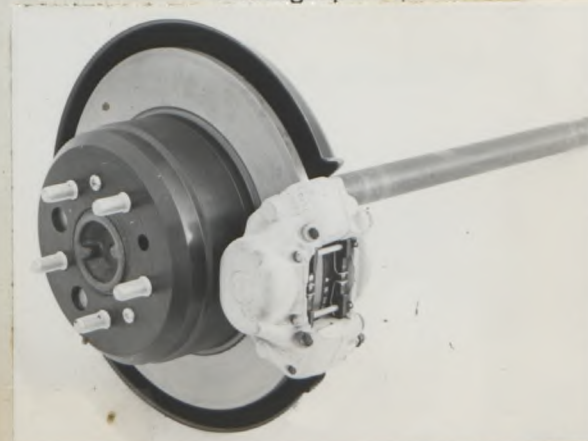
Photograph E



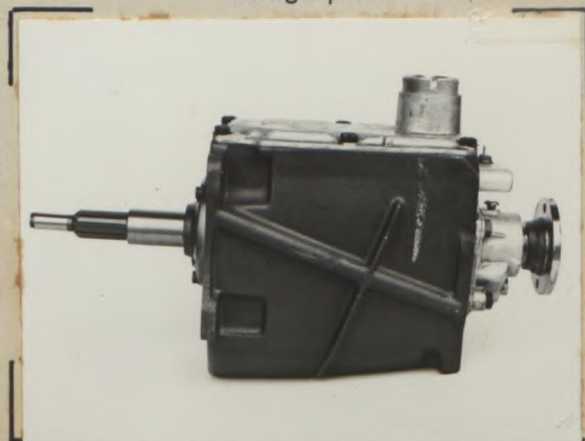
Photograph F



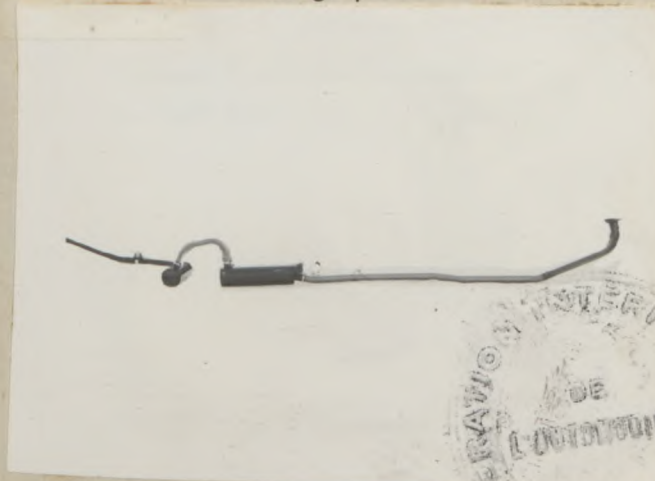
Photograph G



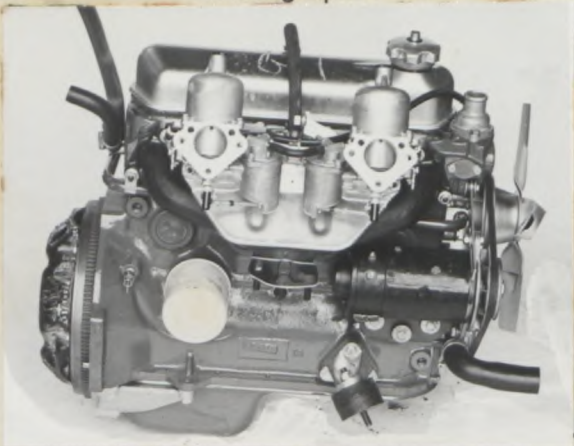
Photograph H



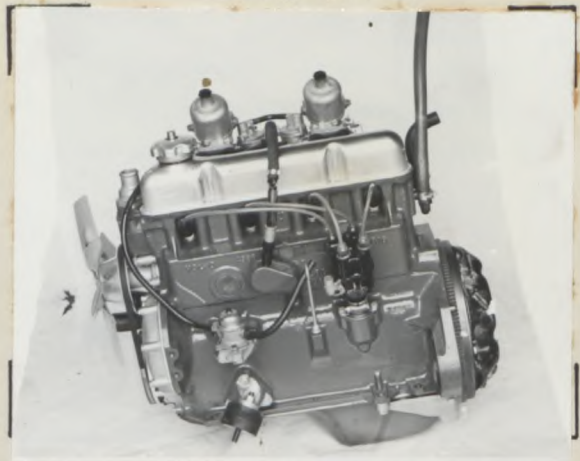
Photograph I



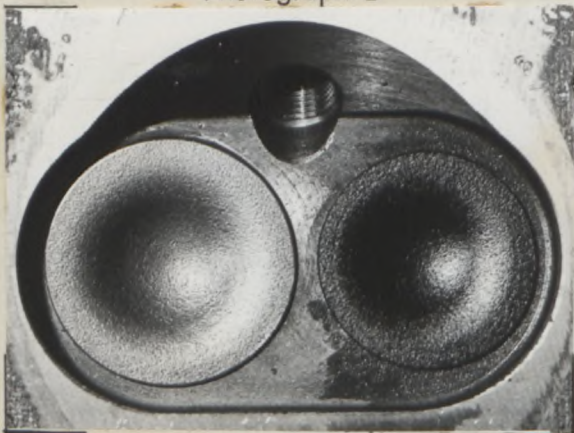
Photograph J



Photograph K



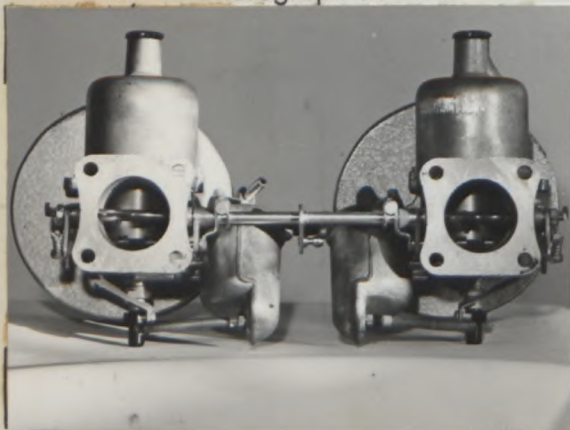
Photograph L



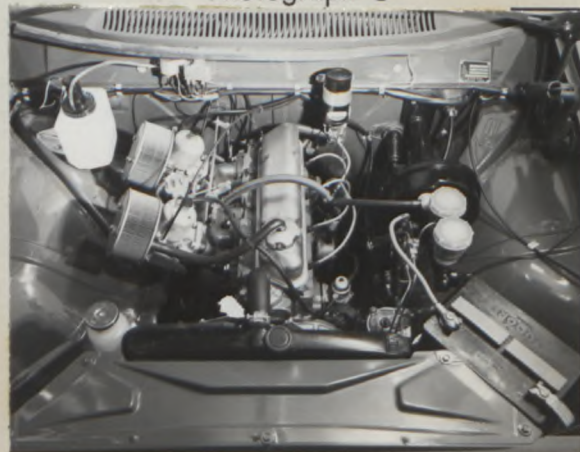
Photograph M



Photograph N



Photograph O



Photograph P

inlet manifold

Photograph Q

fold



Make **Volvo**

Model **142 S**

F.I.A. Rec.No **5208**

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



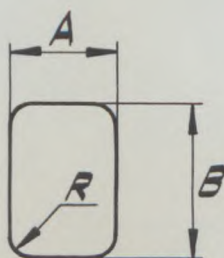
$\varnothing 36 \pm 0,31$

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



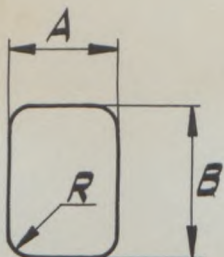
$\varnothing 36 \pm 0,31$

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



$A = 27 \pm 0,8$
 $B = 40 \pm 0,8$
 $R = 5 \pm 0,8$

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



$A = 25 \pm 0,8$
 $B = 38 \pm 0,8$
 $R = 4 \pm 0,8$



Make **Volvo**Model **142 S**F.I.A. Rec.No **5208**

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

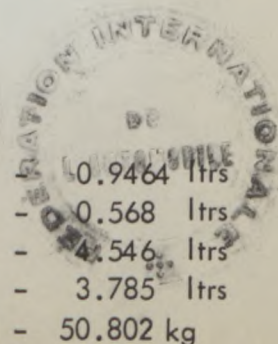
CAPACITIES AND DIMENSIONS

- | | | | | |
|---|-------------|-----------|----------------|-------------|
| 1. <u>Wheelbase</u> | 2600 | mm | 102 1/2 | inches |
| 2. <u>Front track</u> | 1350 | mm | 53 1/8 | inches * |
| 3. <u>Rear track</u> | 1350 | mm | 53 1/8 | inches * |
| 4. Overall length of the car | 464 | cm | | inches |
| 5. Overall width of the car | 174 | cm | | inches |
| 6. Overall height of the car | 146 | cm | | inches |
| 7. <u>Capacity of fuel tank</u> (reserve included) | 15 | Gallon US | 58 | ltrs |
| | | | 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: | 1073 | kg | 2366 | lbs |
| | | | 21,1 | 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.

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 **VOLVO**

Model **142 S**

F.I.A. Rec.No **5208**

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
 24. Number of doors **2** 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
 31. Sliding system of door windows **WINDOW WINDERS**
 32. Material (s) of rear-quarter light **TEMPERED GLASS**

ACCESSORIES AND UPHOLSTERY

38. Interior heating : yes - ~~yes~~
 39. Air-conditioning : ~~yes~~ - no
 40. Ventilation : yes - ~~yes~~
 41. Front seats, type of seat and upholstery **SEPARATE SEATS, VINYL**
 42. Weight of front seat (s), complete with supports and rails, out of the car :

18 kg

lbs

43. Rear seats, type of seat and upholstery **BENCH, VINYL**

44. Front bumper, material (s) **ANODIZED ALUMINIUM** Weight

8

kg

lbs

45. Rear bumper, material (s) **ANODIZED ALUMINIUM** Weight

7

kg

lbs

WHEELS

50. Type **DISC WHEELS**

51. Weight (per wheel, without tyre)

7,9

kg

lbs

52. Method of attachment **WITH 5 NUTS**

53. Rim diameter **381** mm

15 inches

54. Rim width **114** mm

4 1/2 inches

STEERING

60. Type **CAM AND ROLLER**

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

62. Number of turns of steering wheel from lock to lock **4,1**

63. In case of servo-assistance



Make **VOLVO**Model **142 S**F.I.A. Rec.No **5208**

SUSPENSION

70. Front suspension (photogr. D), type **INDIVIDUAL**
 71. Type of spring **COIL**
 72. Stabiliser (fitted) **YES**
 73. Number of shockabsorbers **2**
 74. Type **TELESCOPIC**
 78. Rear suspension (photogr. E), type **RIGID AXLE**
 79. Type of spring **COIL**
 80. Stabiliser (if fitted) —
 81. Number of shockabsorbers **2**
 82. Type **TELESCOPIC**

BRAKES (photographs F and G)

90. Method of operation **HYDRAULIC, SPLIT CIRCUIT BRAKE SYSTEM**
 91. Servo-assistance (if fitted), type **VACUUMSERVO**
 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.	2x36 mm	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	12,8 mm	in.	9,6 mm	in.
102. Length of brake linings	75 mm	in.	57 mm	in.
103. Width of brake linings	50 mm	in.	42,5 mm	in.
104. Number of pads per brake	2		2	
105. Total area per brake	7300 mm ²	sq.in.	4650 mm ²	sq.in.



ENGINE (photographs J and K)

130. Cycle **4-STROKE**
131. Number of cylinders **4**
132. Cylinder arrangement **IN LINE**
133. Bore **84,14 ± 0,02** mm **3,313** in.
134. Stroke **80,0 ± 0,01** mm **3,15** in.
135. Capacity per cylinder **444,5** cm³ **27,13** cu.in.
136. Total cylinder-capacity **1778** cm³ **109** 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 **4**
141. Number of exhaust ports **4**
142. Compression ratio **10,0:1**
143. Volume of one combustion chamber **49,5** 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 ± 0,1 mm inches
147. Crankshaft : ~~cast~~ / stamped
148. Type of crankshaft : integral /
149. Number of crankshaft main bearings **5**
150. Material of bearing cap **CAST IRON**
151. System of lubrication : ~~dry sump~~ / oil in sump
152. Capacity, lubricant **3,75** ltrs pts quarts US
153. Oil cooler: ~~yes~~ / no
154. Method of engine cooling **WATER**
155. Capacity of cooling system **8,6** ltrs pints quarts US
156. Cooling fan (if fitted), dia. **33,5** cm inches
157. Number of blades of cooling fan **4**

Bearings

158. Crankshaft main, type Dia. **63,45** mm **COPPER-LEAD-INDIUM** in.
159. Connecting rod big end, type Dia. **54,1** mm **COPPER-LEAD-INDIUM** in.

Weights

160. Flywheel (clean) **9,9** kg lbs
161. Flywheel with clutch (all turning parts) **15,9** kg lbs
162. Crankshaft **16,7** kg lbs
163. Connecting rod **0,680** kg lbs
164. Piston with rings and pin **0,588** kg lbs



Make **VOLVO**

Model **1425**

F.I.A. Rec.No **5208**

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 **CAST IRON**
 181. Diameter of valves **40** mm **1,58** inches
 182. Max. valve lift **10,2** mm **0,40** 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) **1,44** mm **inches**
 187. Valves open at (with tolerance for tappet clearance indicated) **0° T.D.C.**
 188. Valves close at (with tolerance for tappet clearance indicated) **40° 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 **1,38** inches
 197. Max. valve lift **10,2** mm **0,40** 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) **1,44** mm **inches**
 202. Valves open at (with tolerance for tappet clearance indicated) **40° B.B.D.C.**
 203. Valves close at (with tolerance for tappet clearance indicated) **0° A.T.D.C.**

CARBURETION (photograph N)

210. Number of carburettors fitted **2**
 211. Type **HORIZONTAL**
 212. Make **SU**
 213. Model **HS-6**
 214. Number of mixture passages per carburettor **1**
 215. Flange hole diameter of exit port (s) of carburettor **44,5** mm **in.**
 216. Minimum diameter of venturi / minimum diam. with piston at maximum height

mm

inches

INJECTION (if fitted)

220. Make of pump
 221. Number of plungers
 222. Model or type of pump
 223. Total number of injectors
 224. Location of injectors
 225. Minimum diameter of inlet pipe

mm

inches



Make **VOLVO**

Model **142 S**

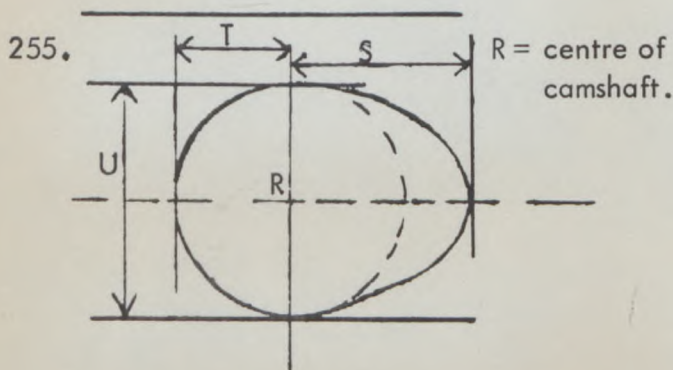
F.I.A. Rec.No **5208**

ENGINE ACCESSORIES

230. Fuel pump : mechanical ~~and/or electric~~
 231. No fitted _____ /
 232. Type of ignition system **COIL**
 233. No of distributors _____ /
 234. No of ignition coils _____ /
 235. No of spark plugs per cylinder /
 236. Generator, type : dynamo / ~~alternator~~ - number fitted /
 237. Method of drive _____ **BELT DRIVEN**
 238. Voltage of generator _____ **12** volts
 239. Battery, number _____ /
 240. Location _____ **ENGINE COMPARTMENT, LEFT FRONT**
 241. Voltage of battery _____ **12** volts

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

250. Max. engine output **115** (type of horsepower: **SAE**) at **6000** rpm
 251. Maximum rpm **6000** output at that figure **115**
 252. Maximum torque **15,5 KGM** at **SAE** at **4000** rpm
 253. Maximum speed of the car km/hour miles/hour



Inlet cam			
S =	21,3	mm	0,83 inches
T =	14,6	mm	inches
U =	29,4/8	mm	inches
Exhaust cam			
S =	21,3	mm	0,83 inches
T =	14,6	mm	inches
U =	29,4/8	mm	inches



Make **VOLVO**Model **1425**F.I.A. Rec.No **5208**DRIVE TRAIN
CLUTCH260. Type of clutch **DRY DISC**261. No of plates **1**262. Dia. of clutch plates **21,6** cm

inches

263. Dia. of linings, inside **14,0** cmin. outside **21,6** cm in.264. Method of operating clutch **MECHANICAL**

GEAR BOX (photograph H)

270. Manual type, make **VOLVO M40**Method of operation **MANUAL**271. No of gear-box ratios forward **4**272. Synchronized forward ratios **4**273. Location of gear-shift **CENTRE 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	3,13:1	33:15			2,62	33:15		
2	1,99:1	28:20			1,67	28:20		
3	1,36:1	22:23			1,24	23:22		
4	1:1							
5								
6								
reverse								

278. Overdrive, type **ELECTRICALLY OPERATED OVERDRIVE**279. Forward gears on which overdrive can be selected **FOURTH GEAR**280. Overdrive ratio **0,756:1**

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 **4,1 AND 4,56**Number of teeth **41:10 41:9**

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.

CONCERNS GROUP II ONLY

FINAL DRIVE RATIO 4,88:1 674983
NUMBER OF TEETH 39:8

POWER-LOK DISC TYPE 384498

TUNING KIT 419398
WHICH ENABLES AN OUTPUT OF 128 HP AND CONTAINS THE
FOLLOWING COMPONENTS:

CYLINDER HEAD 419351
INLET VALVE 419315
EXHAUST VALVE 419316
VALVE SPRING 418737
WASHER FOR SPRING 403500
PROTECTIVE RING 405357
LOCK TAP FOR WASHER 403315
GUIDE SLEEVES, INDUCTION 419378
GUIDE SLEEVES, EXHAUST 403390
GASKET, CYLINDER HEAD 419393
CAMSHAFT 419258
FLYWHEEL 419392
COVER FOR OIL PUMP 419395
TIMING GEAR CASING 418693
PACKING BOX FOR ABOVE 418668
HUB FOR PULLEY 418264
EXHAUST MANIFOLD 419381
METERING NEEDLE 237241
SPRING, VACUUM PLUNGER, CARBURETTER 237242



Make **VOLVO**

Model **1425**

F.I.A. Rec.No **5208**

IGNITION COIL

239499

SPARK PLUG W 280 T135

240571

SPARK PLUG W 240 T1

238624

GROUP I ENGINE DATA TO BE ALTERED AS FOLLOWS:

COMPRESSION RATIO 11,1:1

VOLUME OF ONE COMBUSTION CHAMBER 38,5 CM³

	INLET	EXHAUST
VALVES OPEN	31°	73°
VALVES CLOSE	73°	31°
MAXIMUM LIFT	230°	230°
3/4 MAXIMUM	174°	174°
DIAMETER OF VALVES	42	35
DIAMETER OF PORT AT VALVE SEAT	41	34
TAPPET CLEARANCE FOR CHECKING TIME	0,4	0,4
MAXIMUM VALVE, LIFT AT VALVE PLAY=0	10,8	10,8

