

F.I.A. Recognition No 544
 Group 3 Grand Touring

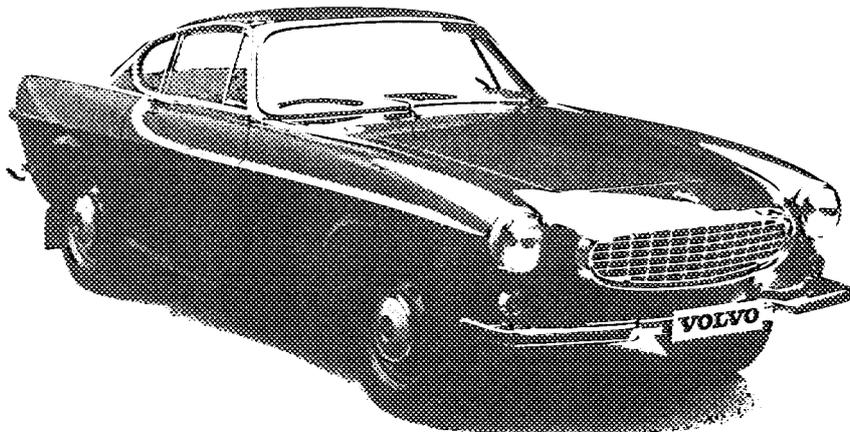
FEDERATION INTERNATIONALE DE L' AUTOMOBILE

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

Manufacturer AB VOLVO Cylinder-capacity 1778.....cm3...109.....in3
 Model 1800 S
 Serial No of chassis 16500 Manufacturer PRESSED STEEL CORP.
 engine 101 Manufacturer AB VOLVO
 Recognition is valid from 14 July 1966 .. List 14/6

The manufacturing of the model described in this recognition form was started on AUG 25 19 65
 and the minimum production of 500 identical cars, in accordance with the specifica-
 tions of this form was reached on OCTOBER 4 19 65

Photograph A, 3/4 view of car from front



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

Variants

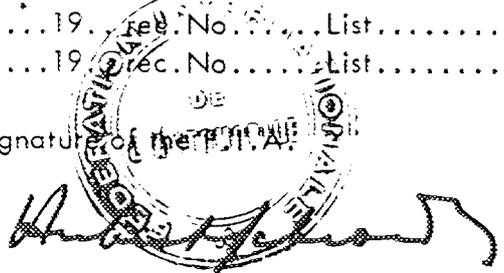
Normal evolution of the type

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



Stamp and signature of the F.I.A.

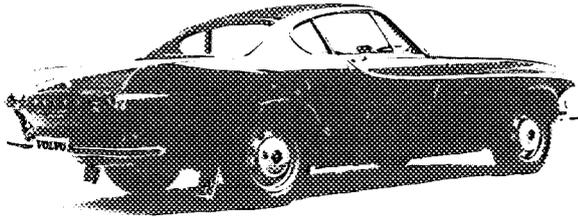


Make VOLVO

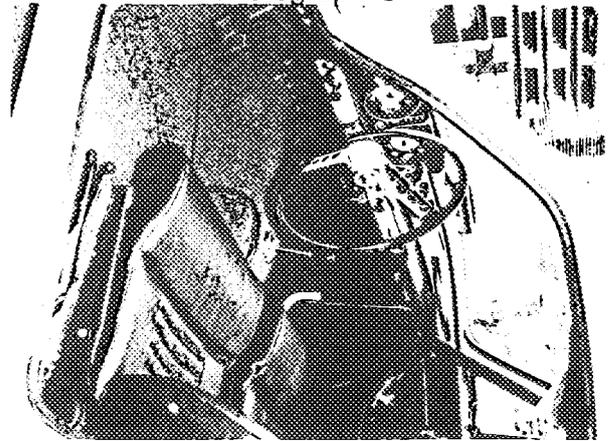
Model 1800 S

F.I.A. Rec.No

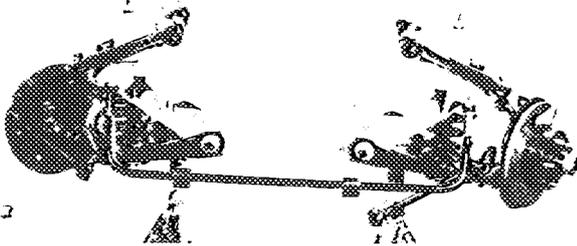
Photograph B



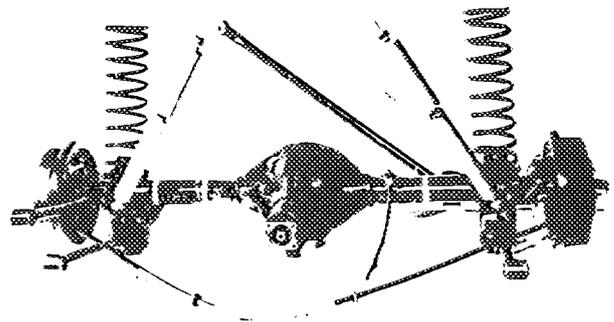
Photograph C



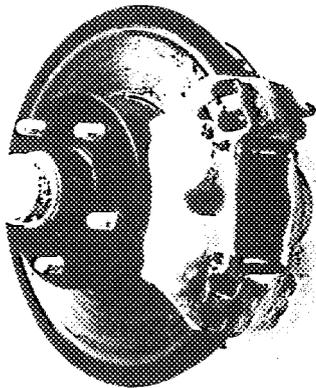
Photograph D



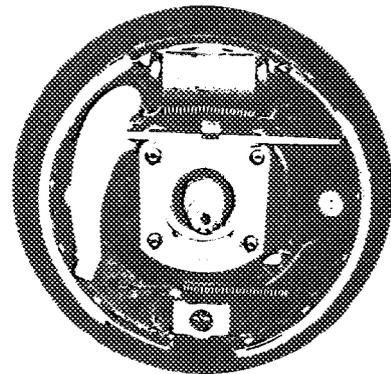
Photograph E



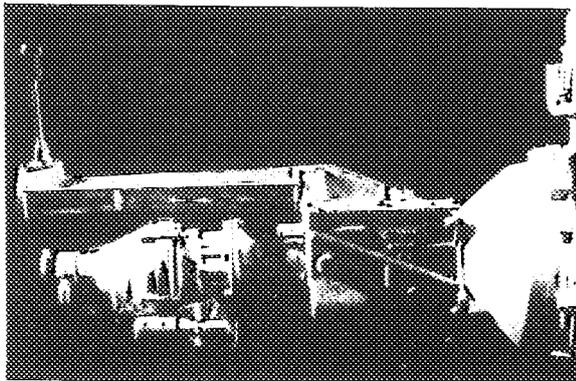
Photograph F



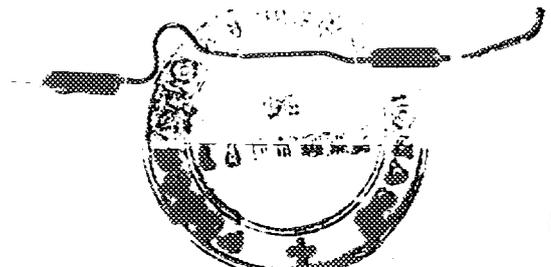
Photograph G



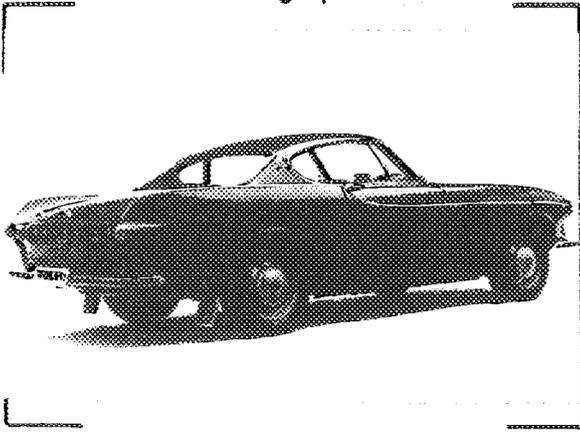
Photograph H



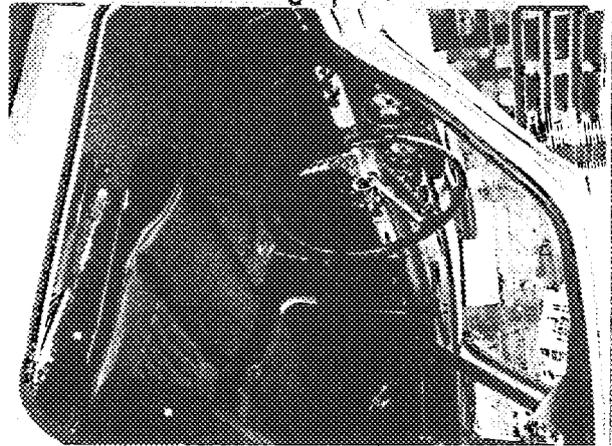
Photograph I



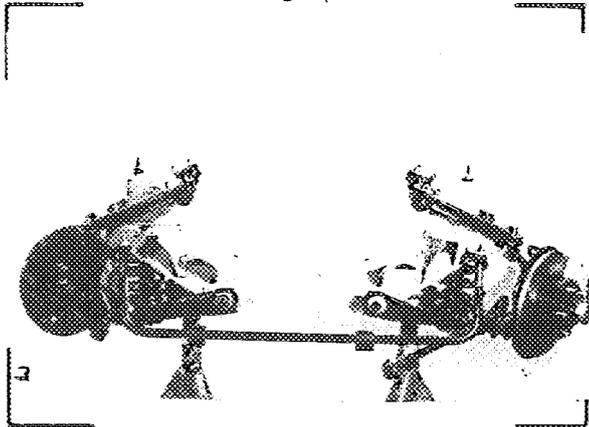
Photograph B



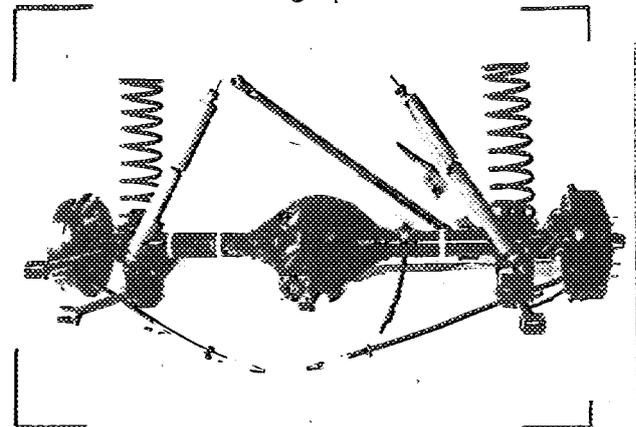
Photograph C



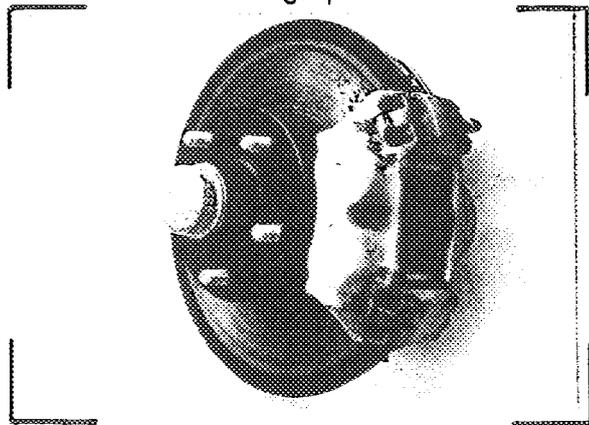
Photograph D



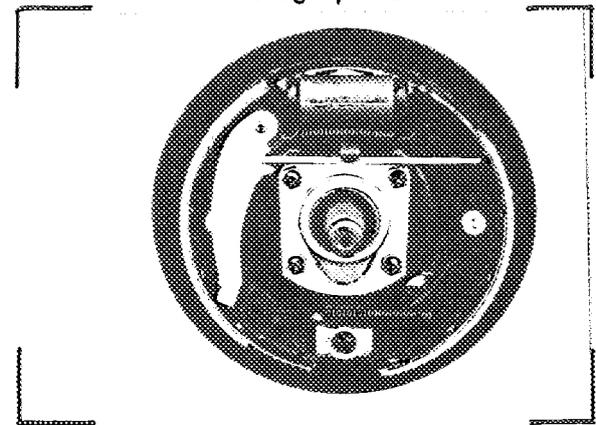
Photograph E



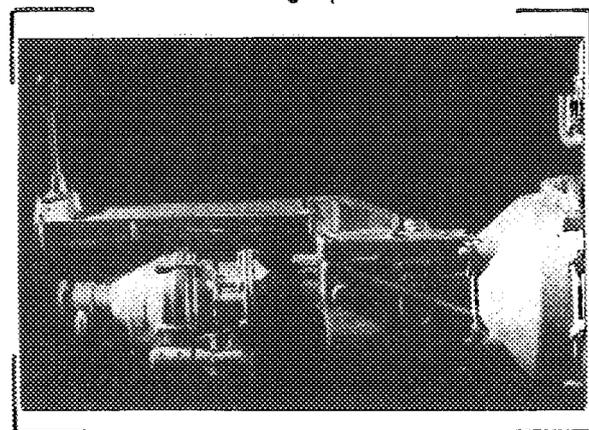
Photograph F



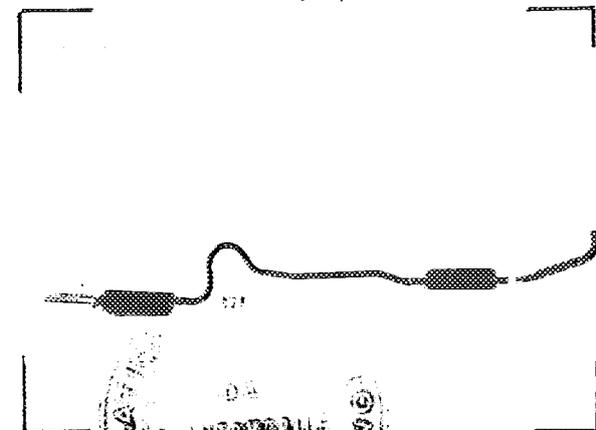
Photograph G



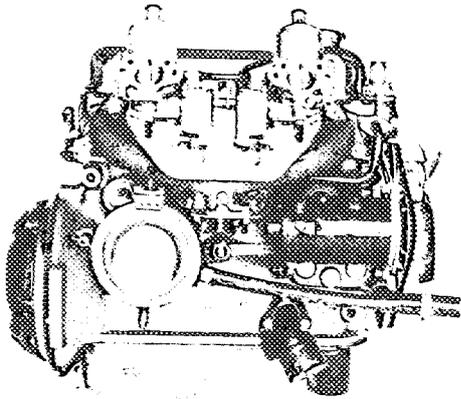
Photograph H



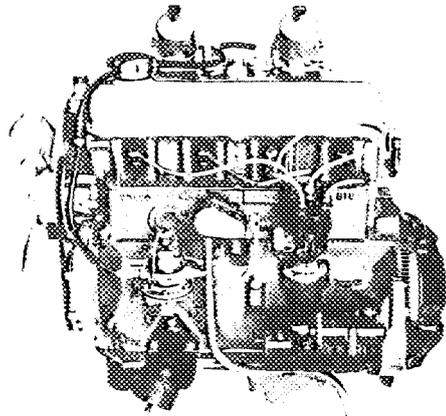
Photograph I



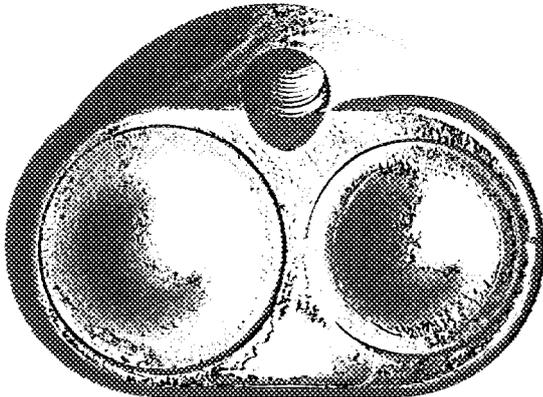
Photograph J



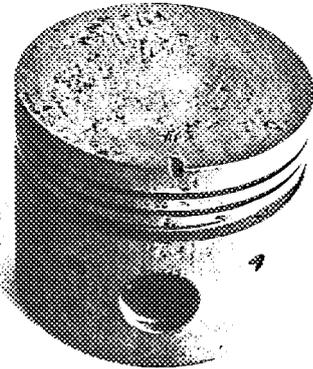
Photograph K



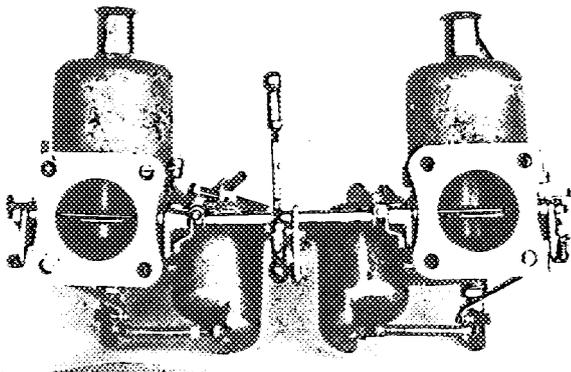
Photograph L



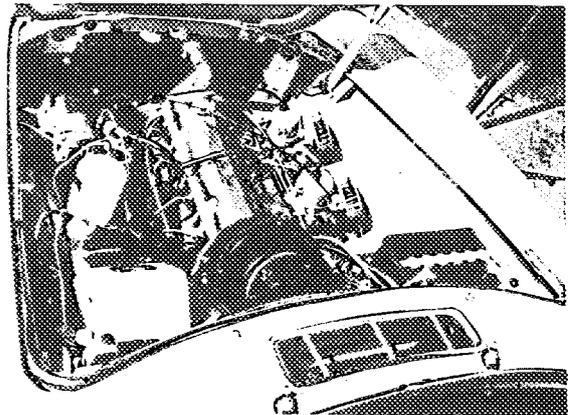
Photograph M



Photograph N

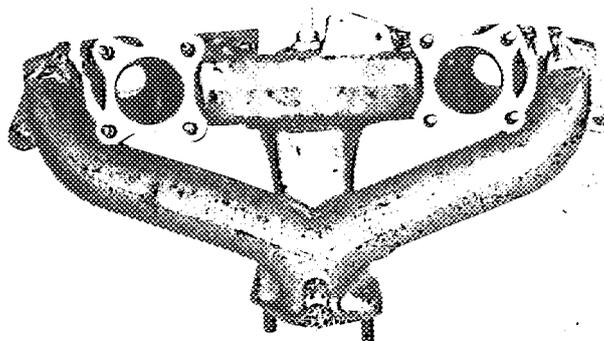


Photograph O



Photograph P

inlet manifold



Photograph Q

Id

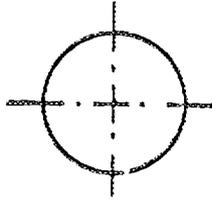


Make

Model

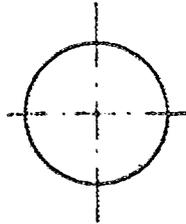
F.I.A. Rec.No

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



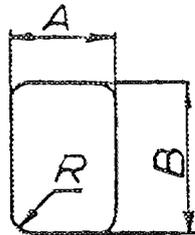
$$\underline{\underline{\phi 36 \pm 0,31}}$$

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



$$\underline{\underline{\phi 36 \pm 0,31}}$$

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

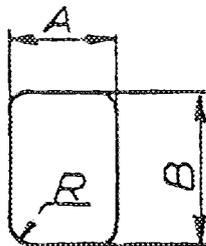


$$\underline{\underline{A = 27 \pm 0,8}}$$

$$\underline{\underline{B = 40 \pm 0,8}}$$

$$\underline{\underline{R = 5 \pm 0,8}}$$

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



$$\underline{\underline{A = 25 \pm 0,8}}$$

$$\underline{\underline{B = 38 \pm 0,8}}$$

$$\underline{\underline{R = 4 \pm 0,8}}$$



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. Wheelbase 2450 mm 96,5 inches
- 2. Front track 1315 mm 51,8 inches *
- 3. Rear track 1315 mm 51,8 inches *
- 4. Overall length of the car 435 cm inches
- 5. Overall width of the car 170 cm inches
- 6. Overall height of the car 128 cm inches
- 7. Capacity of fuel tank (reserve included) 45 ltrs
12 Gallon US 10 Gallon Imp.
- 8. Seating capacity 2
- 9. Weight , total weight of the car with normal equipment, water, oil and spare wheel but without fuel nor repair tools:
1095 kg 2412 lbs 21,55 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 (l b)	- 453.593 gr.	1 hundred weight (cwt)	- 50.802 kg



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 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 -~~xxx~~
- 39. Air-conditioning : ~~yes~~ - no
- 40. Ventilation : yes -~~xxx~~
- 41. Front seats, type of seat and upholstery REAL LEATHER
- 42. Weight of front seat (s), complete with supports and rails, out of the car :

12,7	kg	lbs
------	----	-----
- 43. Rear seats, type of seat and upholstery VINYL
- 44. Front bumper, material (s) CHROME-PLATED STEEL Weight 5,7 kg lbs
- 45. Rear bumper, material (s) CHROME-PLATED STEEL Weight 5,7 kg lbs

WHEELS

- 50. Type DISC WHEEL
- 51. Weight (per wheel, without tyre) 8,0 kg lbs
- 52. Method of attachment WITH 5 NUTS
- 53. Rim diameter 381 mm 15 inches
- 54. Rim width 114 mm 4,5 inches

STEERING

- 60. Type CAM AND ROLLER
- 61. Servo-assistance : ~~yes~~ - no
- 62. Number of turns of steering wheel from lock to lock 3 1/4
- 63. In case of servo-assistance



SUSPENSION

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

BRAKES (photographs F and G)

- 90. Method of operation HYDRAULIC
- 91. Servo-assistance (if fitted), type VACUUM SERVO
- 92. Number of hydraulic master cylinders 1

		FRONT		REAR	
93. Number of cylinders per wheel	3				
94. Bore of wheel cylinder (s) (1)	53,98	mm	in.	25,4 mm	in.
(2)	38,1				
Drum brakes					
95. Inside diameter		mm	in.	228,6 mm	in.
96. Length of brake linings		mm	in.	220 mm	in.
97. Width of brake linings		mm	in.	50,8 mm	in.
98. Number of shoes per brake				2	
99. Total area per brake		mm ²	sq.in.	2300 mm ²	sq.in.
Disc brakes					
100. Outside diameter	268,5	mm	in.	mm	in.
101. Thickness of disc	12,8	mm	in.	mm	in.
102. Length of brake linings	105-65	mm	in.	mm	in.
103. Width of brake linings	55	mm	in.	mm	in.
104. Number of pads per brake	2				
105. Total area per brake	9250	mm ²	sq.in.	mm ²	sq.in.



ENGINE (photographs J and K)

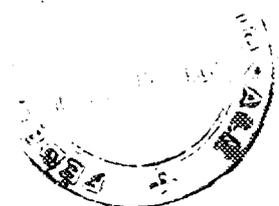
- 130. Cycle FOUR STROKE
- 131. Number of cylinders FOUR
- 132. Cylinder arrangement IN LINE
- 133. Bore $84,14 \pm 0,02$ mm 3,313 in.
- 134. Stroke $80 \pm 0,1$ mm 3,15 in.
- 135. Capacity per cylinder 444,5 cm³ 27,04 cu.in.
- 136. Total cylinder-capacity 1778 cm³ 109 cu.in.
- 137. Material (s) of cylinder block CAST IRON
- 138. Material (s) of sleeves (if fitted)
- 139. Cylinder-head, material (s) CAST IRON Number fitted 1
- 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
 $46 \pm 0,1$ mm inches
- 147. Crankshaft : ~~mandrel~~ / 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 3,85 ltrs pts quarts US
- 153. Oil cooler: yes/ ~~no~~
- 154. Method of engine cooling WATER
- 155. Capacity of cooling system 8,5 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 1800 S

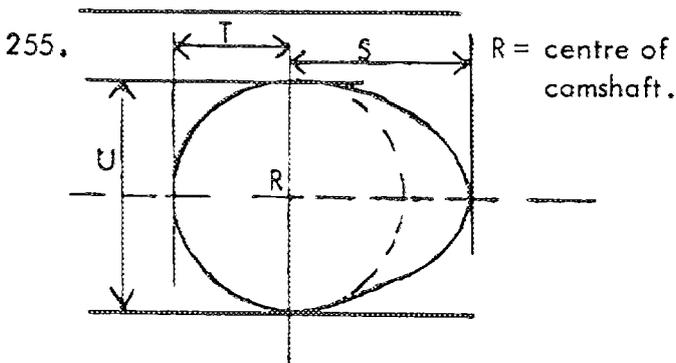
F.I.A. Rec.No

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
- 238. Voltage of generator 12 volts
- 239. Battery, number 1
- 240. Location UNDER BONNET AGAINST FIREWALL
- 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 at 4000 rpm
- 253. Maximum speed of the car km/hour miles/hour



<u>Inlet cam</u>			
S = 21,3	mm	0,83	inches
T = 14,6	mm		inches
U = 29,418	mm		inches
<u>Exhaust cam</u>			
S = 21,3	mm	0,83	inches
T = 14,6	mm		inches
U = 29,418	mm		inches



Make VOLVO

Model 1800 S

F.I.A. Rec.No

DRIVE TRAIN
CLUTCH

- 260. Type of clutch SINGLE DRY PLATE
- 261. No of plates 1
- 262. Dia. of clutch plates 21,5 cm inches
- 263. Dia. of linings, inside 14,4 cm in. outside 21,5 cm in.
- 264. Method of operating clutch HYDRAULIC

GEAR BOX (photograph H)

- 270. Manual type, make VOLVO M 41 Method of operation SHIFT STICK
- 271. No of gear-box ratios forward 4
- 272. Synchronized forward ratios 4
- 273. Location of gear-shift CENTRALLY-LOCATED ON FLOOR
- 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	33:15						
2	1,99	28:20						
3	1,36	23:22						
4	1							
5								
6								
reverse	3,25							

- 278. Overdrive, type LAYCOCK DE NORMANVILLE, PLANETARY GEAR
- 279. Forward gears on which overdrive can be selected FOURTH GEAR ONLY
- 280. Overdrive ratio 0,756

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 4,56:1
- Number of teeth 9:41



Make VOLVO

Model 1800 S

F.I.A. Rec.No

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.

