VOLVO

Competition Service.

PARTS AND EQUIPMENT CATALOG

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2 Competition Parts

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1 Homologation Forms

VOLVO

Competition Service

Prod HOMOLGATION FORM	Section 1
	No 1
Date July, 1970	

HOMOLOGATION FORM

The homologation form, or ID-card, is a document which states the fixed specifications for an automobile and also indicates that this automobile has been manufactured in the quantity demanded by the international rules.

An application for homologation is submitted by the manufacturer to the national instance, in Sweden SVENSKA BILSPORTFÖRBUNDET (SBF) which forwards the application to the international organization for automobile competitions FÉDÉRATION INTERNATIONALE DE L'AUTOMOBILE.

The intention of the homologation form is that the pilot of a car, with the help of the form concerned in competitions, can prove that his car is of the version specified in the rules and that it has not been tuned beyond what is approved.

In competitions it is essential for every entry to be able to produce a valid homologation form. Owners of Volvo cars can obtain a copy free of charge from Volvo Competition Service.

The homologation form is available for amongst others the following cars:

VOLVO 122S (2-door)	B18	from	chassie	no	84600	Form	No	1408
123GT	B18	"	"	"	216950	"	"	5152
122S (2-door)	B20	"	"	"	312500	"	"	5313
VOLVO 142S	B18	"	"	"	1	"	"	5208
142S	B20	"	"	"	52900	"	"	5314

F. I. A. Recognition No.
F. I. A. Identifieringskort Nr 1408

KUNGL AUTOMOBIL KLUBBEN
THE ROYAL SWEDISH AUTOMOBILE CLUB

Fédération Internationale de l'Automobile

FORM OF RECOGNITION IN ACCORDANCE WITH APPENDIX J TO THE INTERNATIONAL SPORTING CODE
IDENTIFIERINGSKORT I ÖVERENSSTÄMMELSE MED BILAGA J TILL INTERNATIONELLA TÄVLINGSREGLEMENTET

Manufacturer / Tillverkare AB VOLVO GÖTEBORG

Model / Modell 122, 2-doors/2-dörr **Year of manufacture / Tillverkningsår** 1965

SERIAL NO. OF / NUMMERSERIE PÅ

Chassis / Chassi P 132xx 84600 -1, -2, -3, ... **Engine / Motor** B 18 D

Type of coachwork / Karosserityp Two door saloon / 2-dörrars täckt

Recognition is valid from / Klassningen gäller fr. o. m. 1st December 1965 **In category / I kategori** Touring

Signature and stamp of F. I. A.
F. I. A.:s underskrift och stämpel

FEDERATION INTERNATIONALE DE L'AUTOMOBILE

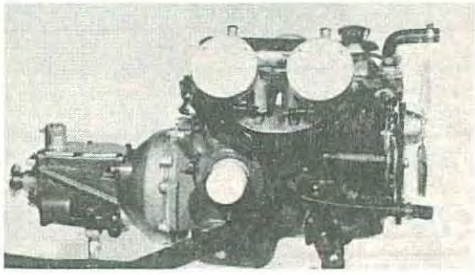
GENERAL DESCRIPTION OF CAR
ALLMÄN VAGNSBESKRIVNING

INTEGRAL STEEL BODY

SJÄLVBÄRANDE STÅLKAROSS

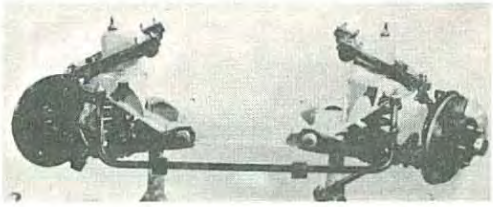
Car from rear left
Fordonet snett bakifrån vänster

Engine from left
Motor från vänster



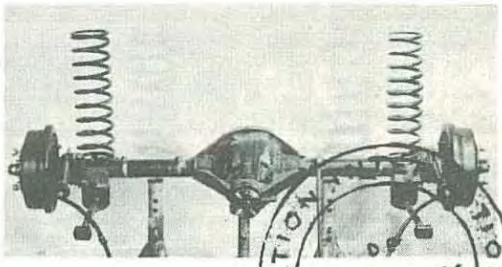
Interior through open driver's door
Interiör genom öppen förardörr

Front axle
Framaxel



Engine from right
Motor från höger

Rear axle
Bakaxel



FEDERATION INTERNATIONALE DE L'AUTOMOBILE

KUNGL AUTOMOBIL KLUBBEN

ENGINE
MOTOR

No. of cylinders / Antal cylindrar	4	Cylinder lay-out: / Cylinderarrangemang:	In line / I rad	Vac / Ta	In V / I V-form	–	Opposed / Motliggande –

Means of cooling / Kylmedium	Water/Vatten	Cycle	4-stroke
		Arbetssätt	4-takt
Capacity / Cylindervolym	1778 cm³	Firing order / Tändföljd	1-3-4-2
Bore / Cylinderdiameter	84,14 mm	Stroke / Slaglängd	80 mm

Material of cylinder block	C. J	Material of sleeves, if fitted	–
Material i cylinderblock	Gjutjärn	Material i ev. cylinderfoder	–

Distance from crankshaft centre line to top face of block at centre line of cylinders
Avstånd från vevaxelns centrumlinje till blockets överkant i cylindrarnas centrumlinje: 231,5 ± 0,1 mm

Material of cylinder head	C. J.		
Material i cylinderlock	Gjutjärn	Volume of one combustion chamber / Volym av ett förbränningsrum	38,5 ± 1,5 cm³
Compression ratio / Kompressionsförhållande	11,1	Height at centre of combustion chamber / Höjd i mitten av förbränningsrum	10,1±0,1 mm
No. of piston rings / Antal kolvringar	3	Distance from gudgeon pin centre to highest point of piston crown / Avstånd från kolvtappens centrumlinje till kolvens högsta punkt	46 ± 0,1 mm

BEARINGS LAGER

Crankshaft main bearings No. / Vevaxellager Antal	4 + 1	Type / Typ	Copper-lead-indium/White metal / Blybrons/Vitmetall	Diameter / Diameter 63,45 mm
Connecting rod big end / Vevstakslager	4	Type / Typ	Copper-lead-indium / Blybrons	Diameter / Diameter 54,1 mm

WEIGHTS VIKTER

Flywheel / Svänghjul	8 kg	Crankshaft Vevaxel	16,5 kg	Connecting rod Vevstake	0,7±0,03 kg
Piston with rings / Kolv med ringar	0,482 kg	Gudgeon pin Kolvtapp	0,113 kg		

VALVES
VENTILER

No. of valves per cylinder / Antal ventiler per cylinder	2	Method of valve operation / Ventilmekanism	Push rod / Tryckstång
No. of camshafts / Antal kamaxlar	1	Location of camshafts / Kamaxelplacering	Cylinder block / Cylinderblock
Type of camshaft drive / Kamaxeldrivning	Gears / Kugghjul		

FEDERATION INTERNATIONALE DE L'AUTOMOBILE

KUNGL AUTOMOBIL KLUBBEN

	INLET / INLOPP		EXHAUST / UTLOPP	
Diameter of valves Ventildiameter	42	mm	35	mm
Diameter of port at valve seat Portdiameter vid ventilsäte	41	mm	34	mm
Tappet clearance for checking timing Ventilspel vid kontroll av ventiltider	0,4	mm	0,4	mm
Valves open Ventiler öppnar	31	B.T.D.C. F.O.D.	73	B.B.D.C. F.U.D.
Valves close Ventiler stänger	73	A.B.D.C. E.U.D.	31	A.T.D.C. E.O.D.
Maximum valve lift Max. lyfthöjd — At valve play / Ventilspel } 0	10,8	mm	10,8	mm
Degrees of crankshaft rotation from zero to: Grader vevaxelvarv från noll till:				
Maximum lift Max. lyfthöjd — At valve play / Ventilspel } 0	230	°	230	
3/4 maximum lift 3/4 av max. lyfthöjd	174	°	174	

VALVE SPRINGS
VENTILFJÄDRAR

Type	Coil	Coil
Typ	Spiral	Spiral
No. per valve Antal per ventil	1	1
Length, unloaded Längd, obelastad	46 mm	46 mm
when fitted Inspänd	39,8±0,4 mm	39,8±0,4 mm
Diameter internal Diameter inre	18,5 mm	18,5 mm
external yttre	27,2 mm	27,2 mm
Number of turns Antal varv	7	7

CARBURETTOR
FÖRGASARE

Type	Horizontal		
Typ	Horisontal	No. fitted Antal	2
Make Fabrikat	S.U.	Model Typ	HS-6
Flange hole diameter Flänsdiameter	44,5 mm		

INLET MANIFOLD
INLOPPSRÖR

Diameter of flange hole at carburettor Inre diameter vid förgasarfläns	47 mm	Diameter of flange hole at port Inre diameter vid cylinderlock	40 mm

EXHAUST MANIFOLD
AVGASRÖR

1 = 75x 41

Diameter of flange hole at port Inre diameter vid cylinderlock	2 = 28 x 41 mm	Diameter of flange hole at connection to exhaust pipe Inre diameter vid grenrörsfläns	45 mm

FEDERATION INTERNATIONALE DE L'AUTOMOBILE

KUNGL AUTOMOBIL KLUBBEN

Combustion chamber
Förbränningsrum

Inlet manifold
Inloppsrör

Piston from above
Kolv snett uppifrån

Exhaust manifold
Utloppsgrenrör

ADDITIONAL INFORMATION FOR CARS FITTED WITH TWO-CYCLE ENGINES
YTTERLIGARE UPPGIFTER FÖR BILAR MED TVÅTAKTSMOTORER

System of cylinder scavenging _____ **Type of lubrication** _____

Cylinderspolning _____ Smörjsystem _____

SIZE OF INLET PORT: **Length measured around cylinder wall** **Height**
MÅTT, INLOPPSKANAL: Längd, mätt runt cylindervägg _____ mm Höjd _____ mm **Area** _____ mm²

SIZE OF EXHAUST PORT: **Length measured around cylinder wall** **Height**
MÅTT, UTLOPPSKANAL: Längd, mätt runt cylindervägg _____ mm Höjd _____ mm **Area** _____ mm²

SIZE OF TRANSFER PORT: **Length measured around cylinder wall** **Height**
MÅTT, ÖVERSTRÖMNINGSKANAL: Längd, mätt runt cylindervägg _____ mm Höjd _____ mm **Area** _____ mm²

SIZE OF PISTON PORT: **Length measured around piston** **Height**
MATT, KOLVPORT: Längd, mätt runt kolv _____ mm Höjd _____ mm **Area** _____ mm²

Method of pre-compression
Spolsystem _____

Drawing of cylinder ports
Skiss över cylinderportar

ENGINE ACCESSORIES
MOTORTILLBEHÖR

Type of ignition system Coil

Tändsystem, typ Batteritändning **No. of ignition coils** / Antal tändspolar 1

Make of dynamo / Fabrikat generator Bosch **Maximum output** / Max effekt 360 W **Voltage of system** / Systemspänning 12 V

Make of starter motor / Fabrikat startmotor Bosch **Battery: No. fitted** / Batteri: Antal 1 **Voltage** / Spänning 12 V

SUPERCHARGER, if fitted
KOMPRESSOR, om sådan finnes

Make / Fabrikat _____ **Model or type No.** / Modell eller typ _____

Type of drive _____

Drivsätt _____ **Ratio of drive** / Utväxling _____

FEDERATION INTERNATIONALE DE L'AUTOMOBILE

KUNGL AUTOMOBIL KLUBBEN

FUEL INJECTION, If fitted
BRÄNSLEINSPRUTNING, om sådan finnes

Make of pump / Insprutningspump, fabrikat _____ Model or type No. / Modell eller typ _____

Make of injectors / Munstycken, fabrikat _____ Model or type No. / Modell eller typ _____

Location of injectors _____

Placering av munstycken _____

TRANSMISSION
KRAFTÖVERFÖRING

Type: Dry disc

Make of clutch / Fabrikat koppling: Borg o Beck — Typ: Torrlamell

Diameter of clutch plate / Diameter lamell: 8,5" — No. of plates / Antal skivor: 1 — No. of clutch springs / Antal kopplingsfjädrar: _____

Type: Mechanical

Make of gearbox / Fabrikat växellåda: Volvo M 40 — Typ: Mekanisk — No. of gearbox ratios / Antal växlar: 4

Method of operating gearshift: Manual — Location of gearshift: Centre floor lever

Växlingsmekanism: Manuell — Växelspaksplacering: Golv

Overdrive? Planetary gear — If fitted, method of operation: Electrical

Överväxel? Planettyp — Om sådan finnes, manövrering: El. hydralisk

GEARBOX RATIOS / UTVÄXLINGAR			ALTERNATIVE RATIOS / ALTERNATIVA UTVÄXLINGAR					
	Ratio / Utväxl.	No. of teeth / Antal kuggar	Ratio / Utväxl.	No. of teeth / Antal kuggar	Ratio / Utväxl.	No. of teeth / Antal kuggar	Ratio / Utväxl.	No. of teeth / Antal kuggar
1	3,13	33:15	2,62	33:15				
2	1,99	28:20	1,67	28:20				
3	1,36	22:23	1,24	23:22				
4	1							
Primary gears / Primärväxel =		27:19		25:21				
Rev. / Back	3,25							

Type of final drive: Hypoid — Type of differential: Rigid axle

Slutväxel, typ: Hypoid — Differentialtyp: Stel axel

Alternatives / Alternativ: Anti-spinn

Final drive ratio / Utväxling slutväxel: 4.1,4.56,4.88 — No. of teeth / Antal kuggar: 41:10,41:9,39:8 — Overdrive ratio, If fitted / Utväxling ev. överväxel: 0,756

WHEELS
HJUL

Type / Typ: Disc wheels/skivhjul — Rim size / Färgstorlek: 4j x 15, 4,5j x 15, 5,5j x 15

Tyre size: Front / Däckdimension: Fram: 165 x 15 — Rear / Bak: 165 x 15 — Alt. / Alt.: 8.00 x 15

BRAKES
BROMSAR

Method of operation: Hydraulic — Type of servo, If fitted: Optional vacumservo

Arbetssätt: Hydraulisk — Typ av ev. servo: Vacumservo extrautrustning

FÉDÉRATION INTERNATIONALE DE L'AUTOMOBILE

KUNGL AUTOMOBIL KLUBBEN

	FRONT / FRAM	REAR / BAK
No. of wheel cylinders Antal hjulcylindrar	3	1
Bore of wheel cylinders Diameter hjulcylindrar	2 st 1 1/2", 1 st 2 1/8" mm	1" mm
Inside diameter of brake drums Inre diameter bromstrummor	- mm	230 mm
No. of shoes per brake Antal backar per broms	-	2
Outside diameter of brake discs Yttre diameter bromsskivor	270 mm	- mm
No. of pads per brake Antal klotsar per broms	2	-
DIMENSIONS OF BRAKE LININGS PER SHOE OR PAD **BELÄGGDIMENSION PER BACK ELLER KLOTS**		
Length Längd	95 mm	220 x 2 mm
	75 mm	- mm
Width Bredd	55 mm	50 mm
Total area per brake Beläggyta per broms	95 cm²	220 cm²

SUSPENSION
FJÄDRING

	FRONT / FRAM	REAR / BAK
Type Typ	Individual	Rigid axle/stel axel
Type of spring Fjädertyp	Coil/spiral	Coil/spiral
Is stabilizer fitted? Finns krängningshämmare?	Yes/ja	-
Type of shock absorber Stötdämpartyp (funktionsprincip)	Teleskopic	Teleskopic
No. of shock absorbers Antal stötdämpare	2	2

Remarks

Anm.

STEERING
STYRINRÄTTNING

Type of steering gear: Cam and roller — Styrinrättning, typ: Skruv och rulle

No. of turns of steering wheel from lock to lock / Antal rattvarv mellan fulla framhjulsutslag: 3,25 — Turning circle / Vänddiameter: 9,6

CAPACITIES AND DIMENSIONS
MÅTT OCH VIKTER

Fuel tank / Bränsletank: 45 90 liter — Sump / Oljetråg: 3,25 liter — Radiator / Kylsystem: 8,5 liter — Gearbox / Växellåda: 0,75 liter

Remarks / Anm.: Gearbox with overdrive 1,6 liter

Overall length / Total längd: 444 cm — Overall width / Total bredd: 163 cm — Overall height, unladen / Total höjd, obelastad: 149 cm

Distance from floor to top of windscreen: Highest point / Höjd över golvet till vindrutans överkant: Högsta punkt: 103 cm — Lowest point / Lägsta punkt: 100 cm

Width of windscreen / Vindrutebredd: max. 125 cm min. 114 cm — Interior width / Inre bredd**: 128 cm

*) To be measured at the immediate rear of the steering wheel, and the width quoted to be maintained in a vertical plane of not less than 25 cms.
**) Bredden mates i ett 25 cm vertikalplan omedelbart bakom ratten.

Wheelbase / Hjulbas: 260 cm — Track width, front / Spårvidd, fram: 131,5 cm — rear / bak: 131,5 cm — No. of seats / Antal platser: 5

Overall weight with water, oil and spare wheel, but without fuel / Vagnvikt med vatten, olja och reservhjul, men utan bränsle: 1013 kg

FEDERATION INTERNATIONALE DE L'AUTOMOBILE

KUNGL AUTOMOBIL KLUBBEN

OPTIONAL EQUIPMENT AND FURTHER OBSERVATIONS
EXTRAUTRUSTNING OCH YTTERLIGARE UPPLYSNINGAR

Protection plates = front and rear
Skyddsplåtar = fram och bak

Coil) Spiral)	front / fram	52 50 60
	rear / bak	52 50 61

The vehicle described in this Form of Recognition "New Model", recognized
Det i detta identifieringskort för ny modell beskrivna fordonet, klassat

by the F.I.A. on the _____ **under No.** _____ **has been subject to**
av F.I.A. den _____ **under nr** _____ **har blivit föremål för**

Additional Recognition (Variation) on the _____ **under No.** _____
Tillägg till klassning (variant) den _____ **under nr** _____

on the _____ **under No.** _____
den _____ **under nr** _____

on the _____ **under No.** _____
den _____ **under nr** _____

on the _____ **under No.** _____
den _____ **under nr** _____

on the _____ **under No.** _____
den _____ **under nr** _____

Extension of Recognition (Normal development of original vehicle type)
Utökning av klassning (Normal utveckling av vagntypen)

on the _____ **under No.** _____
den _____ **under nr** _____

on the _____ **under No.** _____
den _____ **under nr** _____

on the _____ **under No.** _____
den _____ **under nr** _____

on the _____ **under No.** _____
den _____ **under nr** _____

on the _____ **under No.** _____
den _____ **under nr** _____

FEDERATION INTERNATIONALE DE L'AUTOMOBILE

Stockholm den 2/9 19 61

KUNGL. AUTOMOBIL KLUBBEN

F.I.A. Recognition No .....5152.....
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 .....123 GT.....
Serial No of chassis .216 950*..... Manufacturer ..A. B. Volvo.....
engine ..1..... Manufacturer ..A. B. Volvo.....
Recognition is valid from..1st April '67. List .16/1.....

* is included in the 1300-series

The manufacturing of the model described in this recognition form was started on ....22/8..1966 and the minimum production of ..5000.. identical cars, in accordance with the specifications of this form was reached on ....28/2.....1967

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.....

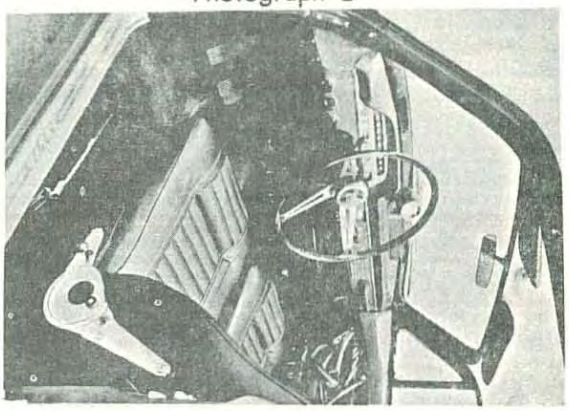
Stamp and signature of the National Sporting Authority

Stamp and signature of the F.I.A.

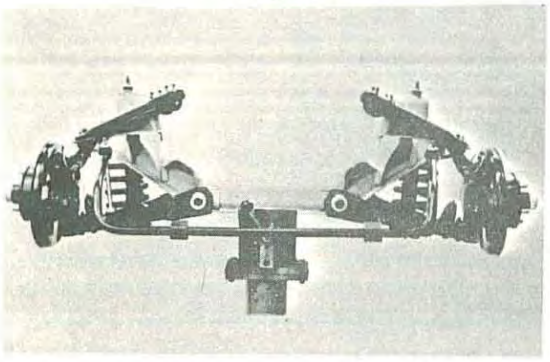
Make Model F.I.A. Rec.No

Photograph B

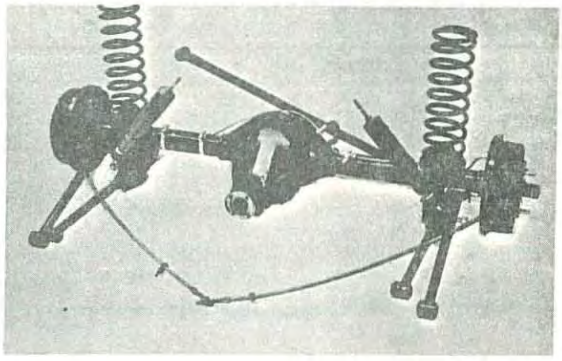
Photograph C



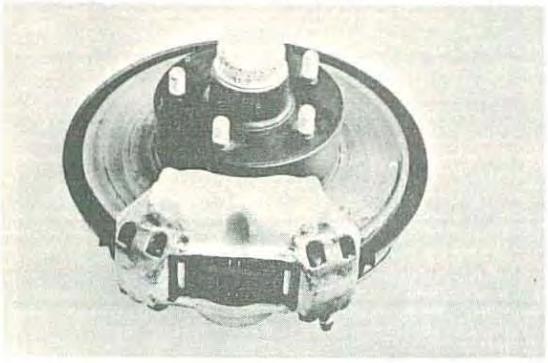
Photograph D



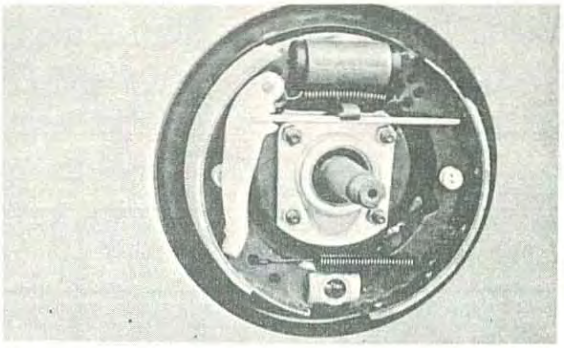
Photograph E



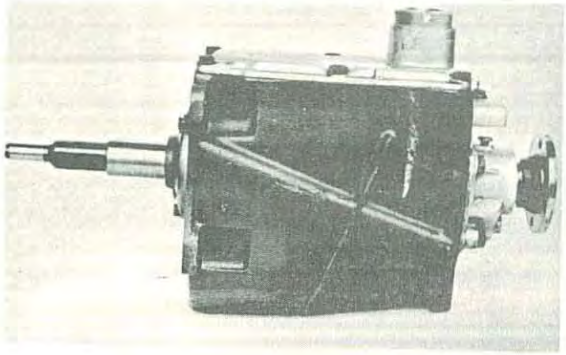
Photograph F



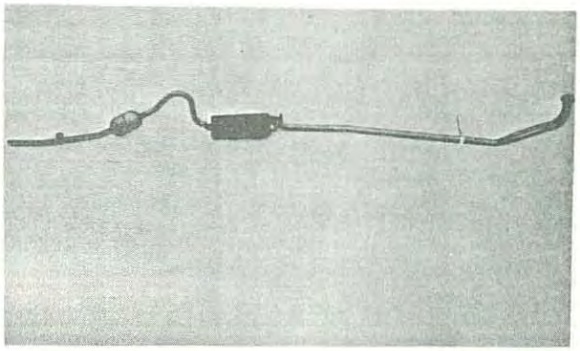
Photograph G



Photograph H

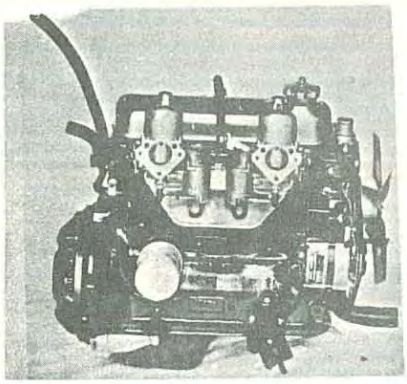


Photograph I

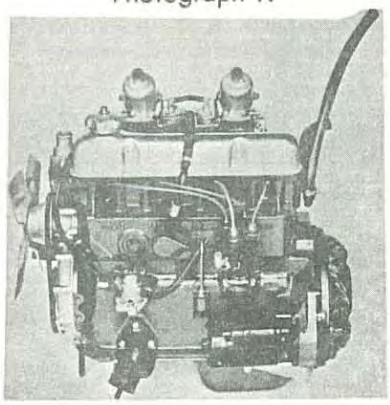


Make Model F.I.A. Rec.No

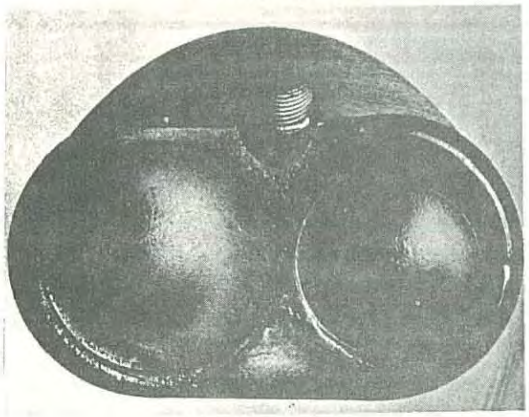
Photograph J



Photograph K

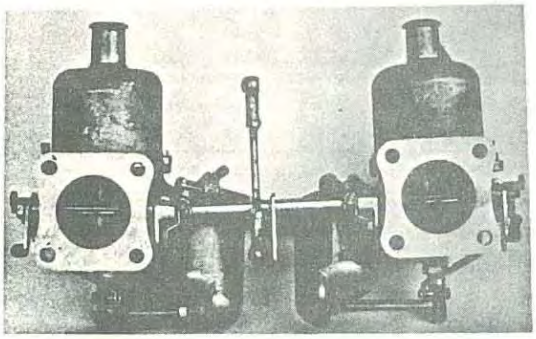


Photograph L

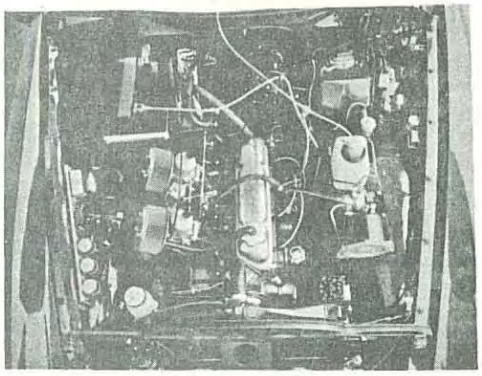


Photograph M

Photograph N



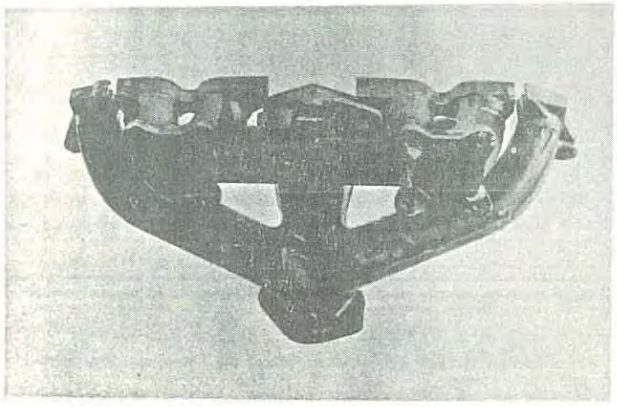
Photograph O

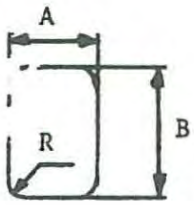
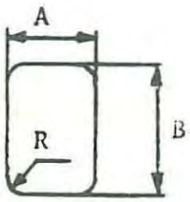


Photograph P

Photograph Q

inlet manifold



Make	Model	F.I.A. Rec.No
Drawing inlet manifold ports, side of cylinder-head. Indicate scale or dimensions and manufacturing tolerance.		Ø 36 ± 0,31
Drawing of entrance to inlet port of cylinder-head. Indicate scale or dimensions and manufacturing tolerance.		Ø 36 ± 0,31
Drawing exhaust manifold ports, side of cylinder-head. Indicate scale or dimensions and manufacturing tolerance.		A = 27 ± 0,8 B = 40 ± 0,8 R = 5 ± 0,8
Drawing of exit to exhaust port of cylinderhead. Indicate scale or dimensions and manufacturing tolerance.		A = 25 ± 0,8 B = 38 ± 0,8 R = 4 ± 0,8

Make Model F.I.A. Rec.No

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 2600 mm 102 1/2 inches
2. Front track 1315 mm 51 3/4 inches *
3. Rear track 1315 mm 51 3/4 inches *
4. Overall length of the car 444 cm inches
5. Overall width of the car 163 cm inches
6. Overall height of the car 147 cm inches
7. Capacity of fuel tank (reserve included) 45 ltrs
   12 Gallon US 10 Gallon Imp.
8. Seating capacity 5
9. Weight , total weight of the car with normal equipment, water, oil and spare wheel but without fuel nor repair tools:
   1013 kg 2233 lbs 19,9 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 cm2	1 gallon Imp.	- 4.546 ltrs
1 cubic inch/pouce cube	- 16.387 cm3	1 gallon US	- 3.785 ltrs
1 pound/livre (l b)	- 453.593 gr.	1 hundred weight (cwt)	- 50.802 kg

Make Model F.I.A. Rec.No

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

per chair 15 kg lbs

43. Rear seats, type of seat and upholstery bench, vinyl
44. Front bumper, material (s) chrome-plated steel Weight 9,6 kg lbs
45. Rear bumper, material (s) chrome-plated steel Weight 9,6 kg lbs

WHEELS

50. Type disc wheels
51. Weight (per wheel, without tyre) 6,9 kg lbs
52. Method of attachment with 5 nuts
53. Rim diameter 381 mm 15 inches
54. Rim width 102 mm 4 inches

STEERING

60. Type cam and roller
61. Servo-assistance : ~~yes~~ - no
62. Number of turns of steering wheel from lock to lock 3,25
63. In case of servo-assistance

Make Model F.I.A. Rec.No

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
91. Servo-assistance (if fitted), type vacuumservo
92. Number of hydraulic master cylinders 1

	FRONT			REAR		
93. Number of cylinders per wheel	3			1		
94. Bore of wheel cylinder (s)	2x38 1x54	mm	in.	22,2	mm	in.
Drum brakes						
95. Inside diameter		mm	in.	228,6	mm	in.
96. Length of brake linings		mm	in.	220x2	mm	in.
97. Width of brake linings		mm	in.	50	mm	in.
98. Number of shoes per brake				2		
99. Total area per brake		mm2	sq.in.	2100	mm2	sq.in.
Disc brakes						
100. Outside diameter	268,5	mm	in.		mm	in.
101. Thickness of disc	12,7	mm	in.		mm	in.
102. Length of brake linings	85	mm	in.		mm	in.
103. Width of brake linings	52	mm	in.		mm	in.
104. Number of pads per brake	2					
105. Total area per brake	9100	mm2	sq.in.		mm2	sq.in.

Make Model F.I.A. Rec.No

ENGINE (photographs J and K)

130. Cycle 4-Stroke
131. Number of cylinders 4
132. Cylinder arrangement in line
133. Bore 84,14 ±0,01 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 (' tted)
139. Cylinder-head, material (s) cast iron Number fitted
140. Number of inlet ..ts 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 : ~~moulded~~ / 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 Model F.I.A. Rec.No

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 Model F.I.A. Rec.No

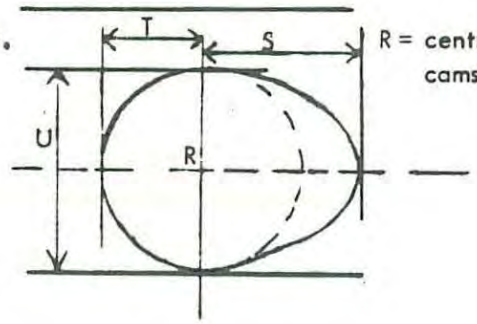
ENGINE ACCESSORIES

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 driven
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 hp (type of horsepower: SAE) at 6000 rpm
251. Maximum rpm 6000 output at that figure 115
252. Maximum torque 15,5 kgm at SAE 4000 rpm
253. Maximum speed of the car km/hour miles/hour

255.



R = centre of camshaft.

Inlet cam

S = 21,3 mm 0,83 inches

T = 14,6 mm inches

U= 29,418 mm inches

Exhaust cam

S = 21,3 mm 0,83 inches

T = 14,6 mm inches

U= 29,418 mm inches

Make Model F.I.A. Rec.No

DRIVE TRAIN
CLUTCH

260. 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 cm, in. outside 21,6 cm in.
264. Method of operating clutch hydraulic

GEAR BOX (photograph H)

270. Manual type, make Volvo M 41 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 Ratio	Manual No teeth	Automatic Ratio	Automatic No teeth	Alternative manual/automatic Ratio	Alternative manual/automatic No teeth	Alternative manual/automatic Ratio	Alternative manual/automatic No teeth
1	3,13:1	33:15						
2	1,99:1	28:20						
3	1,36:1	23:22						
4	1:1							
5								
6								
reverse								

278. Overdrive, type electrically-operated
279. Forward gears on which overdrive can be selected No 4
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 4,56:1
Number of teeth 41:9

Make Model 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 equipement affecting preceeding information. This to be stated together with reference number.

F.I.A. Recognition No .5313.....

Group .....1.....

FEDERATION INTERNATIONALE DE L' AUTOMOBILE

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

Cylinder-capacity ..1986....cm3..121,2...in3

Manufacturer .....AB VOLVO..... Model .....122 S.....

Serial No of chassis ..312500..... Manufacturer .....AB VOLVO.....

engine ..1..... Manufacturer .....AB VOLVO.....

Recognition is valid from...1/1/70.... List ..70/1.....

The manufacturing of the model described in this recognition form was started on ..15.8.19 68 and the minimum production of ..5000... identical cars, in accordance with the specifications of this form was reached on .26.2.....19 4.

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.....

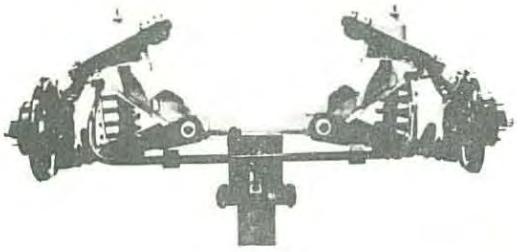
Stamp and signature of the National Sporting Authority

Stamp and signature of the F.I.A.

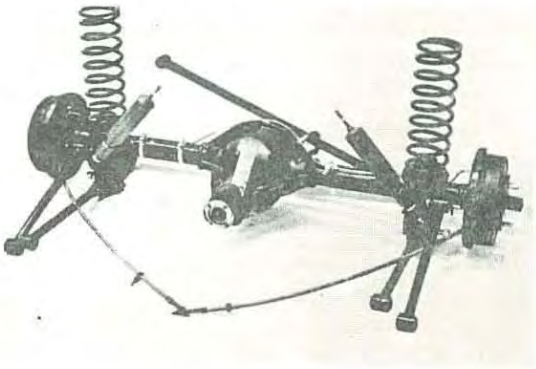
Photograph B

Photograph C

Photograph D



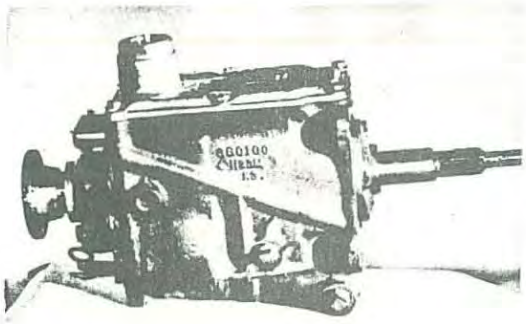
Photograph E



Photograph F

Photograph G

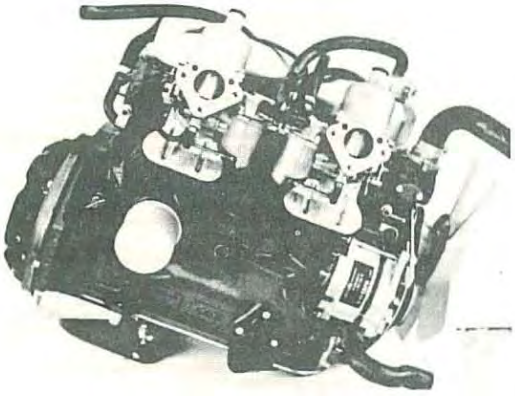
Photograph H



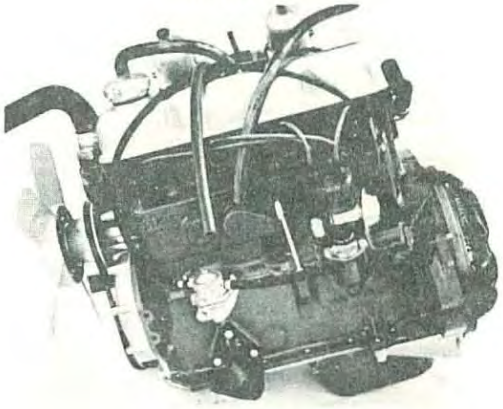
Photograph I

Make V O L V O Model 122 S F.I.A. Rec.No

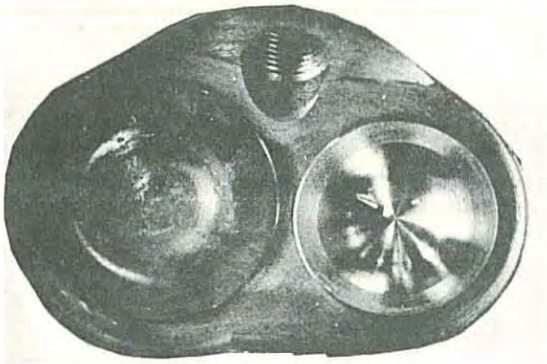
Photograph J



Photograph K

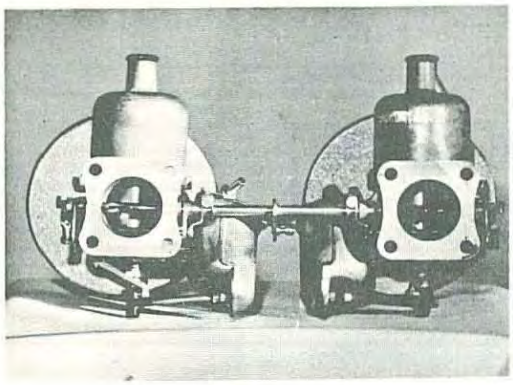


Photograph L

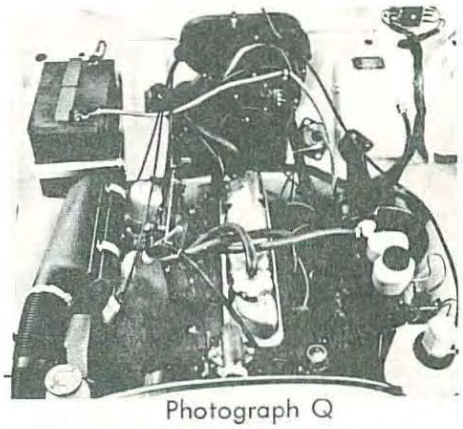


Photograph M

Photograph N



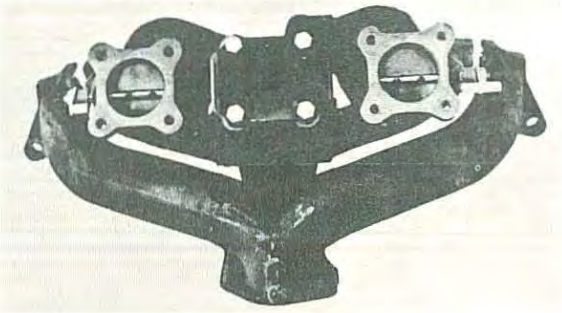
Photograph O



Photograph P

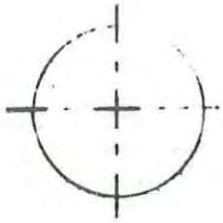
Photograph Q

inlet manifold



Make V O L V O | Model 122 S | F.I.A. Rec.No

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

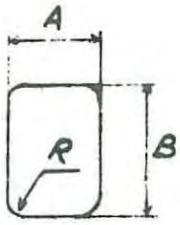


$\emptyset$ 36 $^{+0,25}_{-0}$

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

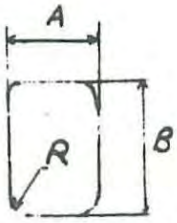
$\emptyset$ 36 $^{+0,25}_{-0}$

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



A = 27 ± 0,7
B = 40 ± 0,7
R = 5 ± 1

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



A = 25 ± 0,7
B = 38 ± 0,7
R = 4 ± 1

Make V O L V O Model 122 S F.I.A. Rec.No

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	2600	mm	102 1/2	inches		
2. Front track	1315	mm	51 3/4	inches *		
3. Rear track	1315	mm	51 3/4	inches *		
4. Overall length of the car		445	cm			inches
5. Overall width of the car		162	cm			inches
6. Overall height of the car		150,5	cm			inches

7. Capacity of fuel tank (reserve included) 45 ltrs
12 Gallon US 10 Gallon Imp.

8. Seating capacity 5

9. Weight , total weight of the car with normal equipment, water, oil and spare wheel but without fuel nor repair tools:

1045 kg 2297 lbs 20,9 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 cm2	1 gallon Imp.	- 4.546 ltrs
1 cubic inch/pouce cube	- 16.387 cm3	1 gallon US	- 3.785 ltrs
1 pound/livre (l b)	- 453.593 gr.	1 hundred weight (cwt)	- 50.802 kg

Make VOLVO Model 122 S F.I.A. Rec.No

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 STEEL
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 - ~~xx~~
39. Air-conditioning : ~~xxx~~ - no
40. Ventilation : yes - ~~xxx~~
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 :

14,6 kg lbs

43. Rear seats, type of seat and upholstery BENCH, VINYL
44. Front bumper, material (s) CHROME-PLATED STEEL Weight 9,6 kg lbs
45. Rear bumper, material (s) CHROME-PLATED STEEL Weight 9,6 kg lbs

WHEELS

50. Type DISC WHEELS
51. Weight (per wheel, without tyre) 6,9 kg lbs
52. Method of attachment WITH 5 NUTS
53. Rim diameter 381 mm 15 inches
54. Rim width 101 mm 4 inches

STEERING

60. Type CAM AND ROLLER
61. Servo-assistance : ~~xxx~~ - no
62. Number of turns of steering wheel from lock to lock 3,25
63. In case of servo-assistance

INTERNATIONALE DE L'AUTOMOBILE

Make V O L V O Model 122 S F.I.A. Rec.No

SUSPENSION

70. Front suspension (photogr. D), type INDIVIDUAL
71. Type of spring COIL
72. Stabiliser (fitted) YES
73. Number of shockabsorbers TWO
74. Type TELESCOPIC

78. Rear suspension (photogr. E), type RIGID AXLE
79. Type of spring COIL
80. Stabiliser (if fitted) —
81. Number of shockabsorbers TWO
82. Type TELESCOPIC

BRAKES (photographs F and G)

90. Method of operation HYDRAULIC, DUAL- CIRCUIT 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)	4 x 36	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		mm2	sq.in.	mm2	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	7,300	mm2	sq.in.	4650 mm2	sq.in.

Make V O L V O Model 122 S F.I.A. Rec.No

ENGINE (photographs J and K)

130. Cycle 4 - STROKE
131. Number of cylinders 4
132. Cylinder arrangement IN LINE
133. Bore 88,9 ± 0,01 mm in.
134. Stroke 80,0 ± 0,01 mm in.
135. Capacity per cylinder 496,6 cm3 30,3 cu.in.
136. Total cylinder-capacity 1986 cm3 121,2 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 9,2:1
143. Volume of one combustion chamber 52,0 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 : ~~moulded~~ / 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. 36 cm 14 inches
157. Number of blades of cooling fan 5

Bearings

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

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 0,710 kg lbs

Make V O L V O Model 122 S F.I.A. Rec.No

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 42 mm 1,65 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 45 mm 1 3/4 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 V O L V O Model 122 S F.I.A. Rec.No

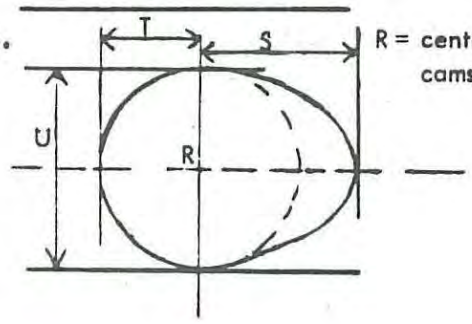
ENGINE ACCESSORIES

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 DRIVEN
238. Voltage of generator 12 volts
239. Battery, number 1
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 118 (type of horsepower: SAE) at 5.800 rpm
251. Maximum rpm 5.800 output at that figure 118 SAE
252. Maximum torque 17,0 at KGM SAE 3.500 rpm
253. Maximum speed of the car km/hour miles/hour

255.



R = centre of camshaft.

Inlet cam				
S =	21,3	mm	0,83[illegible]	inches
T =	14,6	mm	0,575	inches
U=	29,418	mm	1,158	inches
Exhaust cam				
S =	21,3	mm	0,839	inches
T =	14,6	mm	0,575	inches
U=	29,418	mm	1,158	inches

Make V O L V O Model 122 S F.I.A. Rec.No

DRIVE TRAIN

CLUTCH

260. 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 cm in. outside 21,6 cm in.
264. Method of operating clutch MECHANICAL

GEAR BOX (photograph H)

270. Manual type, make VOLVO M 40 Method of operation
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			2,62:1	33:15		
2	1,99:1	28:20			1,67:1	28:20		
3	1,36:1	22:23			1,24:1	23:22		
4	1:1				1:1			
5								
6								
reverse	3,25:1	32:19			3,25:1	32:19		

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 4,56:1 4,88:1
Number of teeth 41:9 39:8

Make V O L V O Model 122 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.

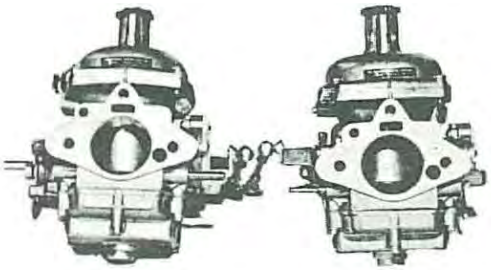
Optional equipement affecting preceeding information. This to be stated together with reference number.

CONCERNS GROUP I ONLY

CARBURETTOR

ZENITH - STROMBERG

175 CD - 2 SE



Front 237437

Rear 237438

FINAL DRIVE RATIO 4,10:1 273126

NUMBER OF TEETH 41:10

LIMITED SLIP DIFFERENTIAL SPILER/DANA "POWR-LOK" 384479

DISC WHEELS 668280

RIM DIAMETER 381 mm 15 inches

RIM WIDTH 114 mm 4½ inches

FEDERATION INTERNATIONALE DE L'AUTOMOBILE

Make V O L V O Model 122 S F.I.A. Rec.No.

CONCERNS GROUP II

Cylinder head 419894

FEDERATION INTERNATIONALE DE L'AUTOMOBILE

F. I. A. Recognition No.
FIA Identifieringskort Nr 5310/1/15
GR II

KUNGL AUTOMOBIL KLUBBEN
THE ROYAL SWEDISH AUTOMOBILE CLUB

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

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valid from / gällande fr. o. m. 1/1/70 - List 70/4 — 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: Volvo 122S

Date when the first vehicles in this stage of development were manufactured / Tillverkningsdatum för de första fordonen av denna vidareutveckling: 1st of February, 1970

Serial No. of the type inaugurating this extension / Nummerserie för denna utvecklade typ: 133341312500

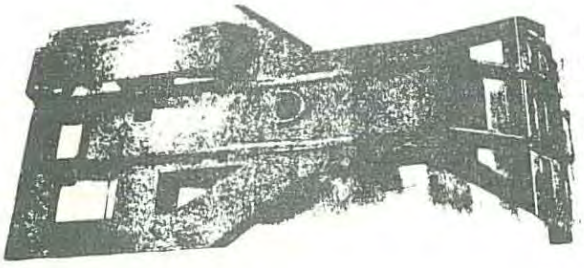
The / Modellen: 122S — recognized in Category / klassad i kategori: Group I

by the F.I.A. on the / av FIA den: 1st of January, 1970 — List / Lista: 70/1 — as a normal / som normal

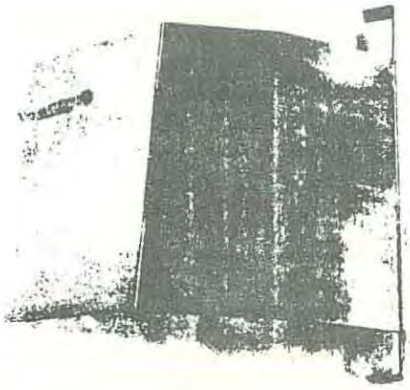
development of the original vehicle type. / utveckling av vagnstypen

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

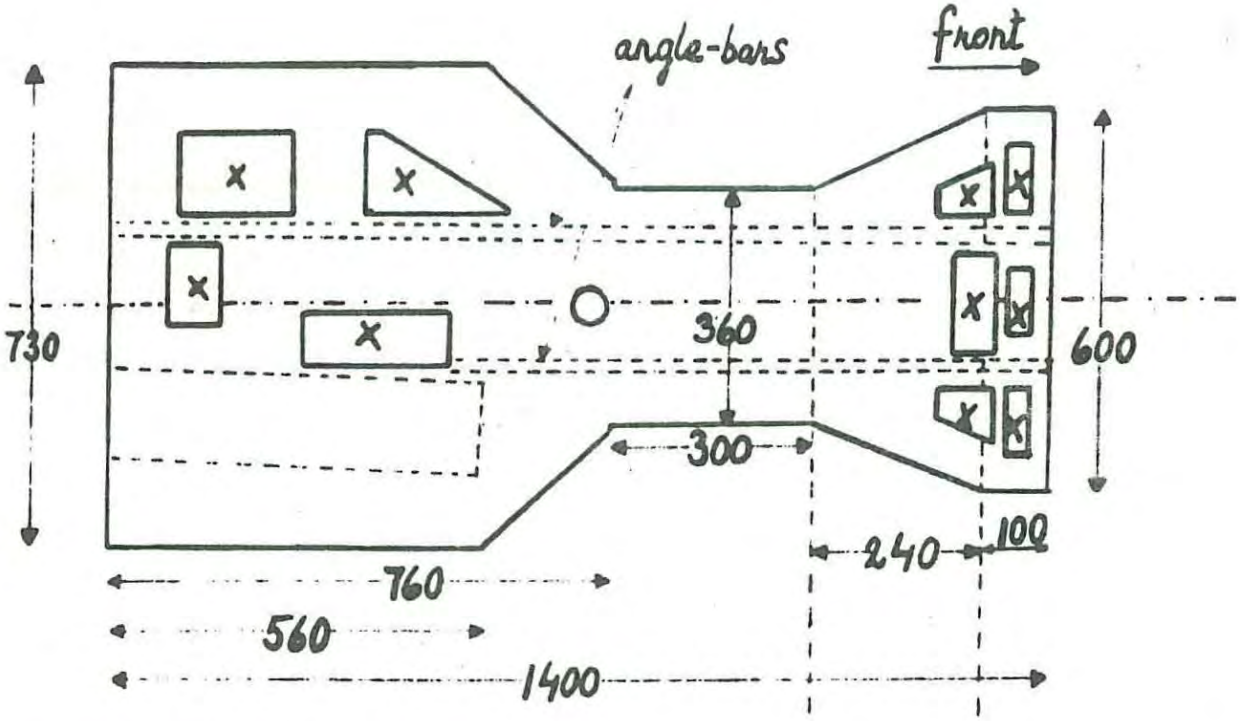


Protection plate - front, steel — Part No. / Det. Nr. 552107
Skyddsplåt - främre, stål
Same as above - of aluminium — Part No. / Det. Nr. 552111
Som ovan - av aluminium



Protection plate - rear, steel — PartNo. / Det. Nr. 552108
Skyddsplåt - bakre, stål
Same as above - of aluminium — PartNo. / Det. Nr. 552112
Som ovan - av aluminium

PROTECTION PLATE, FRONT VOLVO 122 S



X = Holes cut out to reduce weight.

Two angle-bars — 25 x 25 x 4 mm — welded alongside bottom of protection plate.

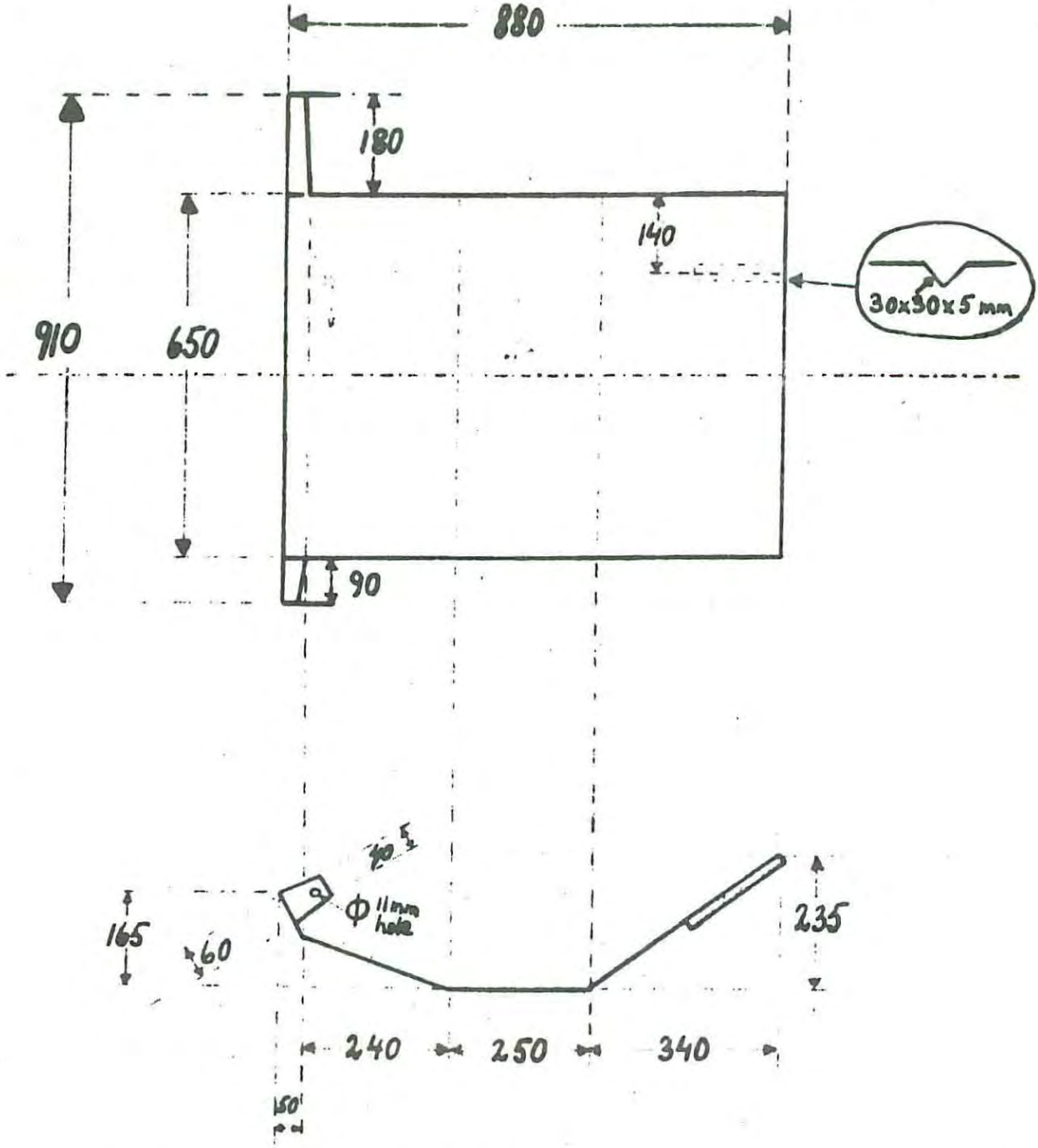
Material: 4 mm steel-plate.

Weight: 31 kilos. 68.2 lb.

Scale: 1:10

0 100 200 300 400 500 mm

PROTECTION PLATE, REAR VOLVO 122 S



Material: 5 mm steel-plate.

Weight: 33 ½ kilos.

73.7 kg

Scale: 1:10

0 100 200 300 400 500 mm

KUNGL AUTOMOBIL KLUBBEN

5313/GR II
1/15

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

No. / Nr	Make / Märke	Type / Typ
	VOLVO	Volvo 122S

Photographic documentation / Fotografier

Front axle cross-member
Framaxelbalk

PartNo. / Det. Nr. 525781

Lower wishbone - LEFT
Nedre länkarm - VÄNSTER

PartNo. / Det. Nr. 552133

Stockholm den 21/1 1920

KUNGL AUTOMOBIL KLUBBEN

SVENSKA [illegible]

F.I.A. Recognition No 5208
Group 1 - Series - Production
Touring

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 1425
Serial No of chassis 1 Manufacturer A.B. Volvo
engine 9688 Manufacturer A.B. Volvo
Recognition is valid from 1st. Jan. 68 List 1968/1

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 specifications of this form was reached on 1/10 1967

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 .....

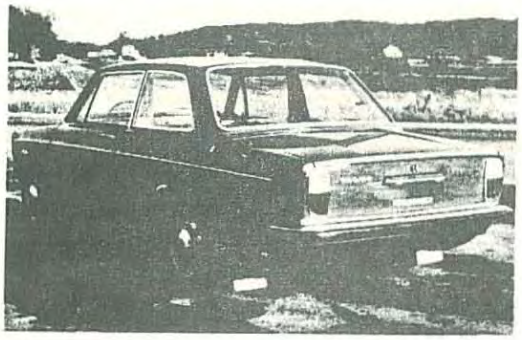
Stamp and signature of the National Sporting Authority

Stamp and signature of the F.I.A.

FEDERATION INTERNATIONALE DE L'AUTOMOBILE

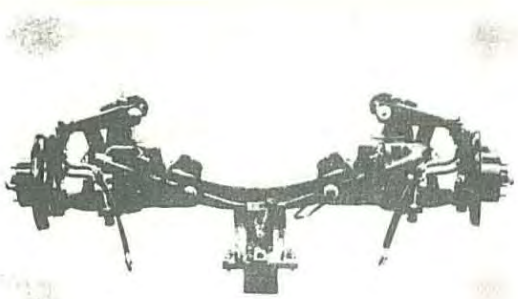
Make Volvo Model 142 S F.I.A. Rec.No

Photograph B

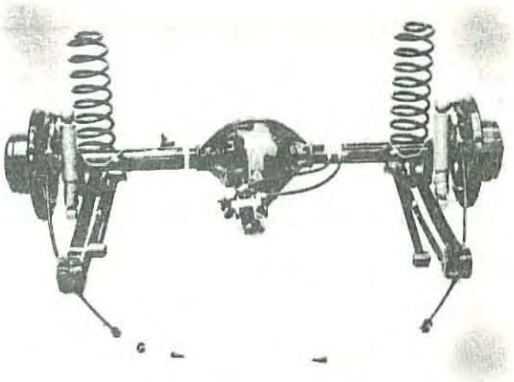


Photograph C

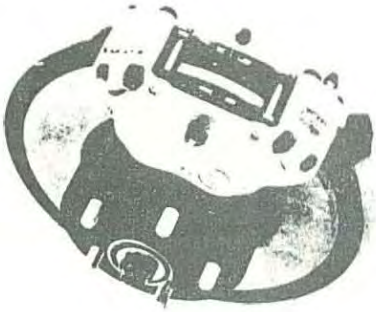
Photograph D



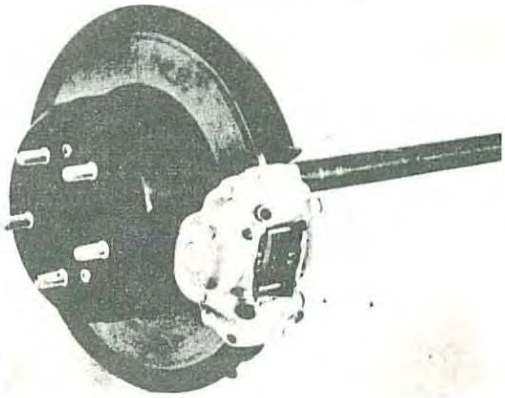
Photograph E



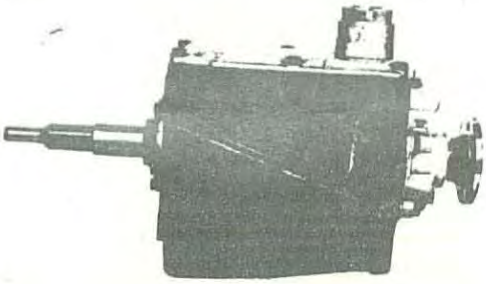
Photograph F



Photograph G



Photograph H

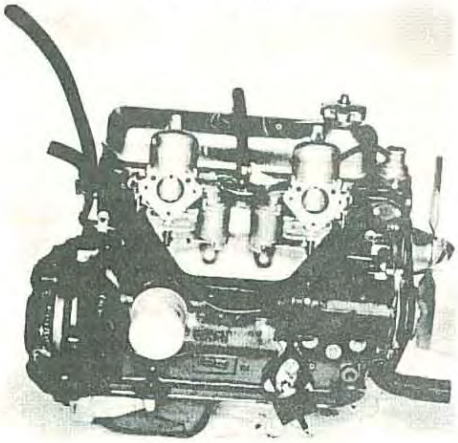


Photograph I

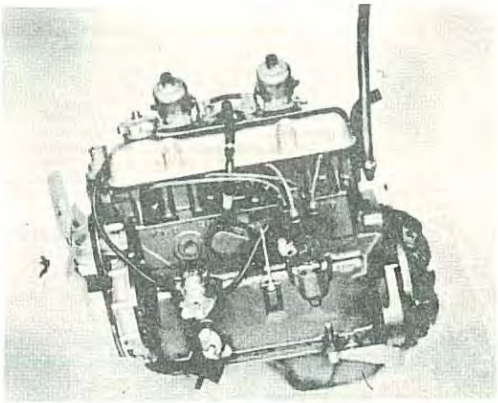
FEDERATION INTERNATIONALE DE L'AUTOMOBILE

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

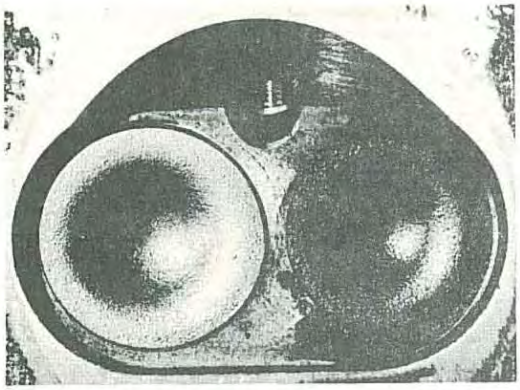
Photograph J



Photograph K

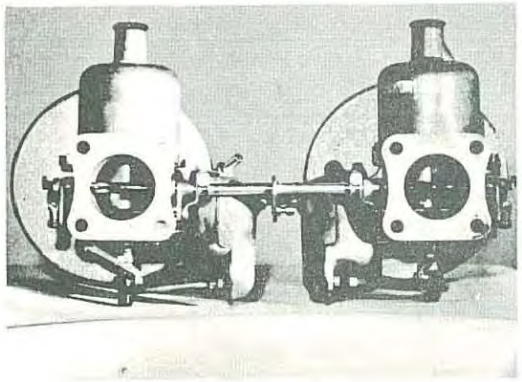


Photograph L

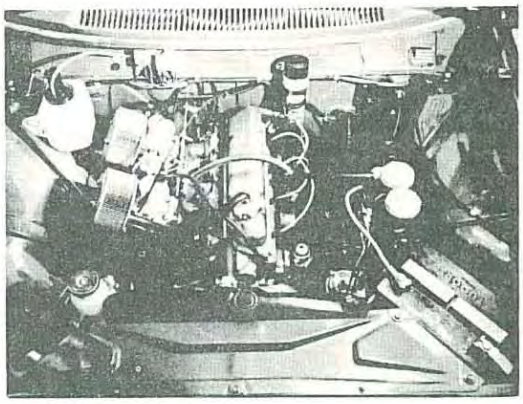


Photograph M

Photograph N



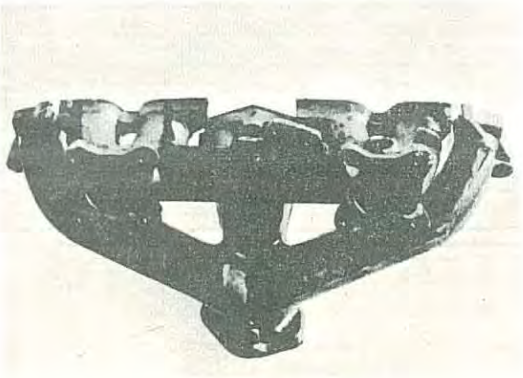
Photograph O



Photograph P

Photograph Q

inlet manifold



FEDERATION INTERNATIONALE DE L'AUTOMOBILE

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

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

Ø 36 ± 0,31

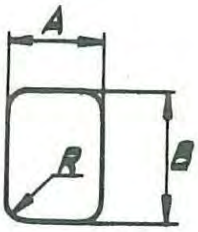
Drawing of entrance to inlet port of cylinder-head. Indicate scale or dimensions and manufacturing tolerance.

Ø 36 ± 0,31

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

A = 27 ± 0,8
B = 40 ± 0,8
R = 5 ± 0,8

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



A = 25 ± 0,8
B = 38 ± 0,8
R = 4 ± 0,8

FEDERATION INTERNATIONALE DE L'AUTOMOBILE

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

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 2600 mm 102 1/2 inches
2. Front track 1350 mm 53 1/8 inches *
3. Rear track 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. Capacity of fuel tank (reserve included) 58 ltrs
   15 Gallon US 13 Gallon Imp.
8. Seating capacity 5
9. Weight , 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	
1 foot/pied	- 30.4794 cm	1 pint (pt)	
1 square inch/pouce carré	- 6.452 cm2	1 gallon Imp.	
1 cubic inch/pouce cube	- 16.387 cm3	1 gallon US	
1 pound/livre (l b)	- 453.593 gr.	1 hundred weight (cwt)	- 50.802 kg

FEDERATION INTERNATIONALE DE L AUTOMOBILE

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

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 - ~~no~~
39. Air-conditioning : ~~yes~~ - no
40. Ventilation : yes - ~~no~~
41. Front seats, type of seat and upholstery SEPARATE SEATS, COMBINATION OF CLOTH AND 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, CLOTH AND 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

FÉDÉRATION INTERNATIONALE DE L'AUTOMOBILE

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

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		mm2	sq.in.		mm2	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*	mm2	sq.in.	*4650*	mm2	sq.in.

FEDERATION INTERNATIONALE DE L'AUTOMOBILE

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

ENGINE (photographs J and K)

130. Cycle *4-STROKE*
131. Number of cylinders *4*
132. Cylinder arrangement *IN LINE*
133. Bore *84,14 ± 0,01* 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 : [redacted] / stamped
148. Type of crankshaft : integral/.....
149. Number of crankshaft main bearings *5*
150. Material of bearing cap *CAST IRON*
151. System of lubrication : [redacted] / oil in sump
152. Capacity, lubricant *3,75* ltrs pts quarts US
153. Oil cooler: [redacted] / 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

FEDERATION INTERNATIONALE DE L'AUTOMOBILE

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

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

FEDERATION INTERNATIONALE DE L'AUTOMOBILE

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

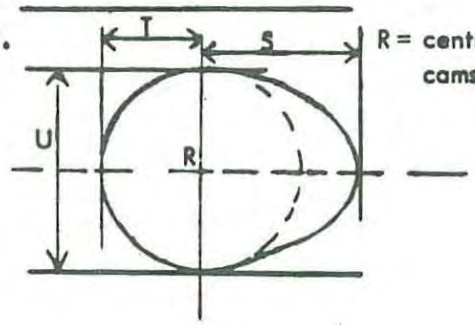
ENGINE ACCESSORIES

230. Fuel pump : mechanical ~~/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* volts
239. Battery, number *1*
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

255.



R = centre of camshaft.

Inlet cam

S = *21,3* mm *0,83* inches

T = *14,6* mm inches

U= *29,418* mm inches

Exhaust cam

S = *21,3* mm *0,83* inches

T = *14,6* mm inches

U= *29,418* mm inches

FEDERATION INTERNATIONALE DE L'AUTOMOBILE

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

DRIVE TRAIN
CLUTCH

260. 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* cm in. 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 *FOURT 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*

FEDERATION INTERNATIONALE DE L'AUTOMOBILE

Make *VOLVO* Model *142 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 equipement affecting preceeding 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*

FEDERATION INTERNATIONALE DE L'AUTOMOBILE

group II only

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

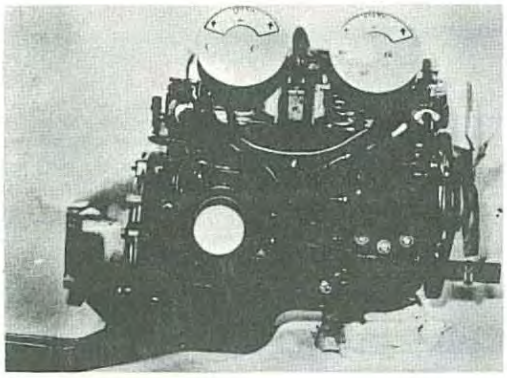
IGNITION COIL	239499
SPARK PLUG W 280 T135	240571
SPARK PLUG W 240 T1	238624

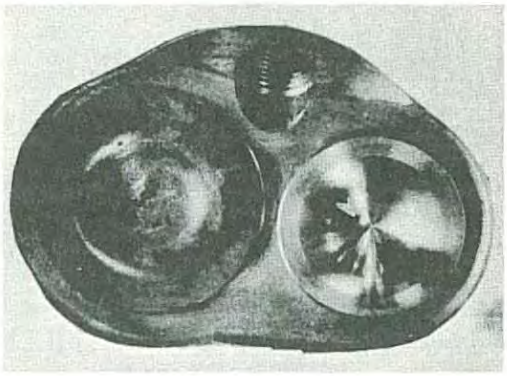
ENGINE DATA TO BE ALTERED AS FOLLOWS:

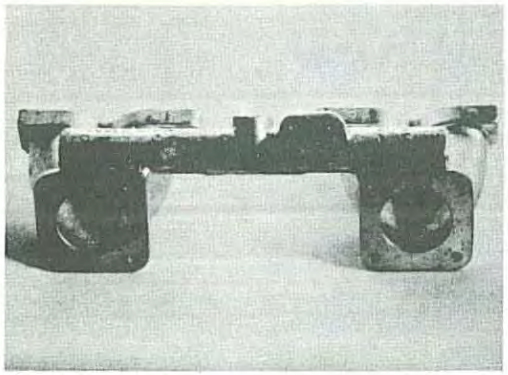
COMPRESSION RATIO 11,1:1

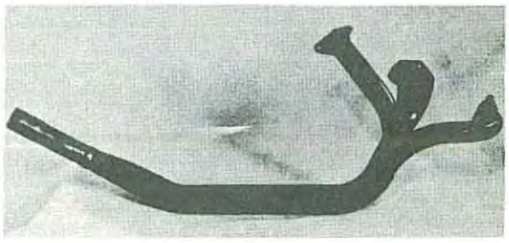
VOLUME OF ONE COMBUSTION CHAMBER 38,5 CM^3

	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









FEDERATION INTERNATIONALE DE L'AUTOMOBILE

F.I.A. Recognition No 5314

Group 1

FEDERATION INTERNATIONALE DE L' AUTOMOBILE

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

Manufacturer AB VOLVO

Serial No of chassis 52900
engine 1

Recognition is valid from 1/1/72

Cylinder-capacity 1986 cm3 121,2 in3
Model 142 S
Manufacturer AB VOLVO
Manufacturer AB VOLVO
List 70/1

The manufacturing of the model described in this recognition form was started on 15.8.1968 and the minimum production of 5.000 identical cars, in accordance with the specifications of this form was reached on 15.11.1968

Photograph A, 3/4 view of car from front

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

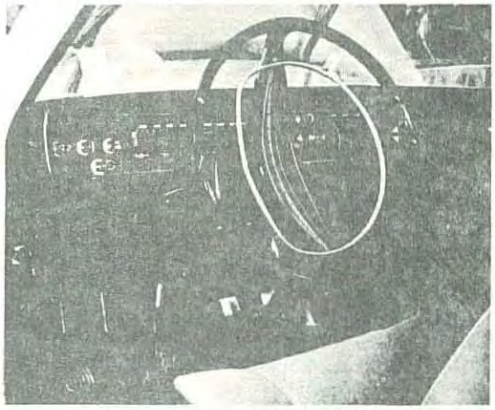
Variants	Normal evolution of the type
on ..... 19.. rec.No .....List	on .....19.. rec.No.....List.....
on ..... 19.. rec.No .....List	on .....19.. rec.No.....List.....
on ..... 19.. rec.No .....List	on .....19.. rec.No.....List.....
on ..... 19.. rec.No .....List	on .....19.. rec.No.....List.....
on ..... 19.. rec.No .....List	on .....19.. rec.No.....List.....

Stamp and signature of the National Sporting Authority

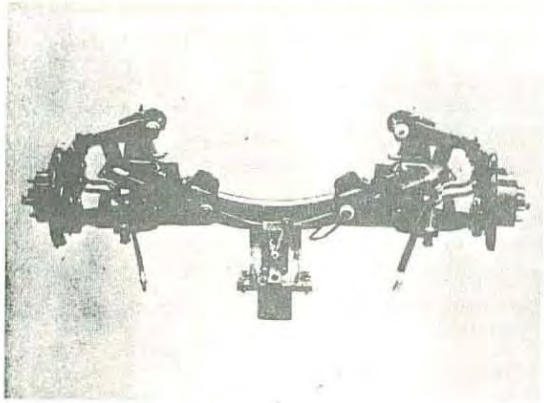
Stamp and signature of the F.I.A.

Photograph B

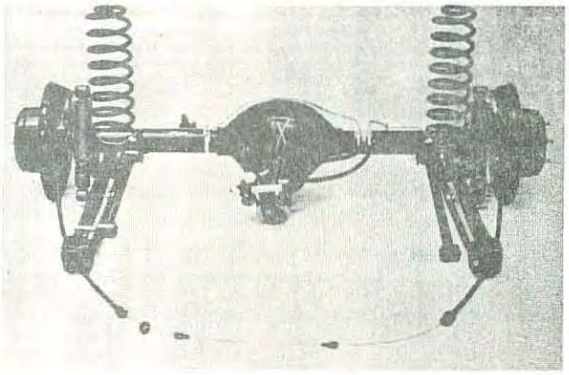
Photograph C



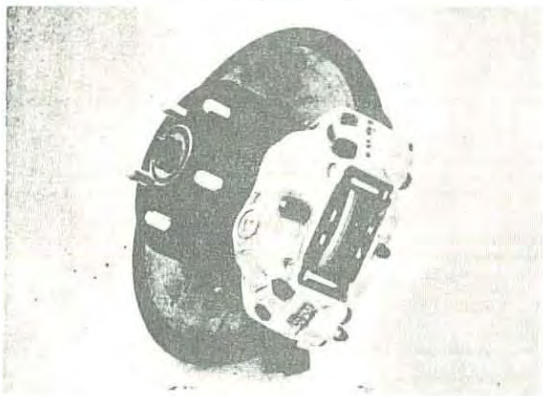
Photograph D



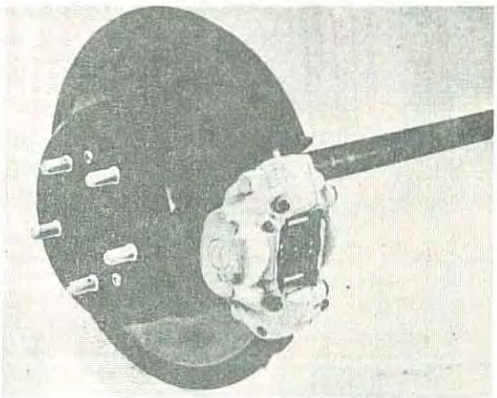
Photograph E



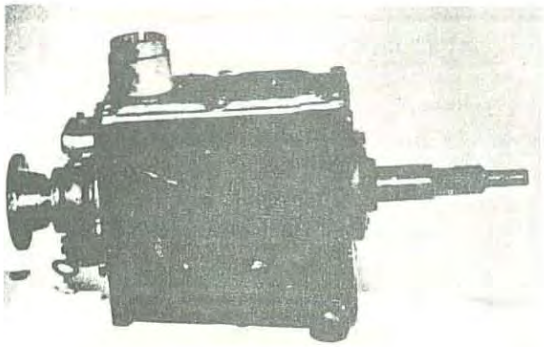
Photograph F



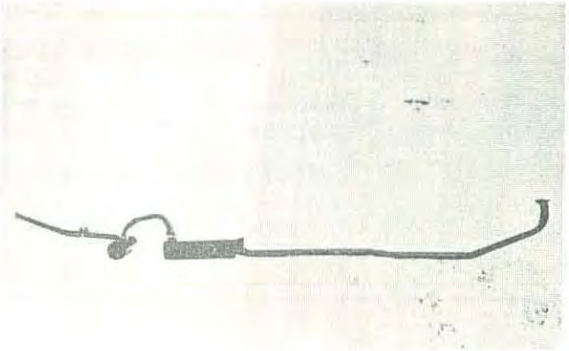
Photograph G



Photograph H

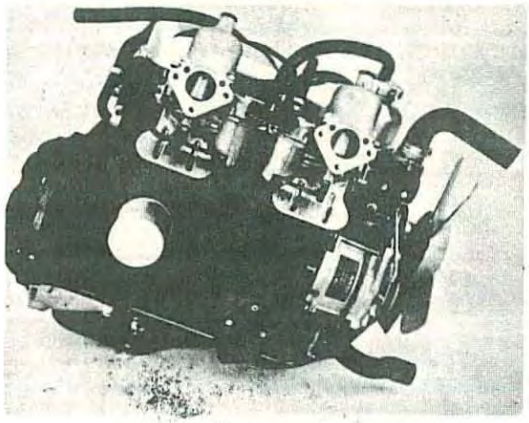


Photograph I

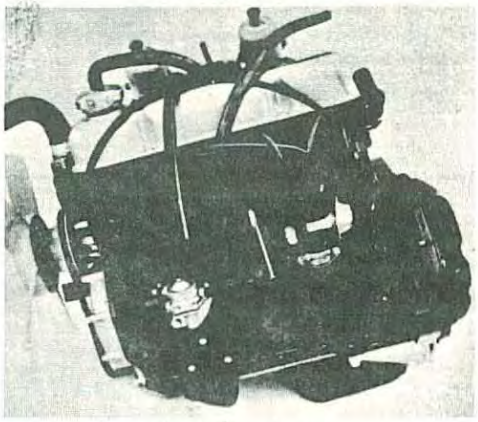


Make VOLVO Model 142 S F.I.A. Rec.No

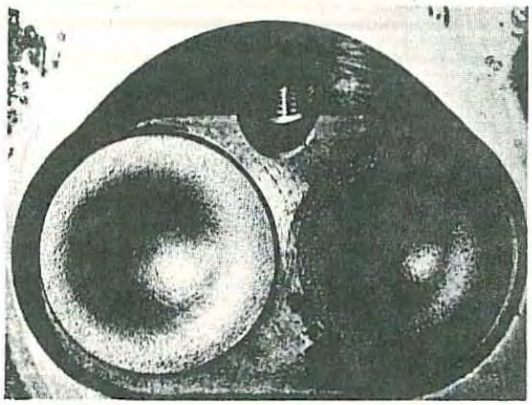
Photograph J



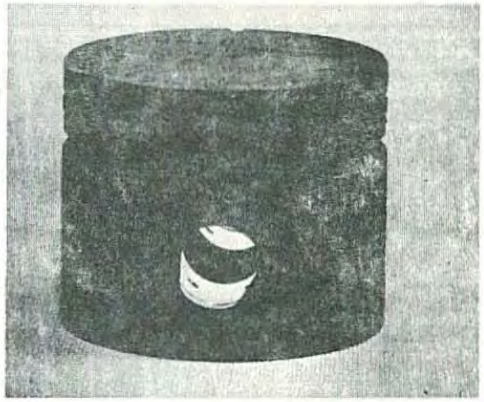
Photograph K



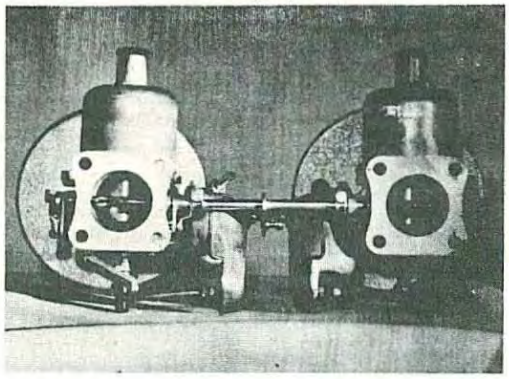
Photograph L



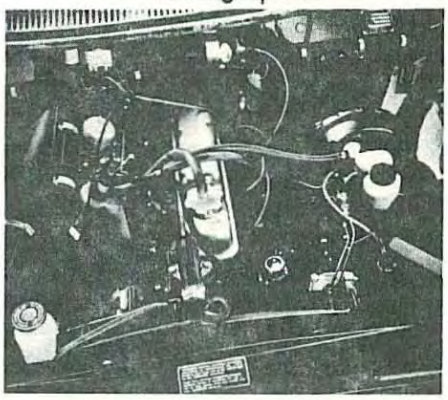
Photograph M



Photograph N



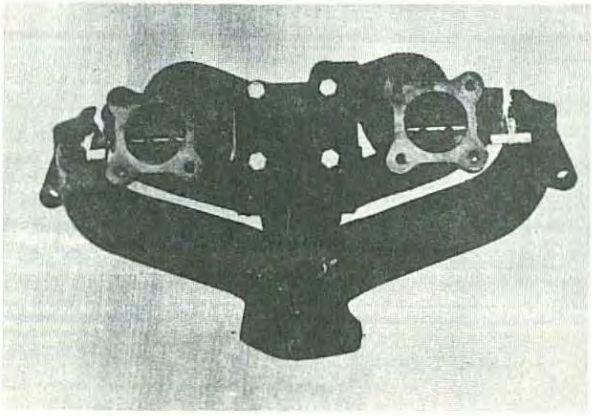
Photograph O



Photograph P

Photograph Q

inlet manifold



Make VOLVO | Model 142 S | F.I.A. Rec.No

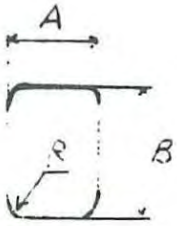
Drawing inlet manifold ports, side of cylinder-head. Indicate scale or dimensions and manufacturing tolerance.

$\phi\ 36\ ^{+0,25}_{-0}$

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

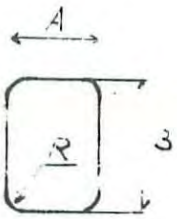
$\phi\ 36\ ^{+0,25}_{-0}$

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



A = 27 ± 0,7
B = 40 ± 0,7
R = 5 ± 1

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



A = 25 ± 0,7
B = 40 ± 0,7
R = 4 ± 1

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

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 2600 mm 102 1/2 inches
2. Front track 1350 mm 53 1/8 inches *
3. Rear track 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. Capacity of fuel tank (reserve included) 58 ltrs
   15 Gallon US 13 Gallon Imp.
8. Seating capacity 5
9. Weight , total weight of the car with normal equipment, water, oil and spare wheel but without fuel nor repair tools:

   1120 kg 2464 lbs 22,40 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	- [illegible] ltrs
1 foot/pied	- 30.4794 cm	1 pint (pt)	0.568 ltrs
1 square inch/pouce carré	- 6.452 cm2	1 gallon Imp.	- 4.546 ltrs
1 cubic inch/pouce cube	- 16.387 cm3	1 gallon US	- 3.785 ltrs
1 pound/livre (l b)	- 453.593 gr.	1 hundred weight (cwt)	- 50.802 kg

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

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 (Steel)
25. Material (s) of bonnet SHEET METAL (Steel)
26. Material (s) of boot lid SHEET METAL (Steel)
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 - ~~no~~
39. Air-conditioning : ~~yes~~ - no
40. Ventilation : yes - ~~no~~
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

FEDERATION INTERNATIONALE DE L'AUTOMOBILE

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

SUSPENSION

70. Front suspension (photogr. D), type INDIVIDUAL
71. Type of spring COIL
72. Stabiliser (fitted) YES
73. Number of shockabsorbers TWO
74. Type TELESCOPIC

78. Rear suspension (photogr. E), type RIGID AXLE
79. Type of spring COIL
80. Stabiliser (if fitted)
81. Number of shockabsorbers TWO
82. Type TELESCOPIC

BRAKES (photographs F and G)

90. Method of operation HYDRAULIC, DUAL-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		mm2	sq.in.		mm2	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	mm2	sq.in.	4650	mm2	sq.in.

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

ENGINE (photographs J and K)

130. Cycle 4-STROKE
131. Number of cylinders 4
132. Cylinder arrangement IN LINE
133. Bore 88,9 $^{+0,01}_{-0}$ mm 3,5 in.
134. Stroke 80,0 ± 0,01 mm 3,15 in.
135. Capacity per cylinder 496,6 cm3 30,3 cu.in.
136. Total cylinder-capacity 1986 cm3 121,2 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 ONE
140. Number of inlet ports 4
141. Number of exhaust ports 4
142. Compression ratio 9,2:1
143. Volume of one combustion chamber 52,0 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 : ~~moulded~~ / 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. 36 cm 14 inches
157. Number of blades of cooling fan 5

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 0,710 kg lbs

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

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 42 mm 1,65 inches
182. Max. valve lift 110,2 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

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 1 3/4 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

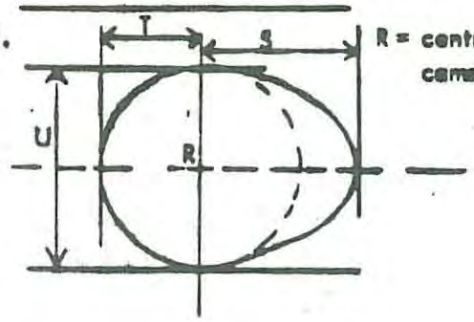
ENGINE ACCESSORIES

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 volts
239. Battery, number 1
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 118 (type of horsepower SAE) at 5.800 rpm
251. Maximum rpm 5.800 output at that figure 118 SAE
252. Maximum torque 17,0 KGMt SAE at 3.500 rpm
253. Maximum speed of the car km/hour miles/hour

255.



R = centre of camshaft.

Inlet cam

S = 21,3	mm	0,839	inches
T = 14,6	mm	0,575	inches
U= 29,418	mm	1,158	inches

Exhaust cam

S = 21,3	mm	0,839	inches
T = 14,6	mm	0,575	inches
U= 29,418	mm	1,158	inches

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

DRIVE TRAIN
CLUTCH

260. 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 cm in. outside 21,6 cm in.
264. Method of operating clutch MECHANICAL

GEAR BOX (photograph H)

270. Manual type, make VOLVO M 40 Method of operation
271. No of gear-box ratios forward 4
272. Synchronized forward ratios 4
273. Location of gear-shift CENTRE FLOOR LEVEL
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			2,62:1	33:15		
2	1,99:1	28:20			1,67:1	28:20		
3	1,36:1	22:23			1,24:1	23:22		
4	1:1				1:1			
5								
6								
reverse	3,25:1	32:19			3,25:1	32:19		

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 4,56:1 4,88:1
Number of teeth 41:9 39:8

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

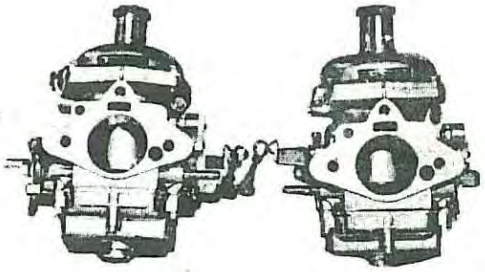
IMPORTANT - The conformity of the car with the following items of the present recognition form is to be disregarded during the scrutineering, when the vehicle has been entered in group 2 (Touring cars) or 3 (Grand Touring cars) : 41, 72, 80, 91, 142, 143, 144, 145, 146, 153, 156, 157, 160, 161, 162, 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 equipement affecting preceeding information. This to be stated together with reference number.

CONCERNS GROUP I ONLY

CARBURETTOR
ZENITH - STROMBERG
175 CD - 2 SE



Front 237437
Rear 237438

ELECTRICALLY OPERATED OVERDRIVE LAYCOCK TYPE "J"		254561
LIMITED SLIP DIFFERENTIAL SPICER/DANA "POWR-LOK"		384727
FINAL DRIVE RATIO	4,10:1	273126
NUMBER OF TEETH	41:10	

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

CONCERNS GROUP II

CYLINDER HEAD

419894

FEDERATION INTERNATIONALE DE L'AUTOMOBILE

F. I. A. Recognition No.
FIA Identifieringskort Nr 5014/1/15
GR II

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. 1/4/70 List 70/4 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: VOLVO 142 S

Date when the first vehicles in this stage of development were manufactured / Tillverkningsdatum för de första fordonen av denna vidareutveckling: 1st of February, 1970

Serial No. of the type inaugurating this extension / Nummerserie för denna utvecklade typ: 1421341052900

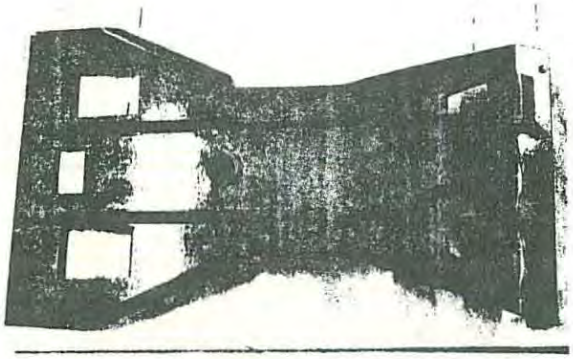
The / Modellen: 142 S recognized in Category / klassad i kategori: Group I

by the F.I.A. on the / av FIA den: 1st of January, 1970 List / Lista: 70/1 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



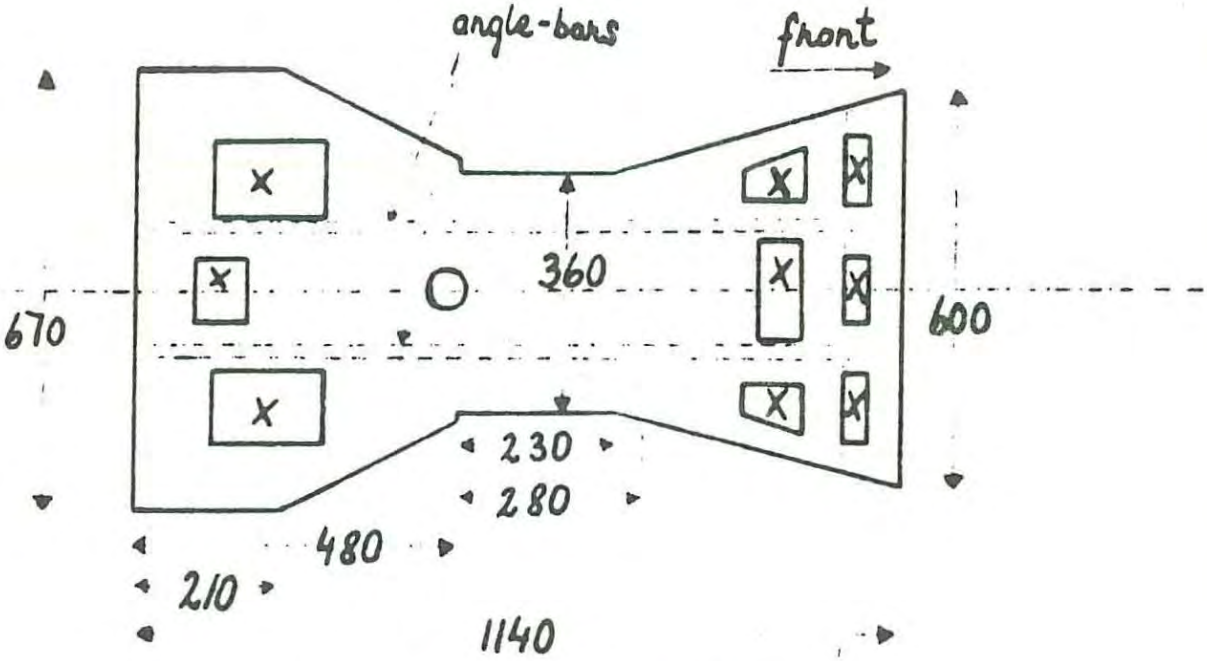
Protection plate - front, steel / Skyddsplåt - främre, stål — Part No. / Detaljnr 552109

Same as above - of aluminium / Som ovan - av aluminium — Part No. / Detaljnr 552113

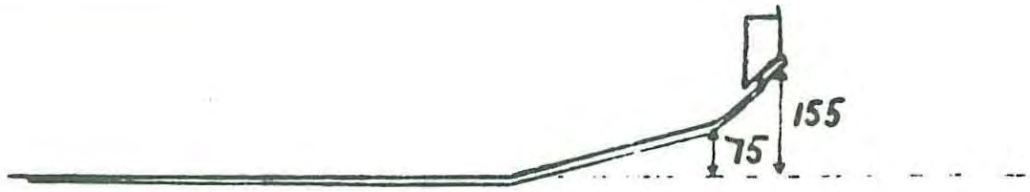
Protection plate - rear, steel / Skyddsplåt - bakre, stål — Part No. / Detaljnr 552110

Same as above - of aluminium / Som ovan - av aluminium — Part No. / Detaljnr 552114

PROTECTION PLATE, FRONT VOLVO 142 S



X = Holes cut out to reduce weight.



Two angle-bars – 25 x 25 x 4 mm – welded alongside bottom of protection plate.

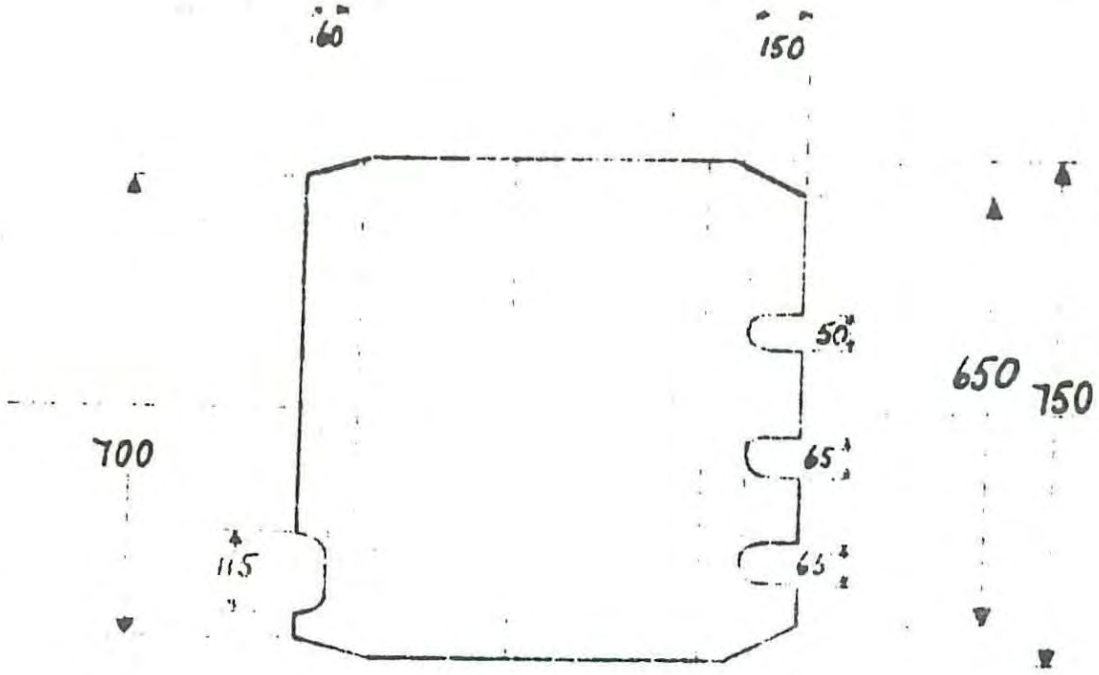
Material: 4 mm steel-plate.
Weight: 26 ½ kilos.

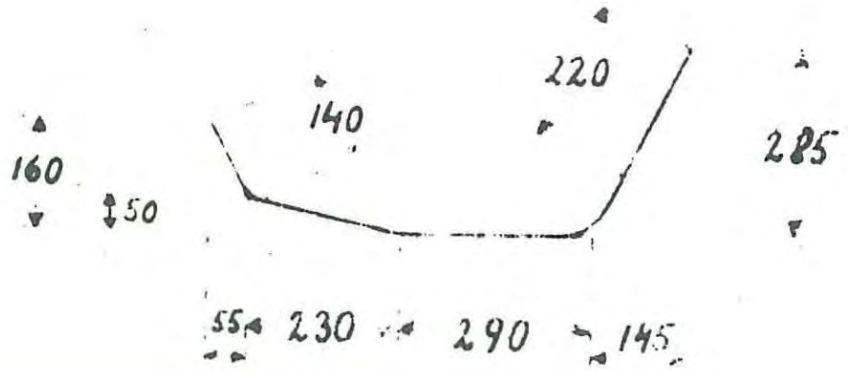
58,3 lbs.

Scale: 1:10

0 100 200 300 400 500 mm

PROTECTION PLATE, REAR VOLVO 142 S





Material: 4 mm steel-plate.

Weight: 26 kilos.

57.2 lbs.

Scale: 1:10

0 100 200 300 400 500 mm

KUNGL AUTOMOBIL KLUBBEN 5314 1/10

Form of Recognition (Normal development of original vehicle type)

Identifieringskort (Normal utveckling av vagnstypen)

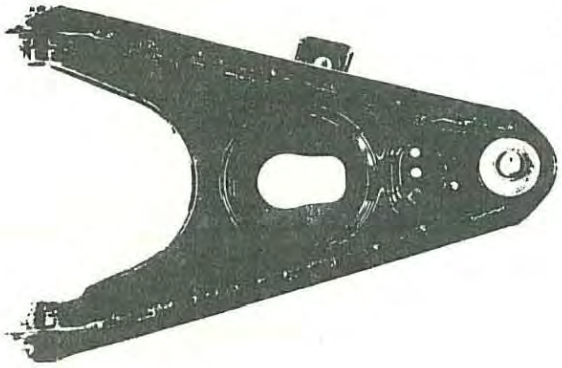
No. Nr	Make Märke	VOLVO	Type Typ	VOLVO 142 S

Photographic documentation
Fotografier

Front axle cross member — Part No. 552130
Framaxelbalk — Detaljnr

Lower wishbone - LEFT — Part No. 552131
Nedre länkarm - VÄNSTER — Detaljnr

Same as above - RIGHT — Part No. 552132
Som ovan - HÖGER — Detaljnr



Stockholm den 19

KUNGL AUTOMOBIL KLUBBEN

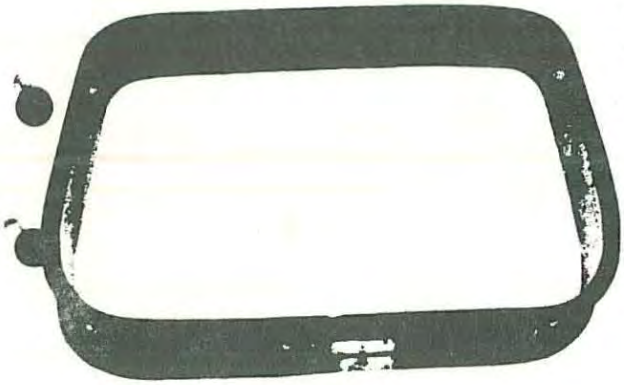
KUNGL AUTOMOBIL KLUBBEN 5314/1/45

Form of Recognition (Normal development of original vehicle type)

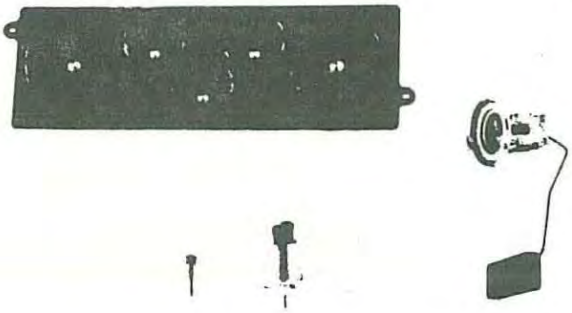
Identifieringskort (Normal utveckling av vagnstypen)

No. / Nr	Make / Märke	Type / Typ
	VOLVO	VOLVO 142 S

Photographic documentation / Fotografier



Frame for fuel tank — Part No.
Mellanläggsram för bränsletank — Detaljnr 552221



Instrument panel — Part No.
Instrumentpanel — Detaljnr 552701

Stockholm den 19

KUNGL AUTOMOBIL KLUBBEN

KUNGL AUTOMOBIL KLUBBEN 5314 1/1/16

Form of Recognition (Normal development of original vehicle type)

Identifieringskort (Normal utveckling av vagnstypen)

No. / Nr	Make / Märke	Type / Typ
	VOLVO	VOLVO 142 S

Photographic documentation
Fotografier

Safari kit Safarisats	Part No. Detaljnr	552120
Consisting of: Plate(s) for Bestående av: Plåt(ar) för		
1. Side member - front LEFT Sidobalk - främre VÄNSTER	Part No. Detaljnr	552121
Same as above - RIGHT Som ovan - HÖGER	Part No. Detaljnr	552122
2. Side member - rear LEFT Sidobalk - främre VÄNSTER	Part No. Detaljnr	552123
Same as above - rear RIGHT Som ovan - bakre HÖGER	Part No. Detaljnr	552124
3. Inner wheel housing - rear LEFT Inre hjulhus - bakre VÄNSTER	Part No. Detaljnr	552125
Same as above - rear RIGHT Som ovan - bakre HÖGER	Part No. Detaljnr	552126
4. Upper attachment for rear shockabsorbers (2) Övre stötdämparfäste bak (2)	Part No. Detaljnr	552127

Stockholm den 27/1 19 7

KUNGL AUTOMOBIL KLUBBEN

SVENSKA [illegible]

2 Competition Parts

Avdelning 2 *Tävlingsdetaljer*
Section 2 *Competition parts*

Nr No	REGISTER	INDEX
0	Prislista	Price list
1	Trimningsdetaljer för B18	Tuning parts for B18
2	Trimningssats B20	Tuning kit B20
3	Motorpaket	Engine package
4	Avgassystem, P140	Exhaust system, P140
5	Kraftöverföring, P130	Power transmission, P130
6	Kraftöverföring, P140	Power transmission, P140
7	Hjulupphängning, fjädrar, bromsar, P130	Suspension, springs, brakes, P130
8	Hjulupphängning, fjädrar, bromsar, P140	Suspension, springs, brakes, P140
9	Skyddsplåtar	Protection plates
10	Förarstol	Drivers' seat
11	Instrument	Instruments
12	El-utrustning	Electrical equipment
13	Säkerhetsdetaljer	Safety parts
14	Däck	Tyres
15	Karosseriförstärkning, P140	Body reinforcement, P140
16	Plastdetaljer, P140	Plastic parts, P140
17	Förgasarsats	Carburettor kit
18	Reglagesats för SOLEX-förgasare	Control kit for SOLEX-carburettor
19	SOLEX-detaljer	SOLEX-parts
20	Jackor, tröjor, T-shirts	Jackets, sweaters, T-shirts
21	Diverse tillbehör	Various accessories

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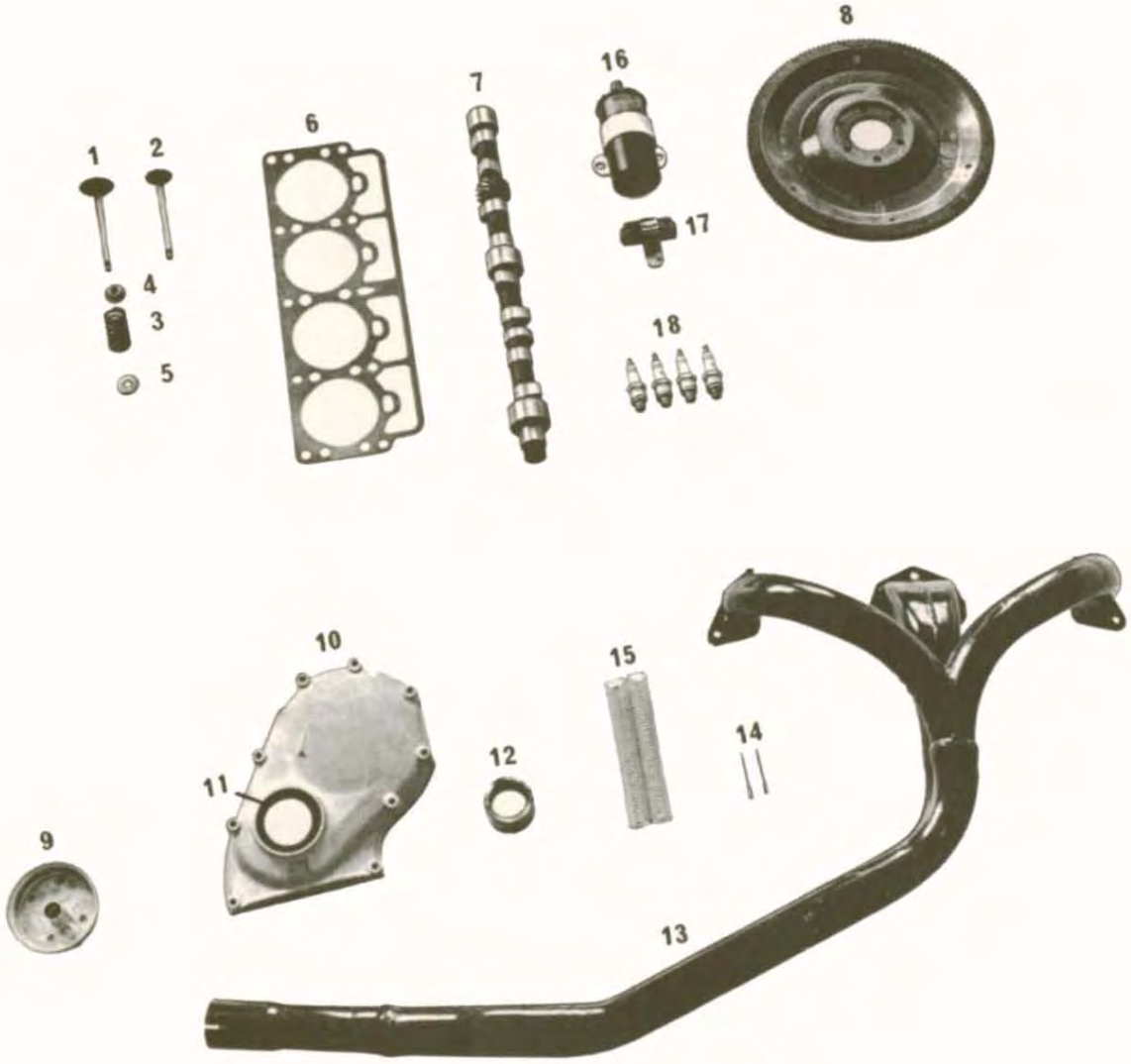
Produktion: PUBLIKATIONSERVICE/HolmQvists Tryckeri. 1972



Trimningsdetaljer för motor B18

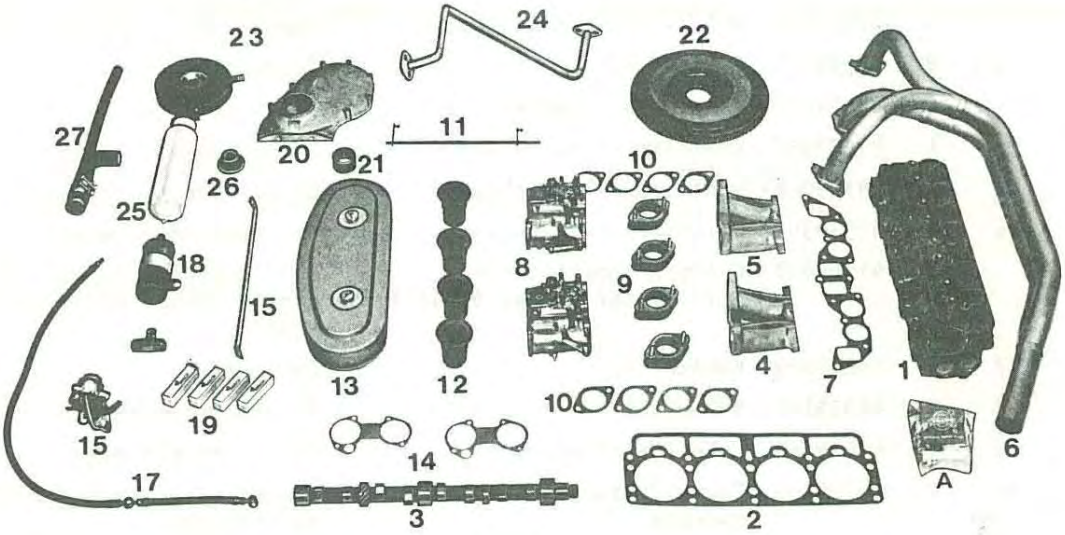
Tuning parts for B18 engine

VOLVO

Competition Service

Prod	P130, P140	Avd Section	2
	TRIMNINGSDETALJER B18 TUNING PARTS B18	Nr No	1:1
Datum Date	December 1972		

Pos	Ant Qty	Det nr Part No	Benämning	Designation
1	4	419315-7	Insugningsventil	Inlet valve
2	4	419316-5	Avgasventil	Exhaust valve
3	8	418737-3	Ventilfjäder	Valve spring
4	8	403500-2	Bricka för ventilfjäder	Washer for valve spring
5	8	405357-5	Skyddsring	Protective ring
	16	403315-5	Ventillås (knaster)	Valve collet
	4	419378-5	Ventilstyrning, insug	Guide sleeve, inlet valve
	4	403390-8	Ventilstyrning, avgas	Guide sleeve, exhaust valve
6	1	419393-4	Cylinderlockspackning	Cylinder head gasket
	1	419658-0	Cylinderlockspackning (till motor borrad 0,040")	Cylinder head gasket (for engine re-borred to 0,040" over-zise)
7	1	419258-9	Kamaxel D	Camshaft D
8	1	419392-6	Svänghjul	Flywheel complete
9	1	419395-9	Lock för oljepump	Cover for oil pump
10	1	418693-8	Transmissionskåpa inkl packbox	Transmission casing including packing box
11	1	418668-0	Packbox för ovanstående	Packing box for above
12	1	418264-8	Nav för remskiva	Hub for belt pulley
13	1	419381-9	Avgasgrenrör	Branched exhaust manifold
14	2	237248-0	Bränslenål	Metering needle
15	2	71816-3	Fjäder för vakuumkolv (rödmärkt)	Spring for vacuum plunger
16	1	241086-8	Tändspole	Ignition coil
17	1	241612-1	Förkopplingsmotstånd	Resistance
18	4	240571-0	Tändstift Bosch W280T13S	Spark plug Bosch W280T13S
	4	238624-1	Tändstift Bosch W240T1	Spark plug Bosch W240T1



Trimningssats B20 Det nr 552861-7

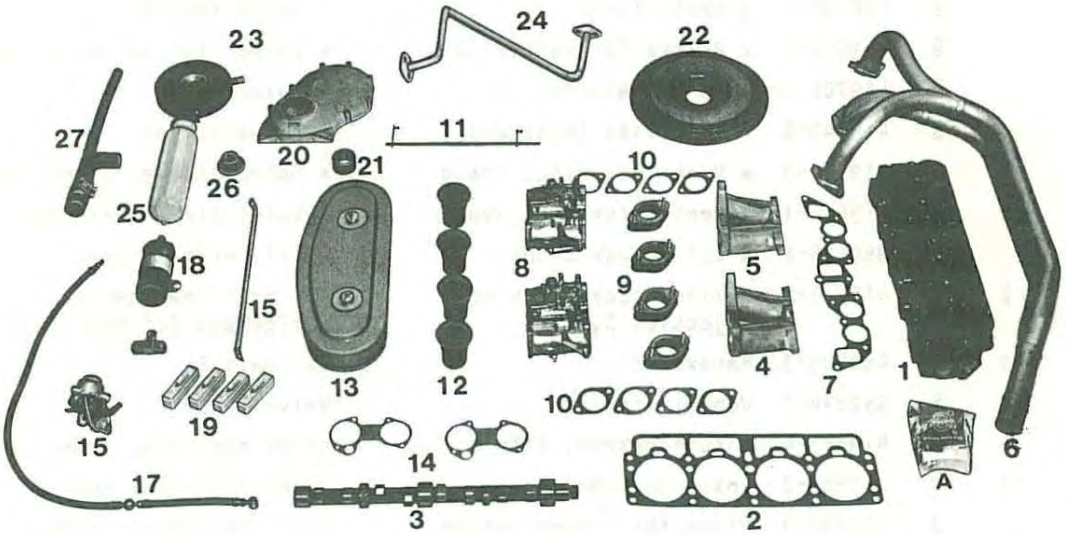
Tuning kit B20 Part No 552861-7

VOLVO

Competition Service

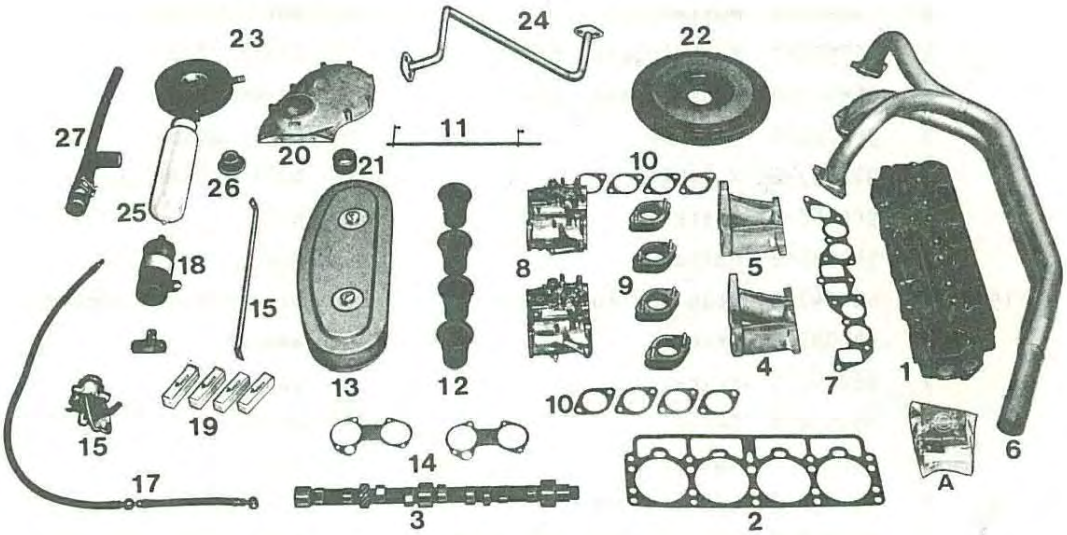
Prod	P130, P140 TRIMNINGSSATS B20 TUNING KIT B20	Avd Section	2
		Nr No	2:1
Datum Date	December 1972		

Pos	Ant Qty	Det nr Part No	Benämning	Designation
		552861-7	Trimningssats B20 Steg I, kpl	Tuning kit B20 Stage I, complete
1	1	419882-6	Cylinderlock kpl	Cylinder head complete
	4	419766-1	x Insugningsventil	x Inlet valve
	4	419735-6	x Avgasventil	x Exhaust valve
	8	418737-3	x Ventilfjäder	x Valve spring
	8	419644-0	x Bricka för ventilfjäder	x Washer for valve spring
	8	419702-6	x Ventiltätning	x Valve seal
	16	419643-2	x Ventillås (knaster)	x Valve collet
	4	419652-3	x Ventilstyrning, insug	x Guide sleeve, inlet valve
	4	419653-1	x Ventilstyrning, avgas	x Guide sleeve, exhaust valve
	2	950586-8	x Cylindrisk pinne	x Cylindrical stud
2	1	419763-8	Cylinderlockspackning (tjocklek 0,8 mm)	Cylinder head gasket (thickness 0,8 mm)
3	1	460509-3	Kamaxel F	Camshaft F
	8	552844-3	Ventillyftare	Valve tappet
4	1	419883-4	Insugningsrör, främre	Inlet manifold, front
5	1	419884-2	Insugningsrör, bakre	Inlet manifold, rear
	2	422635-3	Plugg för insugningsrör	Plug for inlet manifold
	1	952075-0	Plugg för insugningsrör	Plug for inlet manifold
6	1	419381-9	Avgasgrenrör	Branched exhaust manifold
7	1	419764-6	Packning för avgasgrenrör	Gasket for exhaust manifold
8	2	237435-3	Förgasare	Carburettor
11	1	684899-8	Axel för gasreglage, övre	Upper shaft, complete, for throttle control
	1	460039-1	Konsol för gasreglage	Bracket for throttle control
	2	955512-9	Skruv	Screw
	8	953461-1	Pinnskruv	Stud bolt
	8	955826-3	Mutter	Nut
	16	941907-8	Bricka	Washer
	8	955847-9	Mutter	Nut
9	4	824643-1	Mellanfläns för förgasare	Rubber flange for carburettor
10	8	819769-1	Packning för förgasare	Gasket for carburettor
	1	686057-1	Mellanaxel	Intermediary shaft



Trimningssats B20		Det nr	552861-7
Tuning kit B20		Part No	552861-7

Pos	Ant Qty	Det nr Part No	Benämning	Designation
	1	943936-5	Reglagestång	Control rod
12	4	824708-2	Luftintag	Air intake
13	1	684036-7	Luftrenare kpl	Air cleaner complete
	1	552620-7	x Luftfilter	x Air cleaner insert
	2	552621-5	x Mutter	x Nut
	2	552622-3	x Bricka	x Washer
14	2	419906-3	Packning	Gasket
	8	953032-0	Pinnskruv	Stud bolt
	8	10591-6	Mutter	Nut
	1	668558-0	Medbringare, främre	Lever, front
	1	668559-8	Medbringare, bakre	Lever, rear
	1	959088-6	Kulskål	Ball socket
	1	942837-6	Kulskål	Ball socket
	1	955780-2	Mutter	Nut
	1	942836-8	Mutter	Nut
15	1	460047-4	Stag för luftfilter	Stay for air cleaner
	1	940097-9	Bricka	Washer
	1	960142-8	Bricka	Washer
	1	955536-8	Skruv	Screw
	1	950354-1	Mutter	Nut
16	1	831092-2	Bränslepump	Fuel pump
	1	943818-5	Nippel för bränslepump	Nipple for fuel pump
17	1	825856-8	Bränsleslang	Fuel hose
	2	825857-6	Hålskruv för bränsleslang	Banjo screw for fuel hose
	4	957173-8	Packning för hålskruv	Gasket for banjo screw
	2	825858-4	Sil för bränsleslang	Strainer for fuel hose
18	1	241086-8	Tändspole	Ignition coil
	1	241612-1	Förkopplingsmotstånd	Resistance
19	4	238624-1	Tändstift Bosch W240T1	Spark plug Bosch W240T1
20	1	418693-8	Transmissionskåpa inkl packbox	Transmission casing including packing box
21	1	418264-8	Nav för remskiva	Hub for belt pulley
22	1	419392-6	Svänghjul	Flywheel complete
23	1	418433-9	Oljekylare	Oil cooler
	1	925255-2	O-ring	O-ring
	1	191701-2	Mutter	Nut



Trimningssats B20 Det nr 552861-7

Tuning kit B20 Part No 552861-7

Pos	Ant Qty	Det nr Part No	Benämning	Designation
	1	952069-3	Propp	Plug
24	1	418651-6	Kylvattenrör	Water pipe
	2	418445-3	Packning	Gasket
	2	940100-1	Skruv	Screw
	2	955512-9	Skruv	Screw
	1	418601-1	Nippel	Nipple
25	1	676558-0	Expansionstank	Expansion tank
26	1	673336-4	Trycklock	Pressure cap
27	1	671840-7	Kylarslang, nedre	Lower radiator hose
	1	951789-7	Slangklammer	Hose clip
	1	460464-1	Vattenrör	Water inlet pipe
	1	552551-4	T-rör för vevhusventilation	T-union for crankcase ventilation

Ovanstående trimningssats uppfyller Europanormerna (krav på avgasrening) gällande från och med 1971 års modell.
Om vagntyp och chassinummer uppges erhålls kostnadsfritt det intyg som skall uppvisas vid kontrollbesiktning hos Svensk Bilprovning. OBS! Intyg lämnas endast vid köp av komplett sats.

Above tuning kit fulfils the European exhaust regulations applying from 1971 year model.

			För extremare trimning	For more extreme tuning
	1	552863-3	Trimningssats B20 Steg II kpl	Tuning kit B20 Stage II complete
			ANM Ingående detaljer är samma som för Steg I (552861-7) med undantag av:	N.B. Same components as for Stage I (552861-7) with the exception of:
	1	552842-7	Cylinderlock Steg II	Cylinder head Stage II
	8	552841-9	Lättade ventillyftare	Lightened valve tappet
	1	824855-1	Cylinderlockspackning (tjocklek 1,2 mm)	Cylinder head gasket (thickness 1,2 mm)
	10	942058-9	Härdad bricka för cylinder-locksbult	Hardened washer for cylinder head bolt
	4	240571-0	Tändstift Bosch W280T13S	Spark plug Bosch W280T13S

Pos	Ant Qty	Det nr Part No	Benämning	Designation
			Dessutom finns (ingår ej i trimningssatsen):	Other parts (not included in the tuning kit):
	1	460911-1	Kamaxel R	Camshaft R
	1	552840-1	Svänghjul av Aluminium kpl Vikt: 3,5 kg	Flywheel of aluminium complete Weight: 3.5 kg
	6	944741-8	x Bult	x Bolt
	6	942336-9	x Bricka	x Washer
	1	418930-4	Koppling	Clutch
	1	380569-4	Urtrampningslager	Clutch throw-out bearing
	1	418871-0	Lamell	Disc

VOLVO

Competition Service

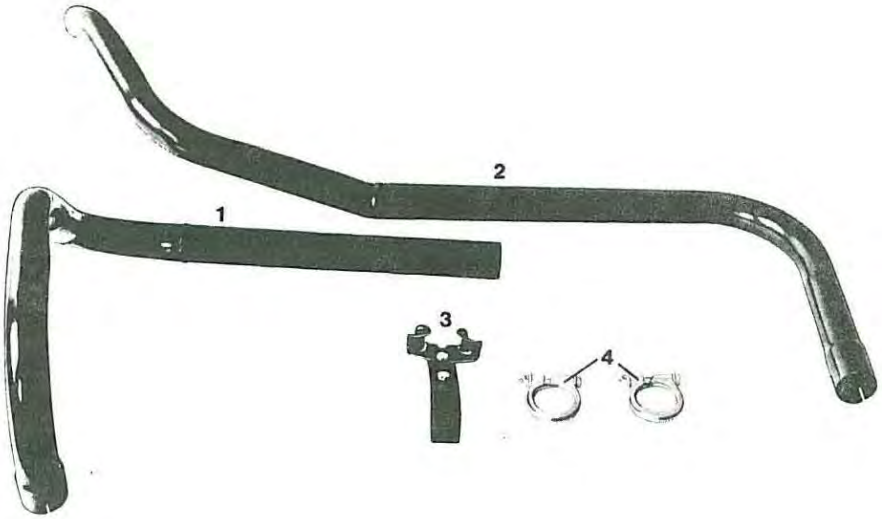
Prod	P130, P140	Avd Section	2
	MOTORPAKET ENGINE PACKETS	Nr No	3
Datum Date	December 1972		

Det nr Part No	Benämning	Designation
	Motorpaket, uppbyggda på begagnade men helt felfria B20 motorblock	Engine package, built up on used - but completely faultless B20 engine blocks.
552871-6	Steg I - paket för vänsterstyrd bil	Stage I - package for LHD car
552872-4	Steg II - paket för vänsterstyrd bil	Stage II - package for LHD car
552873-2	Steg I - paket för högerstyrd bil	Stage I - package for RHD car
552874-0	Steg II - paket för högerstyrd bil	Stage II - package for RHD car
	Enheterna är kompletta med trimningssats, förstärkt koppling. Dessutom medföljer startmotor, generator, fördelare etc.	The units are complete with tuning kit, reinforced clutch. Starter motor, distributor etc are included.
	Steg I = 140 hk	Stage I = 140 hp
	Steg II = ca 160 hk	Stage II = approx 160 hp

VOLVO

Competition Service

Prod	P140	Avd Section	2
	AVGASSYSTEM EXHAUST SYSTEM	Nr No	4
Datum Date	December 1972		



Pos	Ant Qty	Det nr Part No	Benämning	Designation
		552211-5	Avgassystem kpl (1 3/4")	Exhaust system complete (1 3/4)
1	1	552212-3	x Rör över bakaxel	x Pipe over rear axle
2	1	552213-1	x Ändrör	x Tail pipe
3	1	552214-9	x Konsol med klammer	x Bracket with clamp
4	2	552208-1	x Klammer med skruv	x Clamp with bolt

Ant Qty	Det nr Part No	Benämning	Designation
1	384479-2	Anti-Spin M30 (Powr-Lok)	Anti-Spin M30 (Limited slip differential)
1	500984-0	Drevsats 4.88:1, M27	Gear set 4.88:1, M27
1	525880-1	Drevsats 4.88:1, M30	Gear set 4.88:1, M30
		Ombyggnadsdetaljer	Conversion parts
		För ombyggnad av nållagrad standardväxellåda, M40, till tätstegad växellåda	For conversion of needle-bearing standard gearbox, M40, to close-range gearbox
1	380422-6	Bottendrev	Gear cluster
1	380423-4	3:ans drev	3rd speed gear
1	380382-2	Ingående axel	Input shaft

För konvertering av standardväxellåda till nållagrad standardväxellåda erfordras följande detaljer, som tillhandahålls av återförsäljare:

For conversion of standard gearbox to a needle-bearing standard gearbox, the following parts, which are supplied by the dealer, are required:

1	380217-0	1:ans drev	1st speed gear
1	380218-8	2:ans drev	2nd speed gear
2	181330-2	Nållager	Needle bearing
1	181331-0	Nållager	Needle bearing

Ant Qty	Det nr Part No	Benämning	Designation
1	254670-3	Tätstegad växellåda med remote control *) (ombyggd nållagrad standard-växellåda, M40)	Close-range gearbox with remote control *) (converted needle-bearing standard gearbox, M40)
1	538445-8	Bakaxel M30, 4.88:1, Anti-Spin (årsmodell 67-69)	Rear axle M30, 4.88:1, Anti-Spin (year model 67-69)
1	384498-2	Anti-Spin M30 (Powr-Lok) (årsmodell 67-69)	Anti-Spin M30 (Limited slip differential) year model 67-69
1	384727-4	Anti-Spin M30 (Powr-Lok) (från -70)	Anti-Spin M30 (Limited slip differential) from model -70
1	525880-1	Drevsats 4.88:1, M30	Gear set 4.88:1, M30
1	552156-2	Motorbalk, bakre	Engine cross-member, rear
1	552158-8	Mellanlagerupphängning	Intermediate bearing suspension
		*) Remote control kan demonteras	*) Remote control can be removed
		Ombyggnadsdetaljer A	Conversion parts A
		För ombyggnad av nållagrad standardväxellåda, M40, till tätstegad växellåda t.o.m. -70 års modell	For conversion of needle-bearing standard gearbox, M40, to close-range gearbox up to -70 year model
1	380422-6	Bottendrev	Gear cluster
1	380423-4	3:ans drev	3rd speed gear
1	380382-2	Ingående axel	Input shaft
		Ombyggnadsdetaljer B	Conversion parts B
		För ombyggnad av nålagrad standardväxellåda, M40, till tätstegad växellåda fr.o.m. -71 års modell	For conversion of needle-bearing standard gearbox, M40, to close-range gearbox from -71 year model
1	380824-3	Bottendrev	Gear cluster
1	380423-4	3:ans drev	3rd speed gear
1	380382-2	Ingående axel	Input shaft

Ant Qty	Det nr Part No	Benämning	Designation
		För konvertering av standardväxellåda till nållagrad standardväxellåda erfordras följande detaljer som tillhandahålls av återförsäljare:	For conversion of standard gearbox to needle-bearing standard gearbox the following parts, supplied by the dealer, are required:
1	380217-0	1:ans drev	1st speed gear
1	380218-8	2:ans drev	2nd speed gear
2	181330-2	Nållager	Needle bearing
1	181331-0	Nållager	Needle bearing
		Ombyggnadsdetaljer C	Conversion parts C
		(Se även avd 2 nr 11:2)	(See also section 2 No 11:2)
		Reduceringsdrev för att hastighetsmätaren ska visa rätt med bakaxelutväxling 4.88:1. Passar växellåda 254670-3.	Reduction gear to give correct speedometer indication with rear axle ratio 4.88:1. Suits gearbox 254670-3.
1	380789-8	Drev, större för utgående axel	Gear, large for output shaft
1	380305-3	Drev, mindre (plast)	Drive gear, small (plastic)

VOLVO

Competition Service

Prod P130 HJULUPPHÄNGNING, FJÄDRAR, BROMSAR - WHEEL SUSPENSION, SPRINGS, BRAKES	Avd Section 2
	Nr No 7
Datum Date December 1972	

Ant Qty	Det nr Part No	Benämning	Designation
2	525060-0	Framfjäder, progressiv	Progressive spring, front
2	525061-8	Bakfjäder, progressiv	Progressive spring, rear
2	552101-8	Stötdämpare, fram	Shock absorber, front
2	552102-6	Stötdämpare, bak	Shock absorber, rear
1	552501-9	Bromsklotssats special, fram *)	Brake pad kit special, front *)
1	275894-4	Bromsklotssats special, fram **)	Brake pad kit special, front **)
1	552502-7	Bromsbandsats special, bak	Brake lining special, rear
1	659866-8	Krängningshämmare Ø 24 mm	Stabilizer Ø 24 mm
2	659869-2	Gummibussning för krängningshämmare	Rubber bushing for stabilizer

*) T.o.m. chassinr 312499 — *) Up to chassis No 312499

**) Fr.o.m. chassinr 312500 — **) From chassis No 312500

Ant Qty	Det nr Part No	Benämning	Designation
2	552105-9	Progressiv framfjäder, P140	Progressive spring, front, P140
2	552106-7	Progressiv framfjäder, P140 hårdare	Progressive spring, front, P140 harder
2	552135-6	Progressiv framfjäder, P164	Progressive spring, front, P164
1	552137-2	Kpl fjäderpaket, bak	Complete spring packet, rear
1	552136-4	x Fjäder, progressiv	x Spring, progressive
1	552151-3	x Nedre bricka	x Lower washer
2	552152-1	x Övre bricka	x Upper washer
1	660108-2	x Fångband	x Damper band
2	940162-1	x Bult	x Bolt
2	679655-1	Kompletteringsgummi för bakfjäder (årsmodell 67-70)	Supplementary rubber bumpers for rear spring (year model 67-70)
2	684873-3	Kompletteringsgummi för bakfjäder (från -71)	Supplementary rubber bumpers for rear spring (from -71)
2	552140-6	Hårdare gummibussning för bärarmar-bakaxel	Harder rubber bushing for support arms-rear suspension
2	552191-9	Stötdämpare, fram (deCarbon)	Shock absorber, front (deCarbon)
2	552192-7	Stötdämpare, bak (deCarbon)	Shock absorber, rear (deCarbon)
1	275894-4	Bromsklotssats, fram (Girling)	Brake pad kit, front (Girling)
1	275895-1	Bromsklotssats, bak (Girling)	Brake pad kit, rear (Girling)
1	272530-7	Bromsklotssats, fram (ATE)	Brake pad kit, front (ATE)
1	272531-5	Bromsklotssats, bak (ATE)	Brake pad kit, rear (ATE)
1	272534-9	Bromsklotssats, fram (Girling)	Brake pad kit, front (Girling)
1	272535-6	Bromsklotssats, bak (Girling)	Brake pad kit, rear (Girling)
1	552130-7	Framaxelbalk	Front axle cross-member
1	552131-5	Nedre länkarm, vänster	Lower wishbone, left
1	552132-3	Nedre länkarm, höger	Lower wishbone, right
1	552170-3	Krängningshämmare Ø 18 mm (årsmodell 67-70)	Stabilizer Ø 18 mm (year model 67-70)
1	552171-1	Krängningshämmare Ø 18 mm (från -71)	Stabilizer Ø 18 mm (from -71)
1	552172-9	Krängningshämmare Ø 20 mm (från -71)	Stabilizer Ø 20 mm (from -71)
2	552173-7	Gummibussning för 552172-9	Rubber bushing for 552173-9

Ant Qty	Det.nr Part No	Benämning	Designation
1	552138-0	Bärarm, bakre (modell 67-70)	Support arm, rear (model 67-70)
1	552139-8	Bärarm, bakre (från -71)	Support arm, rear (from -71)
1	552141-4	Nedre stötdämparbult	Lower shock absorber bolt
2	552127-3	Förstärkningsplåt för övre, bakre, stötdämparfäste (se Avd 2 Nr 15:1)	Reinforcement plate for upper, rear, shock absorber anchorage (see Section 2 No 15:1)
2	552142-2	Förstärkningsplåt för bärarms-infästning (se Avd 2 Nr 15:2)	Reinforcement plate for support arm journalling (see Section 2 No 15:2

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Competition Service

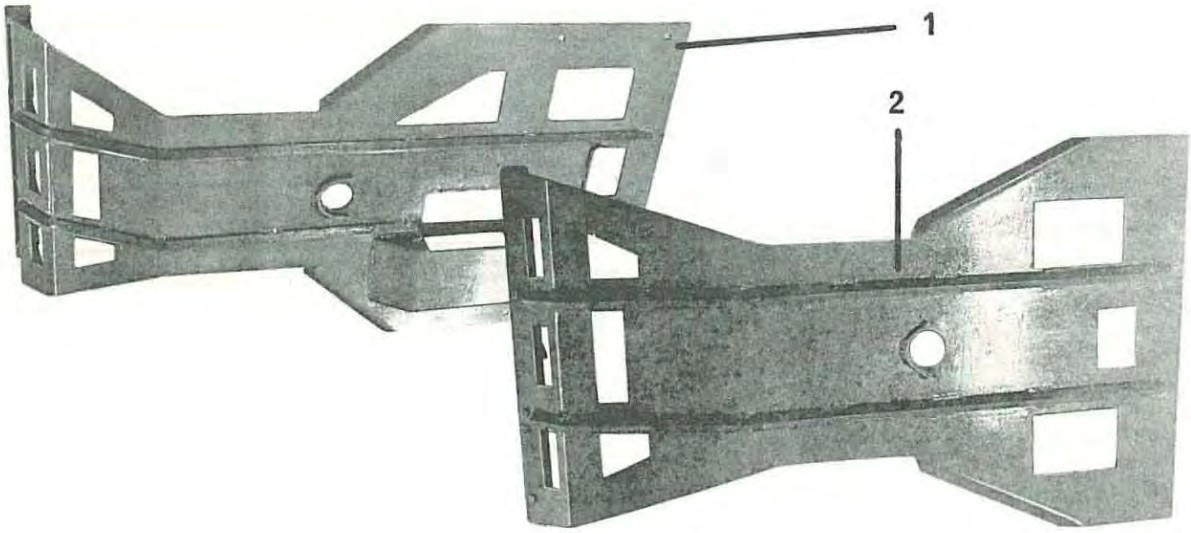
PROD PV 444/544 120/130/140/160/ 1800 Bilstein Gas Shock Absorbers	SECTION 2
	NO. 8
DATE April, 1974	

Ant Qty	Det nr Part No	Benämning Description	Model Model
2	552093-7	Shock Absorber Front	444/544
2	552094-5	Shock Absorber Rear	444/544
2	552101-8	Shock Absorber Front	120/130/1800
2	552102-6	Shock Absorber Rear	120/130/1800
2	552095-2	Shock Absorber Front	142/144/145 1966 to present
2	552096-0	Shock Absorber Rear with Lower Bushing	142/144/145 1966 to 9/71
2	552097-6	Shock Absorber Rear without Lower Bushing	142/144/145 10/71 to present
2	552098-6	Shock Absorber Front	164 All
2	552099-4	Shock Absorber Rear with Lower Bushing	164 1969 to 9/71
2	552100-0	Shock Absorber Rear without Lower Bushing	164 10/71 to present
2	552103-4	Rally Sweden Shock Front	140/160 Extra Firm
2	552104-2	Rally Sweden Shock Rear with Lower Bushing	140/160 Extra Firm 1966 to 9/71
2	552092-9	Rally Sweden Shock Rear without Lower Bushing	140/160 Extra Firm 10/71 to present

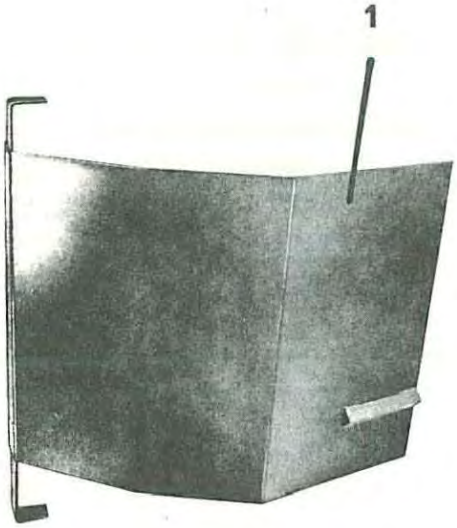
VOLVO

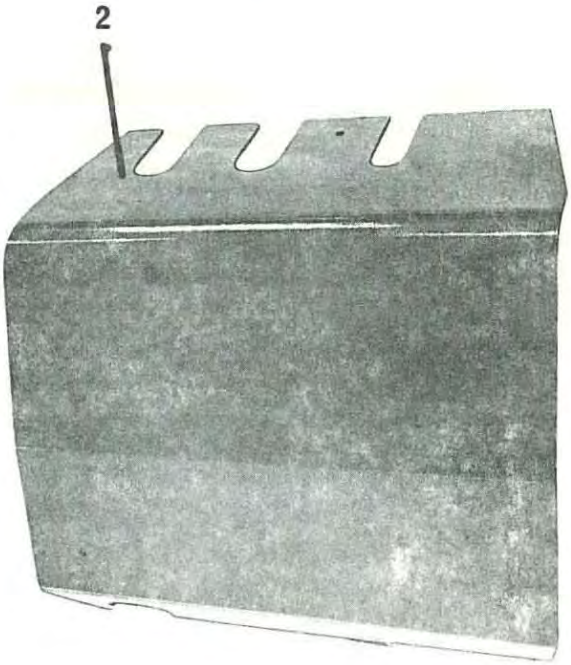
Competition Service

Prod	P130, P140	Avd Section	2
	SKYDDSPLÅTAR PROTECTION PLATES	Nr No	9:1
Datum Date	December 1972		



Pos	Ant Qty	Det nr Part No	Benämning	Designation
1	1	552107-5	Skyddsplåt främre kpl, STÅL, P130 Vikt: 32 kg	Protection plate front complete, STEEL, P130 Weight: 32 kilos
1	1	552111-7	Skyddsplåt främre kpl, ALUMINIUM, P130 Vikt: 18 kg	Protection plate front complete, ALUMINIUM, P130 Weight: 18 kilos
2	1	552109-1	Skyddsplåt främre kpl, STÅL, P140 (model 67-70) Vikt: 34 kg	Protection plate front complete, STEEL, P140 (year model 67-70) Weight: 34 kilos
2	1	552115-8	Skyddsplåt främre kpl, STÅL, P140 (från -71) Vikt: 34 kg	Protection plate front complete, STEEL, P140 (from -71) Weight: 34 kilos
2	1	552113-3	Skyddsplåt främre kpl, ALUMINIUM, P140 (modell 67-70) Vikt: 20 kg	Protection plate front complete, ALUMINIUM, P140 (model 67-70) Weight: 20 kilos
2	1	552116-6	Skyddsplåt främre kpl, ALUMINIUM, P140 (från -71) Vikt: 20 kg	Protection plate front complete, ALUMINIUM, P140 (from -71) Weight: 20 kilos





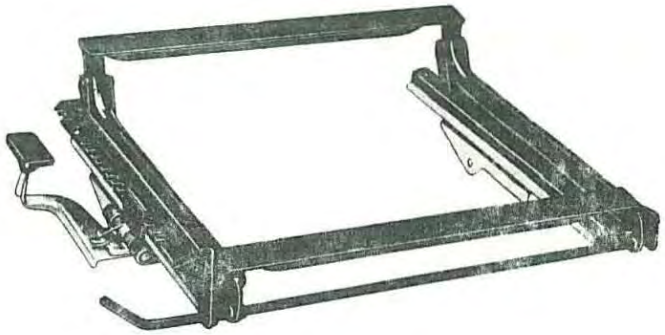
Pos	Ant Qty	Det nr Part No	Benämning	Designation
1	1	552108-3	Skyddsplåt bakre, STÅL, P130 Vikt: 18 kg	Protection plate rear, STEEL, P130 Weight: 18 kilos
1	1	552112-5	Skyddsplåt bakre, ALUMINIUM, P130 Vikt: 11 kg	Protection plate rear, ALUMINIUM, P130 Weight: 11 kilos
2	1	552110-9	Skyddsplåt bakre, STÅL, P140 Vikt: 15 kg	Protection plate rear, STEEL, P140 Weight: 15 kilos
2	1	552114-1	Skyddsplåt bakre, ALUMINIUM, P140 Vikt: 8 kg	Protection plate rear, ALUMINIUM, P140 Weight: 8 kilos
	1	552117-4	Skyddsplåt bakre, ALUMINIUM, P140 Grand Luxe Vikt: 13 kg	Protection plate rear, ALUMINIUM, P140 Grand Luxe Weight: 13 kilos
			OBS! Se även avd 2 nr 15:2 "Mellanläggsram"	NOTE! See also section 2 No 15:2 "Spacer frame"

VOLVO

Competition Service

Prod		Avd Section	2
	P130, P140 FÖRARSTOL DRIVERS´ SEAT	Nr No	10
Datum Date	December 1972		

Ant Qty	Det nr Part No	Benämning	Designation



1	552301-4	Skålad förarstol	Dished drivers´ seat
1	552303-0	Underrede till förarstol, P140	Base for drivers´ seat, P140

1	552305-5	Förarstol RECARO, endast P140	Drivers´ seat RECARO, only P140

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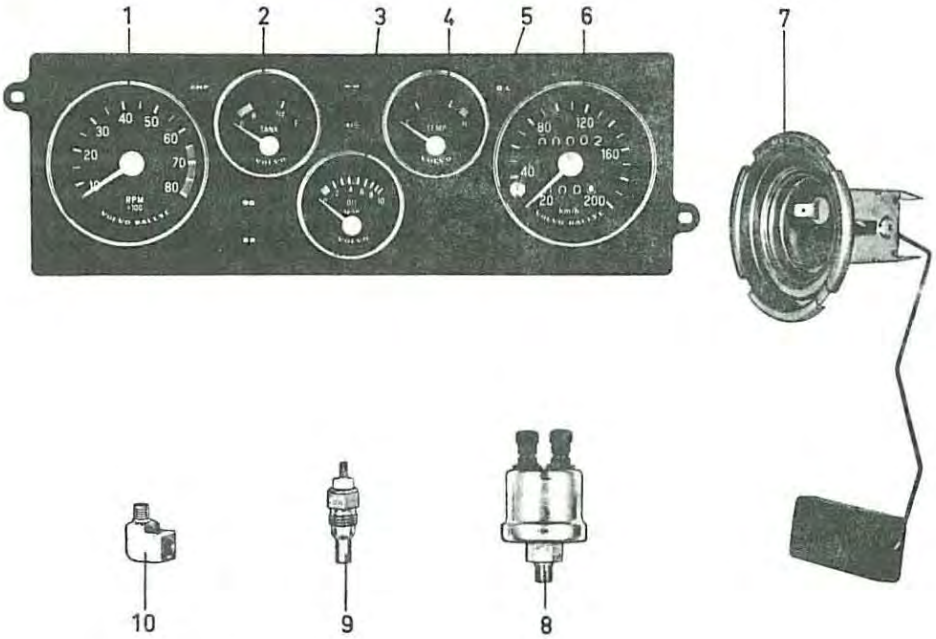
Competition Service

Prod	P140, P164	Avd Section	2
	INSTRUMENT INSTRUMENTS	Nr No	11:1
Datum Date	December 1972		

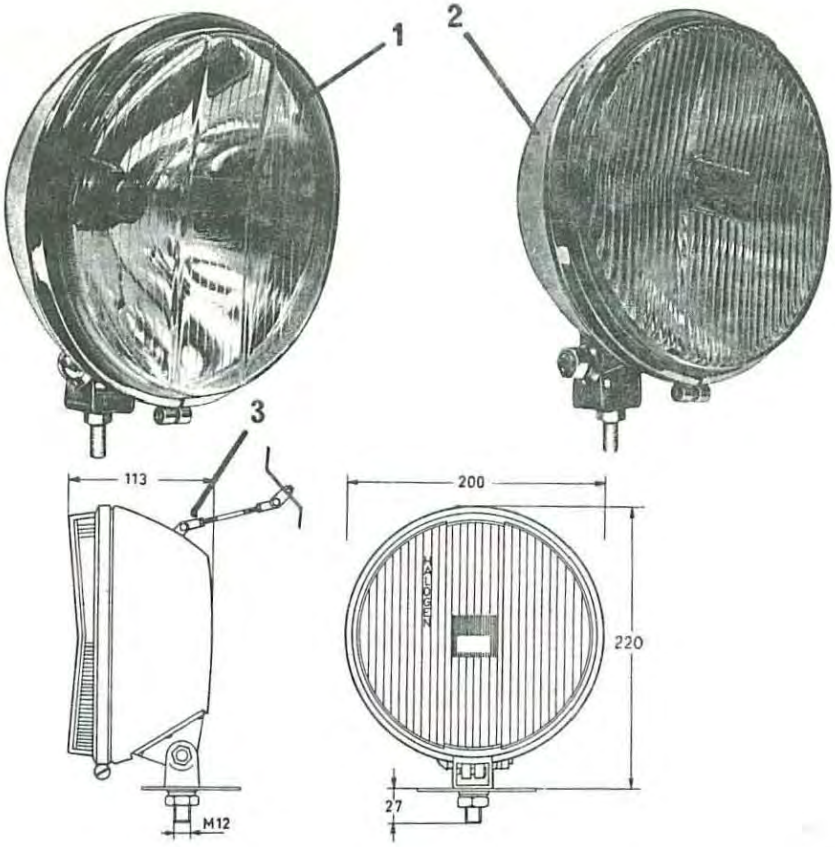
RALLY INSTRUMENTPANEL

RALLY INSTRUMENT PANEL



Pos	Ant Qty	Det nr Part No	Benämning	Designation
	1	552701-5	Instrumentpanel kpl, P140 km/tim (årsmodell 67-70)	Instrument panel complete, P140 km.p.h. (year model 67-70)
	1	552721-3	Instrumentpanel kpl, P140 km/tim (årsmodell 71-72)	Instrument panel complete, P140 km.p.h. (year model 71-72)
	1	552703-1		Instrument panel complete, P140 miles p.h. (year model 67-70)
	1	552723-9		Instrument panel complete, P140 miles p.h. (year model 71-72)
	1	552731-2	Instrumentpanel kpl, P140 km/tim (årsmodell 67-70) för utväxling 4.88:1	Instrument panel complete, P140 km.p.h. (year model 67-70) for rear axle ratio 4.88:1
	1	552733-8	Instrumentpanel kpl, P140 km/tim (årsmodell 71-72) för utväxling 4.88:1	Instrument panel complete, P140 km.p.h. (year model 71-72) for rear axle ratio 4.88:1
	1	552732-0		Instrument panel complete, P140 miles p.h. (year model 67-70) for rear axle ratio 4.88:1
	1	552734-6		Instrument panel complete, P140 miles p.h. (year model 71-72) for rear axle ratio 4.88:1

Pos	Ant Qty	Det nr Part No	Benämning	Designation
	1	552702-3	Instrumentpanel kpl, P164 km/tim (årsmodell 67-70)	Instrument panel complete, P164 km.p.h. (year model 67-70)
	1	552722-1	Instrumentpanel kpl, P164 km/tim (årsmodell 71-72)	Instrument panel complete, P164 km.p.h. (year model 71-72)
	1	552704-9		Instrument panel complete, P164 miles p.h. (year model 67-70)
	1	552724-7		Instrument panel complete, P164 miles p.h. (year model 71-72)
1	1	552705-6	x Varvräknare, P140	x Revolution counter, P140
1	1	552706-4	x Varvräknare, P164	x Revolution counter, P164
2	1	552709-8	x Bränslemätare	x Fuel guage
3	1	552710-6	x Oljetrycksmätare, kp/cm^2	x Oil pressure guage, kp/cm^2
3	1	552717-1		x Oil pressure guage, lb/sq.in.
4	1	552708-0	x Temperaturmätare	x Temperature guage
5	1	552711-4	x Reostat för instrument-belysning	x Rheostat for instrument panel lighting
6	1	552707-2	x Hastighetsmätare, km/tim	x Speedometer, km.p.h.
6	1	552715-5		x Speedometer, miles p.h.
	1	552718-9	Hastighetsmätare för utväxling 4.88:1	Speedometer for rear axle ratio 4.88:1
7	1	552712-2	x Tankarmatur (årsmodell 67-70)	x Tank level unit (year model 67-70)
7	1	552716-3	x Tankarmatur (årsmodell 71-72)	x Tank level unit (year model 71-72)
8	1	552714-8	x Givare för oljetrycksmätare och kontrollampa	x Sender for oil pressure guage and warning light
9	1	552713-0	x Temperaturgivare	x Sender for temperature guage
10	1	16218-0	x Vinkelkoppling för ojle-trycksgivare	x Angle coupling for oil pressure sender
	1	552725-4	x Kontrollampa för handbroms och fotbroms (modell 67-72)	x Warning light, parking brake and service brake circuits (model 67-72)
1	1	552726-2	x Kontrollampa för helljus (modell 67-72)	x Warning light, mainbeams (model 67-72)
	1	552727-0	x Kontrollampa för laddning (modell 67-72)	x Warning light, battery charging (model 67-72)
	1	552728-8	x Kontrollampa för oljetryck (modell 67-72)	x Warning light, oil pressure (model 67-72)
	1	552729-6	x Kontrollampa för körrikt-ningsvisare (modell 67-72)	x Warning light, turn indicators (model 67-72)
	1	552730-4	x Kontrollampa för överväxel (modell 67-72)	x Warning light, overdrive (model 67-72)



Pos	Ant Qty	Det nr Part No	Benämning	Designation
1	1	552026-7	Fjärrstrålkastare BOSCH 180 KNICK utan glödlampa (diameter 180 mm)	Spotlight BOSCH 180 KNICK without bulb (diameter 180 mm)
2	1	552027-5	Kurvstrålkastare BOSCH 180 KNICK utan glödlampa (diameter 180 mm)	Foglight BOSCH 180 KNICK without bulb (diameter 180)
	1	277751-4	Glödlampa Jod 55W	Bulb halogen 55W
	1	552030-9	Glödlampa Jod 100W	Bulb halogen 100W
3	1	552031-7	Justerstag för extrastrål-kastare	Adjusting stay for extra lights

VOLVO

Competition Service

PROD	SECTION
120/130/140/160 1800 El-Utrustning Electrical Equipmt.	2
	NO. 12:3
DATE April 1974	

Pos	Ant Qty	Det nr Part No	Benämning	Description
	1	552020-0	Kurvstralkastare Hella 160mm utan glodlampa	Foglight, Hella 160mm without bulb
	1	552021-8	Fjarrstralkastare, Hella 160mm utan glodlampa	Spotlight, Hella 180mm without bulb
	1	552022-6	Kurvstralkastare Hella 170mm utan glodlampa	Foglight Hella 170mm without bulb
	1	552023-4	Fjarrstralkastare, Hella 170mm utan glodlampa	Spotlight, Hella 170mm without bulb
	1	552024-2	Kurvstralkastare, Hella 192mm utan glodlampa	Foglight, Hella 192mm without bulb
	1	552025-9	Fjarrstralkastare, Hella 192mm utan glodlampa	Spotlight, Hella 192mm without bulb
	1	552028-3	Stenskydd for extraljus (med Volvo emblem)	Protective lamp cover with Volvo emblem 160 to 170mm
	1	552029-1	Stenskydd for extraljus (med Volvo emblem)	Protective lamp cover with Volvo emblem 140 to 160mm
	1	552032-5	Kabelharva for alla extraljus inklusive rela, kableskor, kontakter och instrucktion.	Wiring kit for all auxiliary lights. Includes harness, relay, terminals, switch and instructions.

VOLVO

Competition Service

Prod	P130, P140	Avd Section	2
	SÄKERHETSDETALJER SAFTEY PARTS	Nr No	13
Datum Date	December 1972		

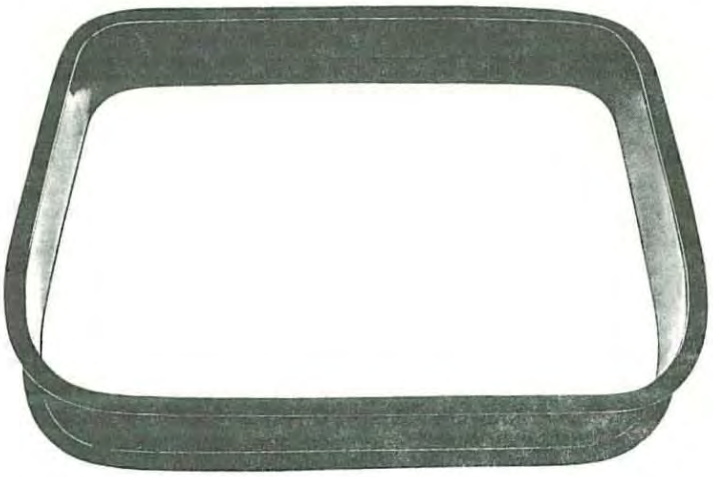
Pos	Ant Qty	Det nr Part No	Benämning	Designation
1	1	552161-2	Skyddsbåge, P130	Roll bar, P130
2	1	552160-4	Skyddsbåge, P142	Roll bar, P142
3	1	552163-8	Stöttningssats för 552160-4	Stay kit for pos 552160-4
	1	552162-0	Skyddsbåge, P144	Roll bar, P144

VOLVO

Competition Service

Prod P140 KAROSSERIFÖRSTÄRKNING BODY REINFORCING	Avd Section 2
	Nr No 15:1
Datum Date December 1972	

Ant Qty	Det nr Part No	Benämning	Designation
1	552120-8	Förstärkningssats SAFARI kpl (årsmodell 67-70)	Reinforcement kit SAFARI complete (year model 67-70)
1	552121-6	x Sidobalk VF	x Side member, front-left
1	552122-4	x Sidobalk HF	x Side member, front-right
1	552123-2	x Sidobalk VB	x Side member, rear-left
1	552124-0	x Sidobalk HB	x Side member, rear-right
1	552125-7	x Inre hjulhus VB	x Inner wheel housing, rear-left
1	552126-5	x Inre hjulhus HB	x Inner wheel housing, rear-right
2	552127-3	x Förstärkningsplåt för övre, bakre stötdämparfäste	x Reinforcement plate for upper, rear shock absorber anchorage
	552180-2	Förstärkningssats SAFARI kpl (från -71)	Reinforcement kit SAFARI complete (from -71)
1	552121-6	x Sidobalk VF	x Side member, front-left
1	552122-4	x Sidobalk HF	x Side member, front-right
1	552181-0	x Sidobalk VB	x Side member, rear-left
1	552182-8	x Sidobalk HB	x Side member, rear-right
1	552183-6	x Inre hjulhus VB	x Inner wheel housing, rear-left
1	552184-4	x Inre hjulhus HB	x Inner wheel housing, rear-right
2	552127-3	x Förstärkningsplåt för övre, bakre stötdämparfäste	x Reinforcement plate for upper, rear shock absorber anchorage



Ant Qty	Det nr Part No	Benämning	Designation
1	552221-4	Mellanläggsram för tank	Spacer frame for tank
2	552142-2	Förstärkningsplåt för bärarms-lagring	Reinforcement plate for support arm journalling

VOLVO

Competition Service

Prod	P140 PLASTDETALJER PLASTIC PARTS	Avd Section	2
		Nr No	16
Datum Date	December 1972		

Ant Qty	Det nr Part No	Benämning	Designation
1	552901-1	Framskärm, vänster	Front mudguard, left
1	552902-9	Framskärm, höger	Front mudguard, right
1	552903-7	Motorhuv	Bonnet
1	552904-5	Baklucka	Luggage compartment lid
1	552905-2	Bakruta	Rear window
2	552906-0	Fjäder för motorhuv	Spring for bonnet

Framskärmar, motorhuv samt baklucka är tillverkade av glasfiberarmerad plast medan bakrutan är av plast

Front muguards, bonnet and luggage compartment lid are made of glassfibre reinforced plastic while the rear window is of plastic

Karosseridetaljerna levereras grundlackerade

The body parts are delivered painted with primary

OBS! 1. Ovanstående detaljer säljs endast till tävlingsförare. Prisuppgifter lämnas genom Volvo Competition Service.

2. Enligt svenska trafikbestämmelser får ej plastrutor användas på registrerade bilar fr.o.m. 1969 års modell.

3. Enbart framskärmar i plast får användas efter 1.1.1972 i enlighet med FIA:s bestämmelser.

NOTE! 1. Only plastic front mudguards will be used from 1.1.1972 for according to the regulations of the FIA.

2. The above parts are sold only to competition drivers. For information on prices, contact Volvo Competition Service.

VOLVO

Competition Service

Prod	Avd Section 2
FÖRGASARSATS CARBURETTOR KIT	Nr No 17:1
Datum Date December 1972	

FÖRGASARSATS INKL REGLAGE FÖR B20 TRIMNINGSSATS
(reglagen gäller t.o.m -72 års modell)

CARBURETTOR KIT INCL CONTROLS FOR B20 TUNING KIT
(the controls are valid up to -72 year model)

Ant Qty	Det nr Part No	Benämning	Designation
	552610-8	Förgasarsats kpl	Carburettor kit complete
2	237435-3	x Förgasare	x Carburettor
1	419764-6	x Packning för avgasgrenrör	x Gasket for exhaust manifold
1	419883-4	x Insugningsrör, främre	x Inlet manifold, front
1	419884-2	x Insugningsrör, bakre	x Inlet manifold, rear
2	422635-3	x Plugg för insugningsrör	x Plug for inlet manifold
1	952075-0	x Plugg för insugningsrör	x Plug for inlet manifold
1	684899-8	x Axel för gasreglage, övre	x Upper shaft, complete, for throttle control
1	460039-1	x Konsol för gasreglage	x Bracket for throttle control
2	955512-9	x Skruv	x Screw
8	953461-1	x Pinnskruv	x Stud bolt
8	955826-3	x Mutter	x Nut
16	941907-8	x Bricka	x Washer
8	955847-9	x Mutter	x Nut
4	824643-1	x Mellanfläns för förgasare	x Rubber flange for carburettor
8	819769-1	x Packning för förgasare	x Gasket for carburettor
1	686057-1	x Mellanaxel	x Intermediary shaft
1	943936-5	x Reglagestång	x Control rod
4	824708-2	x Luftintag	x Air intake
1	684036-7	x Luftrenare kpl	x Air cleaner copmlete
2	419906-3	x Packning	x Gasket
8	953032-0	x Pinnskruv	x Stud bolt
8	10591-6	x Mutter	x Nut
1	668558-0	x Medbringare, främre	x Lever, front
1	668559-8	x Medbringare, bakre	x Lever, rear
1	959088-6	x Kulskål	x Ball socket

Ant Qty	Det nr Part No	Benämning	Designation
1	942837-6	x Kulskål	x Ball socket
1	955780-2	x Mutter	x Nut
1	942836-8	x Mutter	x Nut
1	460047-4	x Stag för luftfilter	x Stay for air cleaner
1	940097-9	x Bricka	x Washer
2	960142-8	x Bricka	x Washer
1	955536-8	x Skruv	x Screw
1	950354-1	x Mutter	x Nut
1	831092-2	x Bränslepump	x Fuel pump
1	943818-5	x Nippel för bränslepump	x Nipple for fuel pump
1	825856-8	x Bränsleslang	x Fuel hose
2	825857-6	x Hålskruv för bränsleslang	x Banjo screw for fuel hose
4	957173-8	x Packning för hålskruv	x Gasket for banjo screw
2	825858-4	x Sil för bränsleslang	x Strainer for fuel hose

VOLVO

Competition Service

Prod	Avd Section 2
REGLAGESATS CONTROL KIT	Nr No 18
Datum Date December 1972	

REGLAGESATS FÖR SOLEX-FÖRGASARE
(gäller t.o.m. -72 års modell)

CONTROL KIT FOR SOLEX-CARBURETTOR
(valid up to -72 year model)

Ant Qty	Det nr Part No	Benämning	Designation
	552611-6	Reglagesats kpl	Control kit complete
1	684899-8	x Axel för gasreglage, övre	x Upper shaft, complete, for throttle control
1	460039-1	x Konsol för gasreglage	x Bracket for throttle control
2	955512-9	x Skruv	x Screw
1	686057-1	x Mellanaxel	x Intermediary shaft
1	943936-5	x Reglagestång	x Control rod
1	668558-0	x Medbringare, främre	x Lever, front
1	668559-8	x Medbringare, bakre	x Lever, rear
1	959088-6	x Kulskål	x Ball socket
1	942837-6	x Kulskål	x Ball socket
1	955780-2	x Mutter	x Nut
1	942836-8	x Mutter	x Nut

VOLVO

Competition Service

Prod	Avd Section 2
SOLEX-DETALJER SOLEX-PARTS	Nr No 19:1
Datum Date December 1972	

Pos	Ant Qty	Det nr Part No	Benämning	Designation
2	2	6100035-2	Spjäll 12°	Throttle butterfly 12°
3	3	6625083-8	Spjällaxel	Throttle spindle with lever
4	4	6700179-2	Spjällskruv	Throttle fixing screw
6	2	6700156-0	Ställskruv	Throttle stop screw
8	1	6700038-0	Tomgångsskruv	Slow running adjustment screw
9	3	6720002-2	Fjäder	Screw spring
10	1	6600186-8	Hävarm	Throttle control lever
10a	1	6600187-6	Hävarm	Throttle control lever
15	2	6700046-3	Volymskruv	Volume control screw
36	2	6710005-7	Mutter för hävarm 10, 10a	Throttle lever nut for pos 10, 10a
39	1	6720007-1	Startfjäder	Starter valve spring
48	1	6440012-0	Fäste	Starter cable clamp
50	1	6700035-6	Klämskruv	Cable fixing screw
62	1	6150014-6	Dubbelflottör kpl	Float assembly
65	1	6500083-8	Packning för flottörhus	Floatchamber gasket
70	2	6000116-1	Huvudmunstycke	Main jet
75	1	6000350-6	Startmunstycke	Starter petrol jet
76	1	6500096-0	O-ring för pos 591	O-ring for pos 591
86	1	6500084-6	Packning	Cover plate gasket
93	2	6700138-8	Skruv för stryphylsa	Central diffusor screw
93a	2	6700180-0	Låsskruv	Tulip fixing screw
98	4	6710015-6	Mutter	Nut for screw
99	2	6010136-7	Emulsionsrör med luftmunstycke	Emulsion tube carrier assembly
101	2	6250104-4	Halsring 36	Choke tube 36
102	2	6700067-9	Skruv för halsring	Choke tube screw
110	1	6750008-2	Flottöraxel	Float toggle spindle
115	1	6500012-7	Packning för flottörventil	Needle valve washer
116	1	6200019-5	Flottörventil	Needle valve
126	4	6700080-2	Skruv för flottörhus, kort	Floatchamber assembly screw, short
126	1	6700155-2	Skruv för flottörhus, lång	Floatchamber assembly screw, long
154	2	6760003-1	Kula	Ball
158	1	6600154-6	Hävarm för accelerationspump	Pump intermediate actuating lever
160	1	6620037-9	Länk för accelerationspump	Pump control rod

Pos	Ant Qty	Det nr Part No	Benämning	Designation
166	4	6700077-8	Skruv	Pump assembly fixing screw
167	1	6500072-1	Packning för accelerations-pump	Pump body gasket
192	1	6440026-0	Hållare för startfjäder	Yoke
195	1	6600188-4	Hävarm för startfjäder	Spring lever
196	1	6720080-8	Returfjäder för spjällaxel	Throttle spindle return spring
209	1	6700161-0	Fäste för kallstartvajer med låsskruv	Roller bracket with screw assembly
210	2	6730035-0	Låsring	Circlip
337	1	6710011-5	Mutter	Nut
338	2	6020029-2	Accelerationsmunstycke	Pump injector assembly
342	1	6720062-6	Fjäder	Pump control, rod spring
371	1	6550005-0	Membran kpl	Diaphragm complete
377a	1	6410033-2	Lock kpl för accelerations-pump	Pump cover complete
378	2	6700118-0	Skruv för pos 377a	Pump cover fixing screw
389	2	6730038-4	Bricka	Stop washer
591	1	6030038-1	Ventil kpl	Valve complete
599	2	6500053-1	O-ring för pos 574	Sealing ring for pos 574
606	2	6500105-9	O-ring för accelerations-munstycke	Injector washer
607	2	6500063-0	O-ring för accelerations-munstycke	Washer for pos 338
621	2	6250188-7	Stryphylsa	Central diffusor
624	2	6500029-1	Tätningsring för pos 102	Washer for pos 102
625	2	6735011-6	Teflontätning	Bush (teflon)
627	1	6700116-4	Tätning	Screw for pump lever
628			Bricka för pos 629	Washer for pos 629
	1	6500107-5	tjocklek 0,5 mm	thickness 0,5 mm
	1	6500108-3	tjocklek 0,8 mm	thickness 0,8 mm
	1	6500109-1	tjocklek 1,0 mm	thickness 1,0 mm
	1	6500110-9	tjocklek 1,2 mm	thickness 1,2 mm
	1	6500111-7	tjocklek 1,5 mm	thickness 1,5 mm
629	1	6745050-2	Säte för bränsleinlopp	Seat

För SOLEX 45 DDH kan det ibland vara lämpligt att byta tomgångsmunstycket mot ett större, speciellt vid körning under kall väderlek.

It may sometimes be suitsble to replace the idle nozzle with a larger size on the SOLEX 45 DDH, particulary when driving in cold weather.

Det nr Part No	Munstycksstorlek Nozzle size
552604-1	57,5
552605-8	60,0
552606-6	62,5
552607-4	65,0

Renoveringssats och packningssats (SOLEX 45 DDH)

Reconditioning and gasket kits (SOLEX 45 DDH)

Ant Qty	Det nr Part No	Benämning	Designation
1	552601-7	Packningssats kpl för två förgasare	Gasket kit complete for two carburettors
1	552602-5	Renoveringssats kpl för två förgasare	Reconditioning kit complete for two carburettors

Renoveringssats innehåller packningssats, samtliga munstycken, flottörer och membran.

The reconditioning kit contains a gasket kit, all jets, floats and diaphragms.

Vissa av våra kunder önskar själva exprimentera med annan bestyckning i Solex-förgasarna. Här nedan följer därför en uppställning över de detaljer i våra Solex-förgasare för marinmotorer som avviker från bilverisionen.

Some of our customers want to experiment themselves with other parts for the Solex carburettors. Below is a list of the parts of our Solex carburettors for marine engines that differ from the car versions.

Ant Qty	Det nr Part No	Benämning	Designation
2	6250125-9	Halsring 38	Choke tube 38
2	6000117-9	Huvudmunstycke 190	Main jet 190
2	6010134-2	Emulsionsrör med luftmunstycke 155	Emulsion tube carrier assembly 155
		PRISER	PRICES
	6250125-9	se 6250104-4	see 6250104-4
	6000117-9	se 6000116-1	see 6000116-1
	6010134-2	se 6010136-7	see 6010136-7

VOLVO

Competition Service

Prod RALLYJACKOR, TRÖJOR, T-SKIRTS RALLY JACKETS, SWEATERS, T-SHIRTS	Avd Section 2
	Nr No 20:1
Datum Date December 1972	

Ant Qty	Det nr Part No	Benämning	Storl	Designation	Size
1	552979-7	Rally-jacka	46	Rally jacket	XS=46
	552980-5	Rally-jacka	48	Rally jacket	S=48
1	552981-3	Rally-jacka	50	Rally jacket	M=50
1	552982-1	Rally-jacka	52	Rally jacket	L=52
1	552983-9	Rally-jacka	54	Rally jacket	XL=54
1	552984-7	Rally-jacka	56	Rally jacket	XXL=56

Jackan är av typ "täckjacka" i Volvo-blå färg och är försedd med följande detaljer: dold huva, två tvärgående "stripes" i vitt på vänster överarm, två ytterfickor med dragskedja, bröstficka, innerficka, pennficka på vänster ärm, dolt plastfodral för förarlicens, inbroderat Volvo-märke med lagerkrans och texten "RALLY".

The jackets are of rally type, Volvo-blue in colour, fitted with a concealed hood and have two white stripes around the left-hand upper arm, two outer pockets with zippers, breast pocket, inside pocket, pen-pocket on left sleeve, concealed plastic holder for license and embroidered Volvo-badge with a laurel embellishment with the word "RALLY" underneath.

1	552986-2	Sommar-jacka	Liten	Summer jacket	Small
1	552987-0	Sommar-jacka	Medium	Summer jacket	Medium
1	552988-8	Sommar-jacka	Stor	Summer jacket	Large

Volvo-blå, ofodrad, två sidofickor, en bröstficka med dragskedja, skjortmanchett, enkel dragskedja och Volvo-märke broderat i vitt med texten "RALLY" under.

Volvo-blue, without lining, two outer pockets, one breast pocket with zipper, sleeve cuff, zipper and embroidered Volvo-badge in white with the word "RALLY" underneath.

VOLVO

Competition Service

PROD	SECTION
Rally Jackets Sweat Shirts T-Shirts	2
	NO. 20:1
DATE November 1973	

Part Number	Description	Size
552973-0	Winter Rally Jacket	6 years
552974-8	Winter Rally Jacket	8 years
552975-5	Winter Rally Jacket	10 years
552976-3	Winter Rally Jacket	12 years
552977-1	Winter Rally Jacket	14 years
552978-9	Winter Rally Jacket	16 years
552979-7	Winter Rally Jacket	Extra Small
552980-5	Winter Rally Jacket	Small
552981-3	Winter Rally Jacket	Medium
552982-1	Winter Rally Jacket	Large
552983-9	Winter Rally Jacket	Extra Large
552984-7	Winter Rally Jacket	Extra Extra Large

The jackets are of rally type, Volvo-blue in color, fitted with a concealed hood and have two white stripes around the left-hand upper arm, two outer pockets with zippers, breast pocket, inside pocket, pen-pocket on left sleeve, concealed plastic holder for license and embroidered Volvo-badge with a laurel embellishment.

552986-2	Summer Jacket	Small
552987-0	Summer Jacket	Medium
552988-8	Summer Jacket	Large

Volvo-blue, without lining, two outer pockets, one breast pocket with zipper, sleeve cuff, zipper and with Volvo-badge in white sewed on.

Part Number	Description	Size
	YELLOW SWEAT SHIRT WITH VOLVO-BADGE	
552951-6	Sweat Shirt	Extra Small
552952-4	Sweat Shirt	Small
552953-2	Sweat Shirt	Medium
552954-0	Sweat Shirt	Large
552955-7	Sweat Shirt	Extra Large
	YELLOW SWEAT SHIRT WITH VOLVO-BADGE WITH THE WORD "RALLY" UNDERNEATH	
552956-5	Sweat Shirt	Extra Small
552957-3	Sweat Shirt	Small
552958-1	Sweat Shirt	Medium
552959-9	Sweat Shirt	Large
552960-7	Sweat Shirt	Extra Large
	WHITE SWEAT SHIRT WITH VOLVO-BADGE	
552961-5	Sweat Shirt	Extra Small
552962-3	Sweat Shirt	Small
552963-1	Sweat Shirt	Medium
552964-9	Sweat Shirt	Large
552965-7	Sweat Shirt	Extra Large
	WHITE SWEAT SHIRT WITH VOLVO-BADGE WITH THE WORD "RALLY" UNDERNEATH	
552931-8	Sweat Shirt	Extra Small
552932-6	Sweat Shirt	Small
552933-4	Sweat Shirt	Medium
552934-2	Sweat Shirt	Large
552935-9	Sweat Shirt	Extra Large

VOLVO

Competition Service

PROD	SECTION
T-SHIRTS	5
	NO. 20:3
DATE June, 1974	

WHITE T-SHIRT WITH VOLVO BADGE IN BLUE

552227-1	6 - 9 years
552228-9	10 - 13 years
552966-5	Ladies Small
552967-2	Men Small
552968-7	Medium
552229-7	Large

WHITE T-SHIRT WITH VOLVO-BADGE IN BLUE WITH THE WORD "RALLY" UNDERNEATH

552231-3	6 - 9 years
552232-1	10 - 13 years
552969-8	Ladies Small
552970-6	Men Small
552971-4	Medium
552233-9	Large

YELLOW T-SHIRT WITH VOLVO-BADGE IN BLUE

552937-5	6 - 9 years
552938-3	10 - 13 years
552939-1	Ladies Small
552940-9	Men Small
552941-7	Medium
552942-5	Large

YELLOW T-SHIRT WITH VOLVO BADGE IN BLUE WITH THE WORD "RALLY" UNDERNEATH

552944-1	6 - 9 years
552945-8	10 - 13 years
552946-6	Ladies Small
552947-4	Men Small
552948-2	Medium
552949-0	Large

WHITE T-SHIRT WITH PICTURE OF VOLVO CAR

552235-4	6 - 9 years
552236-2	10 - 13 years
552237-0	Ladies Small
552238-8	Men Small
552239-6	Medium
552240-4	Large

YELLOW T-SHIRT WITH PICTURE OF VOLVO CAR

552242-0	6 - 9 years
552243-8	10 - 13 years
552244-6	Ladies Small
552245-3	Men Small
552246-1	Medium
552247-9	Large

BLUE T-SHIRT WITH PICTURE OF VOLVO-CAR

552249-5	6 - 9 years
552250-3	10 - 13 years
552251-1	Ladies Small
552252-9	Men Small
552253-7	Medium
552254-5	Large

WHITE T-SHIRT WITH PICTURE OF RACING BOAT WITH VOLVO PENTA-ENGINE IN ACTION

552256-0	6 - 9 years
552257-8	10 - 13 years
552258-6	Ladies Small
552259-4	Men Small
552260-2	Medium
552261-0	Large

YELLOW T-SHIRT WITH PICTURE OF RACING BOAT EQUIPPED WITH VOLVO-PENTA IN ACTION

552263-6	6 - 9 years
552264-4	10 - 13 years
552265-1	Ladies Small
552266-9	Men Small
552267-7	Medium
552268-5	Large

BLUE T-SHIRT WITH PICTURE OF RACING BOAT EQUIPPED WITH VOLVO-PENTA IN ACTION

552270-1	6 - 9 years
552271-9	10 - 13 years
552272-7	Ladies Small
552273-5	Men Small
552274-3	Medium
552275-0	Large

ALL T-SHIRTS - $4.30 Retail
Dealer Discount Code A

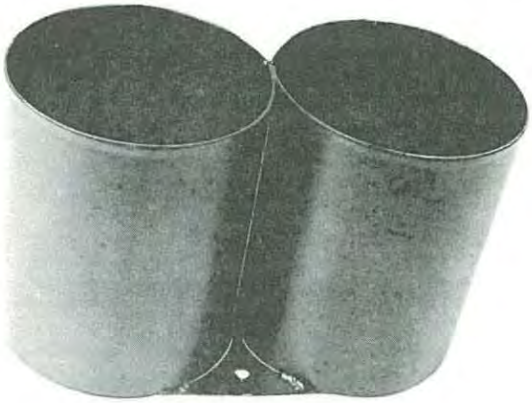
REMARKS: Due to the nature of the European manufacture of the cloth used in the T-Shirts, it is strongly recommended that one size larger than normal be ordered.

VOLVO

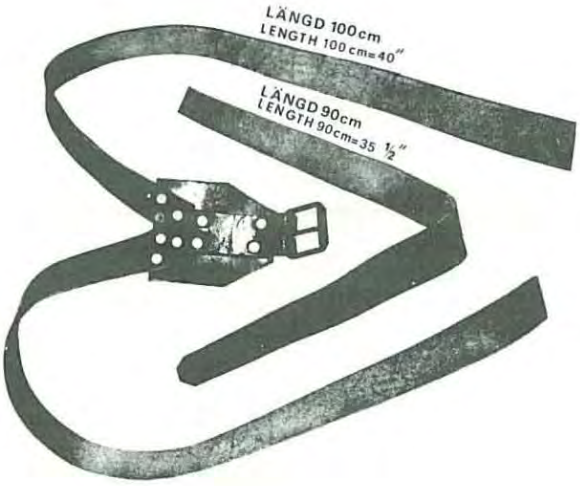
Competition Service

Prod	Avd Section 2
DIVERSE TILLBEHÖR VARIOUS ACCESSORIES	Nr No 21
Datum Date December 1972	

Ant Qty	Det nr Part No	Benämning	Designation
1	552845-0	Förkromad ventilkåpa (B20)	Chromium-plated valve cover (B20)
1	552985-4	Volvo-emblem (broderat i vitt på blått tyg med lagerkrans och texten "RALLY", diameter - 75 mm)	Volvo-emblem (of cloth with laurel embellishment and underneath the word "RALLY", all in white colour on blue bottom, diameter - 75 mm)



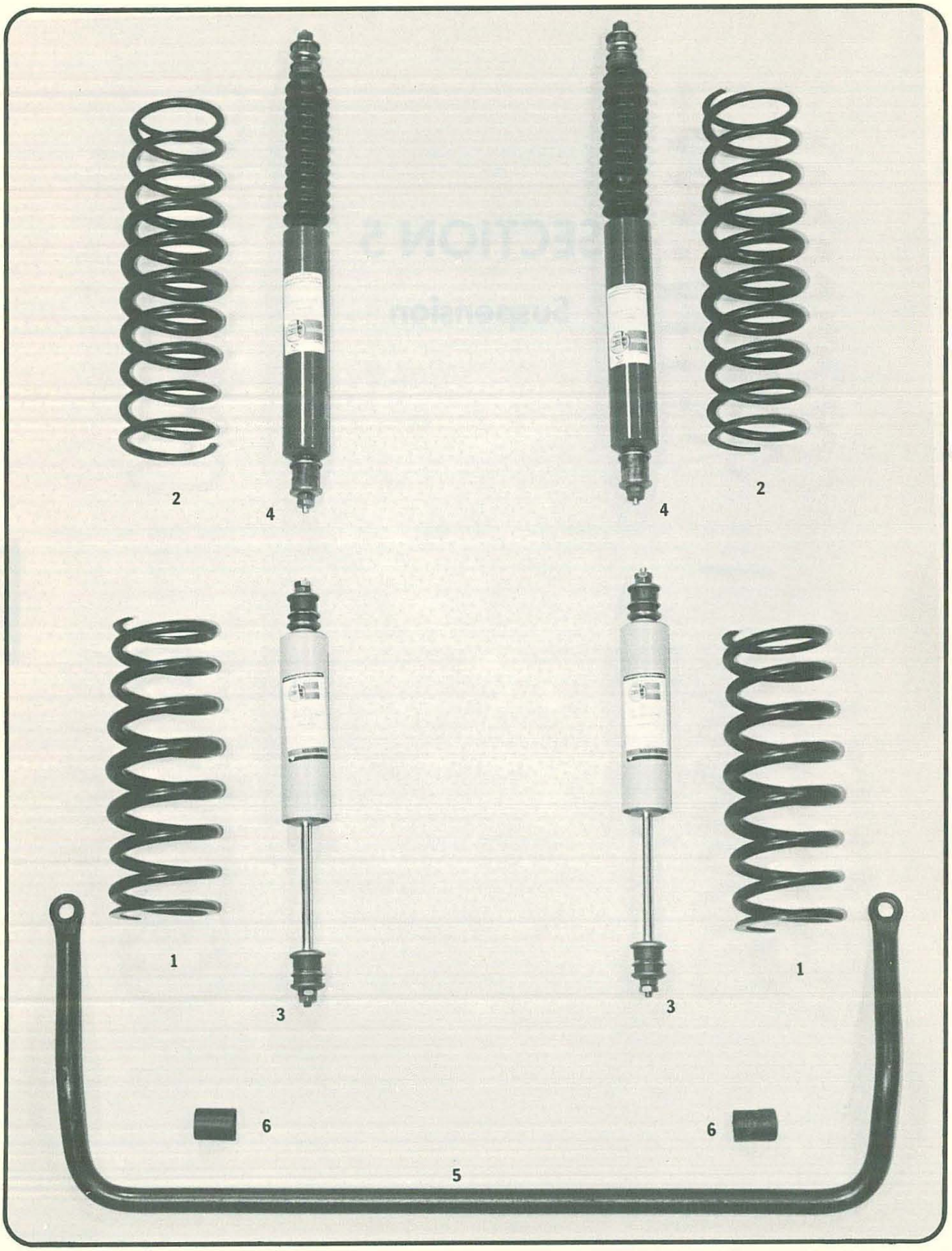
1	552310-5	Hållare för 2 st 1-liters plastflaskor för olja (diameter 86 mm)	Retainer for two 1-litre plastic bottles for oil (diameter 86 mm)



1	552304-8	Rem för extra reservhjul (avsedd för 1-2 liggande hjul)	Retainer for spare wheel (intended for 1-2 wheels placed horizontally)

SECTION 5

Suspension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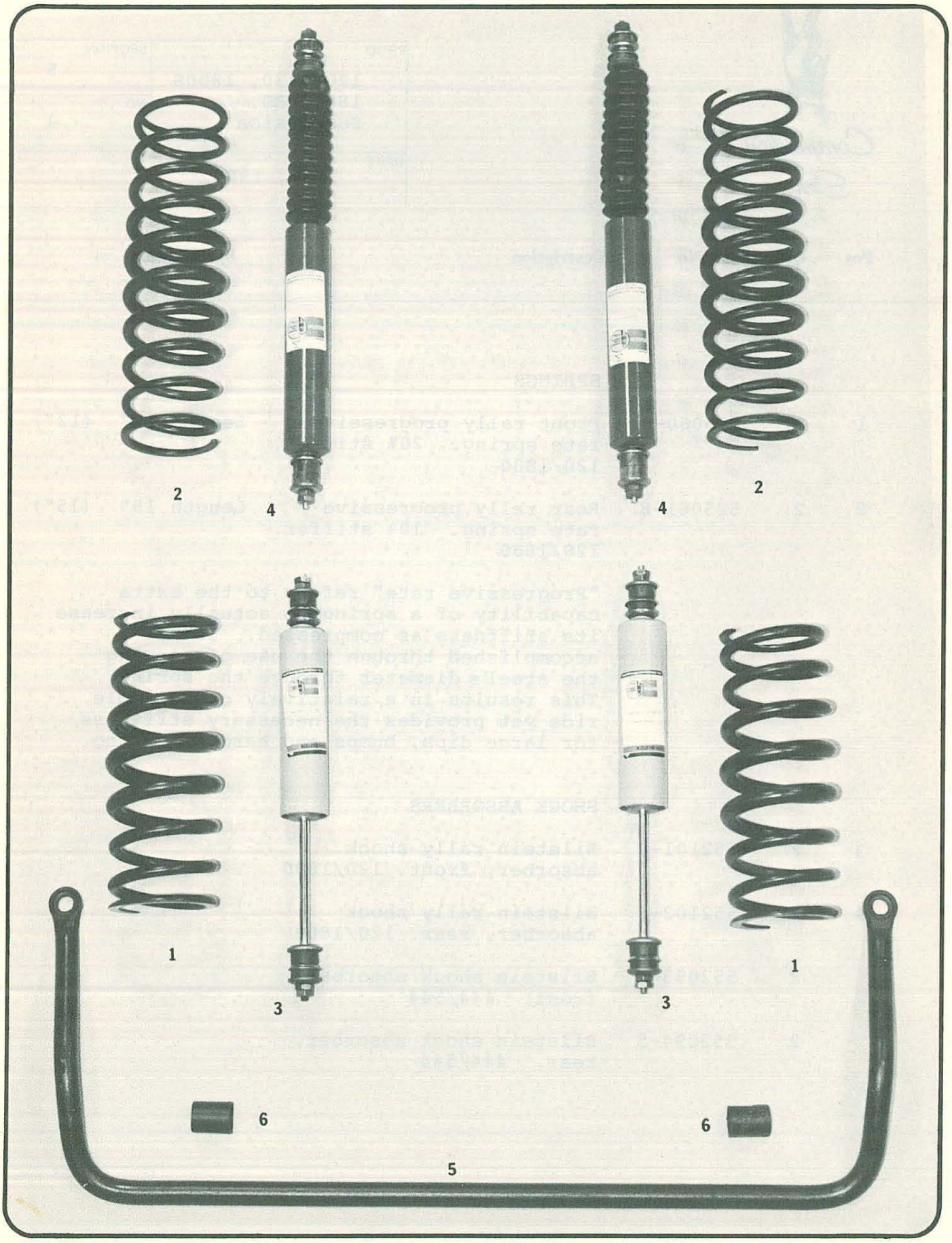
VOLVO

Competition Service

PROD	SECTION
120, 130, 1800S 1800E/ES Suspension	5
	NO. 1
DATE May, 1977	

Pos	Qty	Part No.	Description	Specification
			SPRINGS	
1	2	525060-0	Front rally progressive rate spring. 20% stiffer. 120/1800	Length 12" (12")
2	2	525061-8	Rear rally progressive rate spring. 10% stiffer. 120/1800	Length 15" (15")
			"Progressive rate" refers to the extra capability of a spring to actually increase its stiffness as compressed. It is accomplished through the use of varying the steel's diameter through the spring. This results in a relatively comfortable ride yet provides the necessary stiffness for large dips, bumps and hard cornering.	
			SHOCK ABSORBERS	
3	2	552101-8	Bilstein rally shock absorber, front. 120/1800	
4	2	552102-6	Bilstein rally shock absorber, rear. 120/1800	
	2	552093-7	Bilstein shock absorber, front. 444/544	
	2	552094-5	Bilstein shock absorber, rear. 444/544	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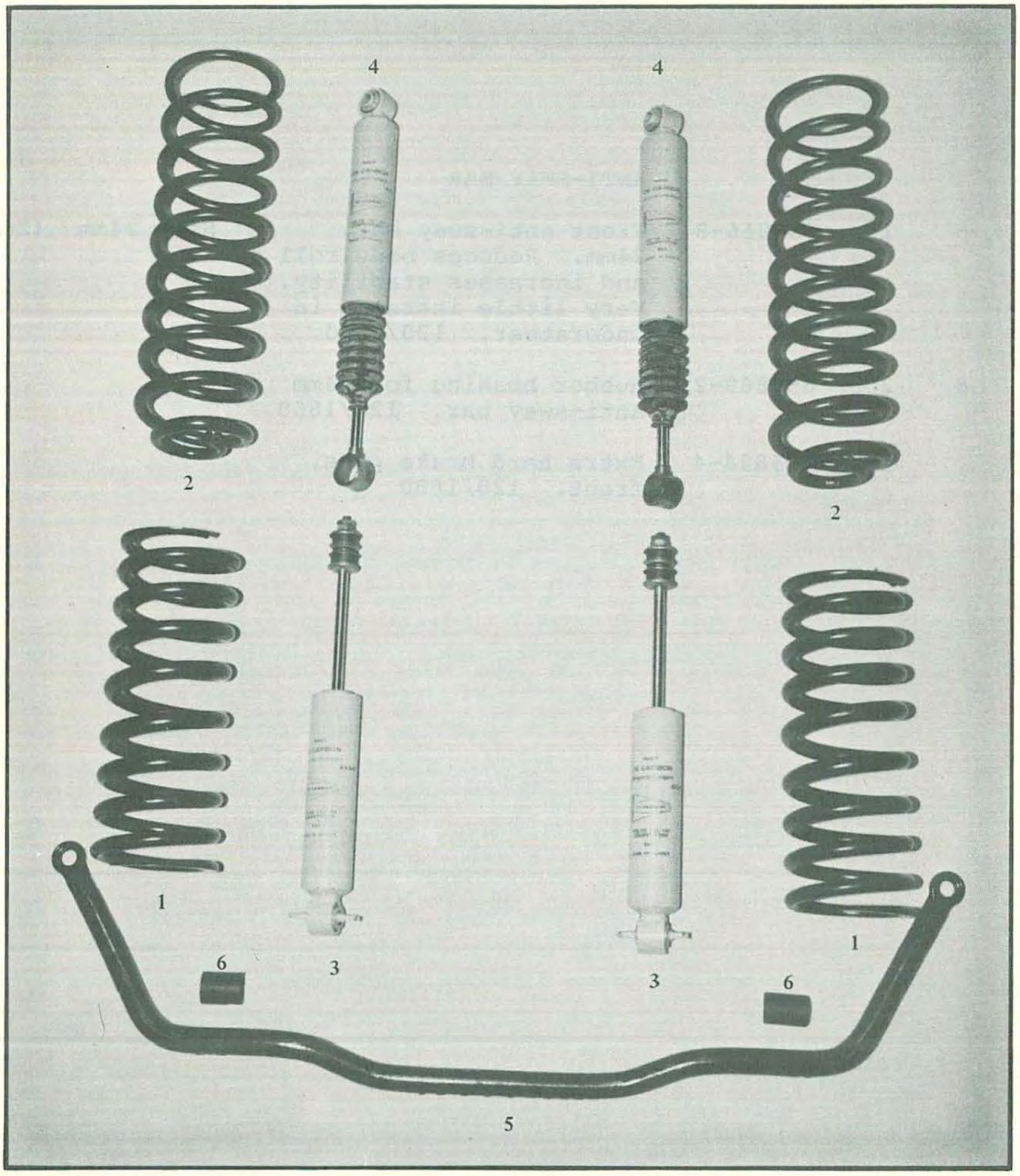
Pos	Qty	Part No.	Description	Specification
			ANTI-SWAY BAR	
5	1	659866-8	Front anti-sway bar, 24mm. Reduces body roll and increases stability. Very little increase in understeer. 120/1800	Size 24mm (20mm)
6	2	659869-2	Rubber bushing for 24mm anti-sway bar. 120/1800	
	1	*275894-4	Extra hard brake pads, front. 120/1800	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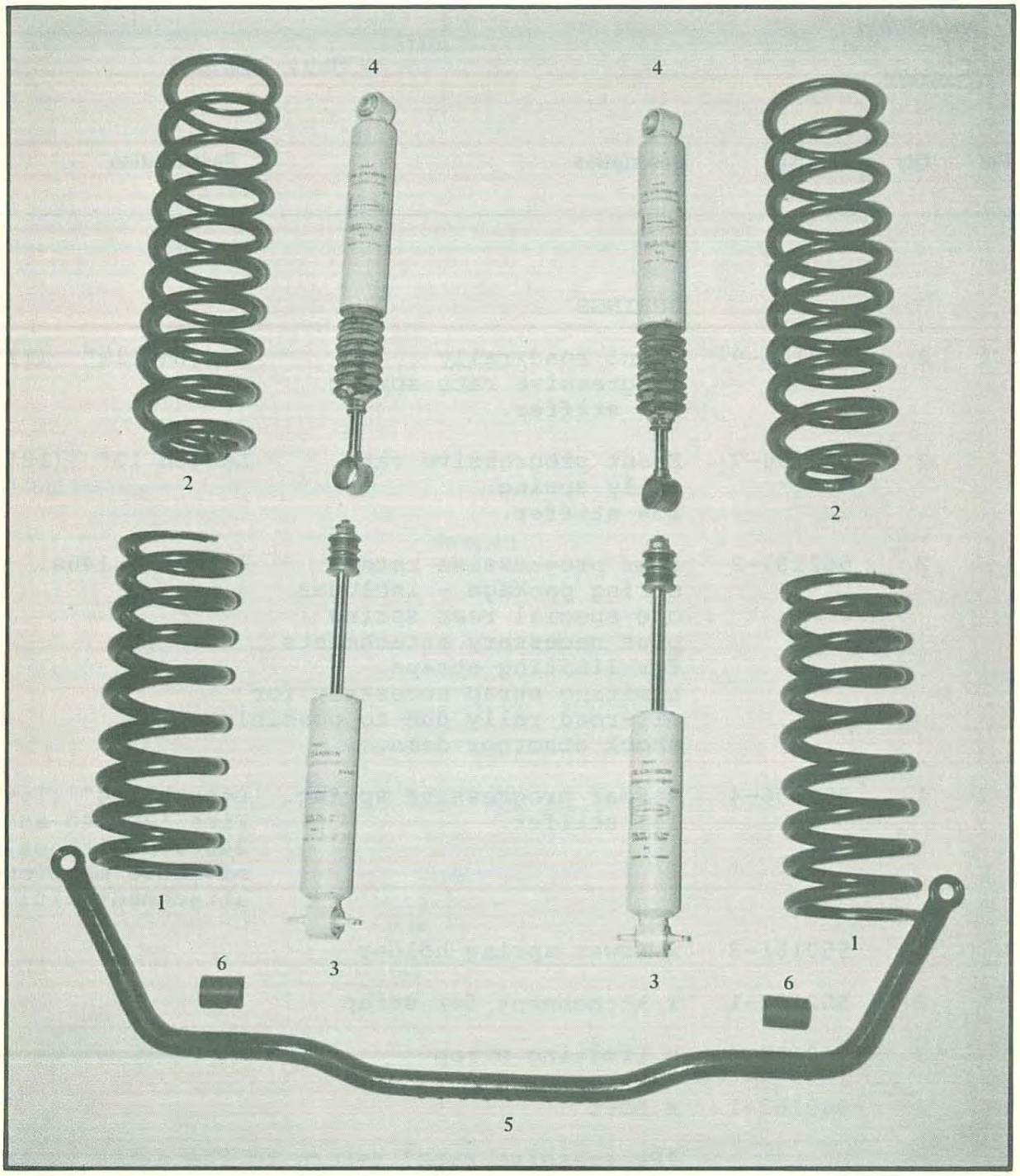
VOLVO

Competition Service

PROD	SECTION
140 Suspension	5
	NO. 3
DATE May, 1977	

Pos	Qty	Part No.	Description	Specification
			SPRINGS	
1	2	552105-9	Front road/rally progressive rate spring. 15% stiffer.	Length 11½" (12")
	2	552106-7	Front progressive rate rally spring. 25% stiffer.	Length 13" (12")
	2	552137-2	Rear progressive rate spring package - includes one special rear spring plus necessary attachments for limiting straps. Limiting strap necessary for off-road rally due to possible shock absorber damage.	Fits all 140s.
2	1	552136-4	x Rear progressive spring. 15% stiffer.	Length 17½" (16½") Fits '74 140 and 240/260 without aid of above mentioned attachment kit.
	1	552151-3	x Lower spring holder	
	2	552152-1	x Attachment for strap	
	1	*660108-2	x Limiting strap	
	2	*940162-1	x Bolt	

"Progressive rate" refers to the extra capability of a spring to actually increase its stiffness as compressed. It is accomplished through the use of varying the steel's diameter through the spring. This results in a relatively comfortable ride yet provides the necessary stiffness for large dips, bumps and hard cornering.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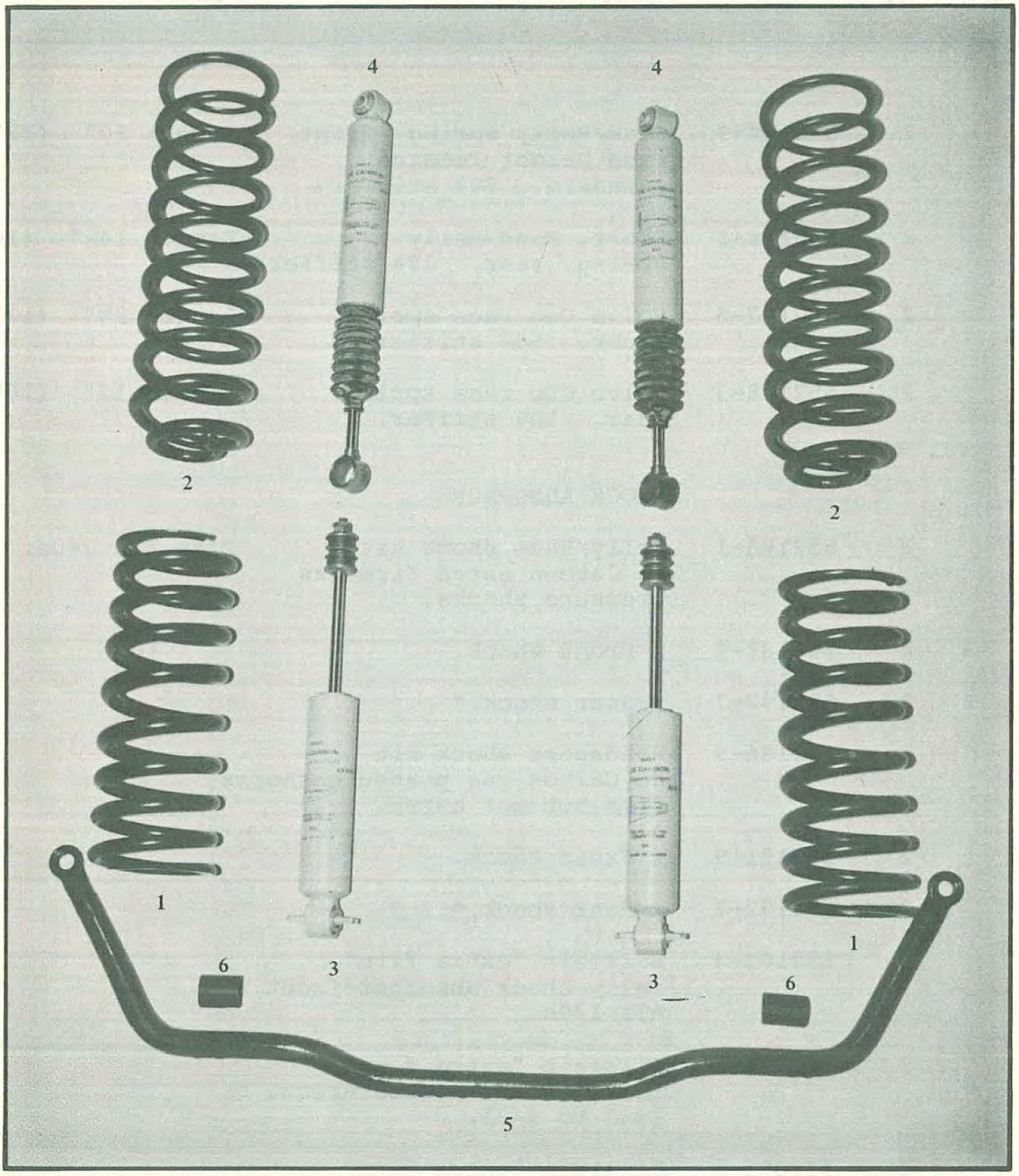
Pos	Qty	Part No.	Description	Specification
	2	552134-9	Road/Rally spring, front ride height remains standard. 70% stiffer.	Length 10" (12")
	2	552128-1	Short, Road/Rally spring, rear. 10% stiffer.	Length 14½" (16½")
	2	552107-5	Volvo Cup race spring, front. 50% stiffer.	Length 9½" (12")
	2	552108-3	Volvo Cup race spring, rear. 10% stiffer.	Length 13" (16½")
			SHOCK ABSORBERS	
	1	552185-1	Rally/Race shock kit de Carbon extra firm gas pressure shocks.	Fits all 140s.
3	2	552189-3	x Front shock.	
4	2	552192-7	x Rear shock.*	
	1	552186-9	Roadsport shock kit de Carbon gas pressure shocks, firm but not harsh.	
	2	552191-9	x Front shock.	
	2	552192-7	x Rear shock.*	
	2	552103-4	Bilstein "extra firm" rally shock absorber-front. All 140s.	
	2	552104-2	Bilstein "extra firm" rally shock absorber-rear. 1967 to 9/71.	
	2	552092-9	Bilstein "extra firm" rally shock absorber-rear. 1972 to 1974 140s.	

*Fits all 140s but '67 - '70 must use adaptor kit 282761-6.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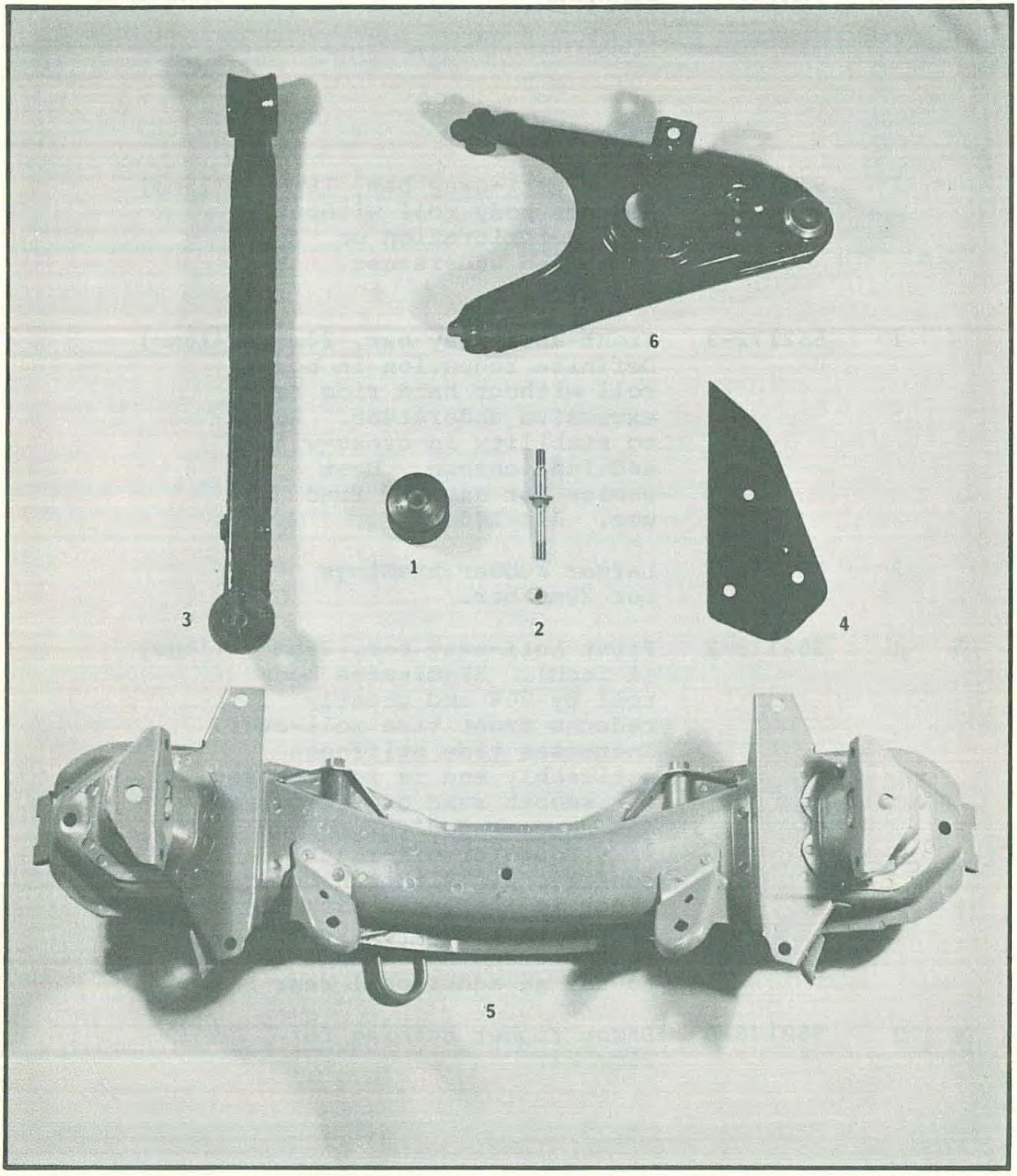
Pos	Qty	Part No.	Description	Specification
			ANTI-SWAY BARS	
	1	552171-1	Front anti-sway bar, 18mm. Reduces body roll without ride deterioration or increased understeer. All 140s.	(15mm)
	1	552172-9	Front anti-sway bar, 20mm. Definite reduction in body roll without hard ride or excessive understeer. Adds to stability in cross-wind and lane change. Best choice for any off road use. All 140s.	(15mm)
	2	552173-7	Larger rubber bushings for 20mm bar.	
5	1	552175-2	Front anti-sway bar, 25mm (1 inch). Eliminates body roll by 70% and greatly reduces front tire roll-over. Increases ride stiffness noticeably and is recommended for smooth road or race track. Not recommended for use on very rough or off-road conditions. Although under-steer is increased with the use of the bar, many drivers find it "interesting" and prefer not to use an additional rear bar.	(15mm)
6	2	552176-0	Large rubber bushing for 25mm bar.	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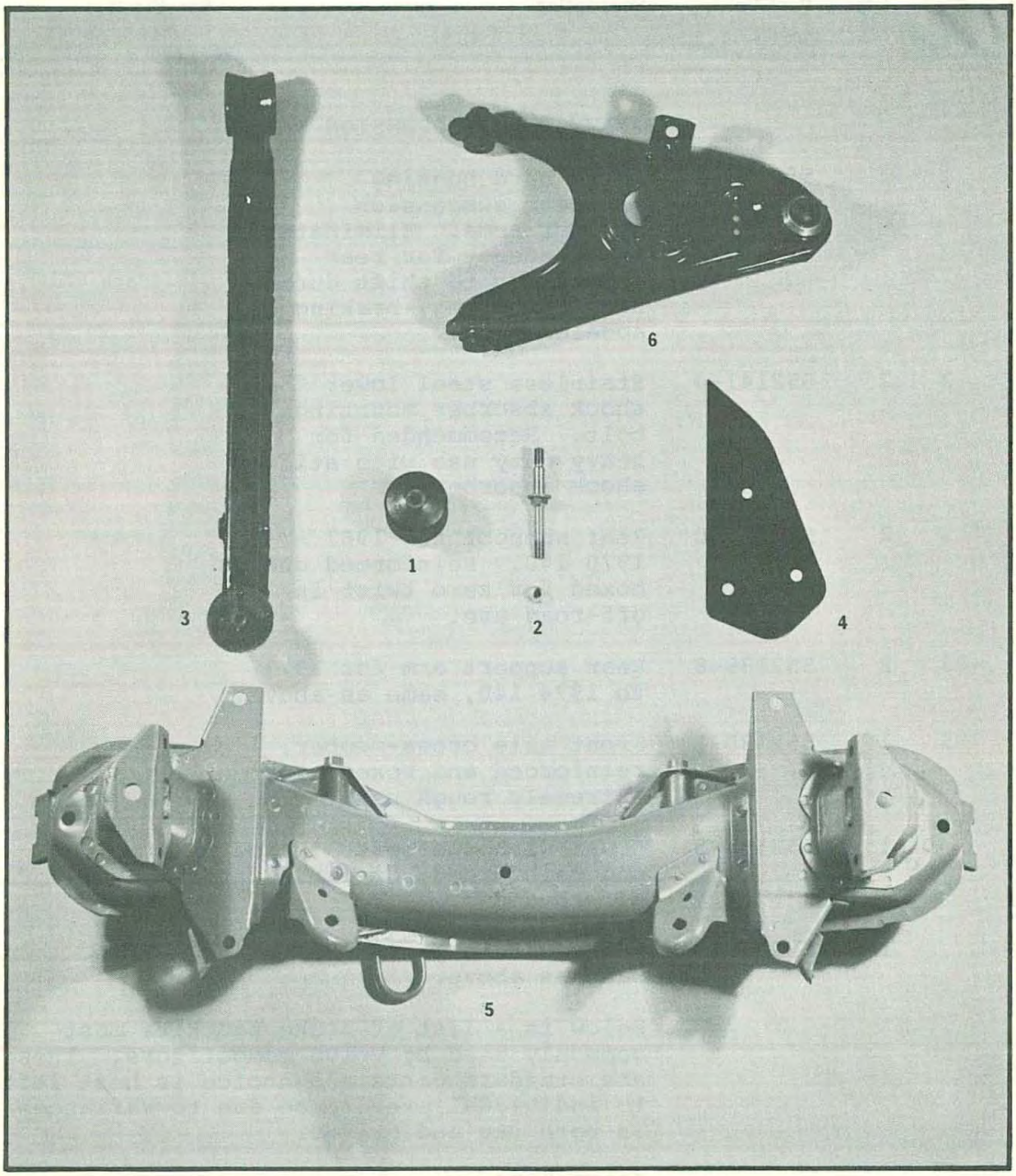
Pos	Qty	Part No.	Description	Specification
			HEAVY DUTY SUSPENSION PARTS	
1	2	552140-6	Extra hard bushing for rear suspension support arms. Eliminates any tendency for rear suspension to shift during hard cornering, braking or acceleration.	
2	2	552141-4	Stainless steel lower shock absorber mounting bolt. Recommended for heavy duty use with stiffer shock absorbers.	
3	2	552138-0	Rear support for 1967 - 1970 140. Reinforced and boxed for zero twist in off-road use.	
3	2	552139-8	Rear support arm for 1971 to 1974 140, same as above.	
5	1	552130-7	Front axle cross-member, reinforced and boxed, for extremely rough use.	
	1	552131-5	Lower wishbone-left. Boxed and reinforced, designed for off-road use.	
	1	552132-3	Lower wishbone-right. Same as above.	
			Below is a list of brake pad kits most commonly used by Volvo competitors. These are standard parts and choice is best left to individual preference due to variances in both car and driver.	
			BRAKE PADS	
	1	*275894-4	Brake pad kit, front (Girling)	
	1	*275895-1	Brake pad kit, rear (Girling)	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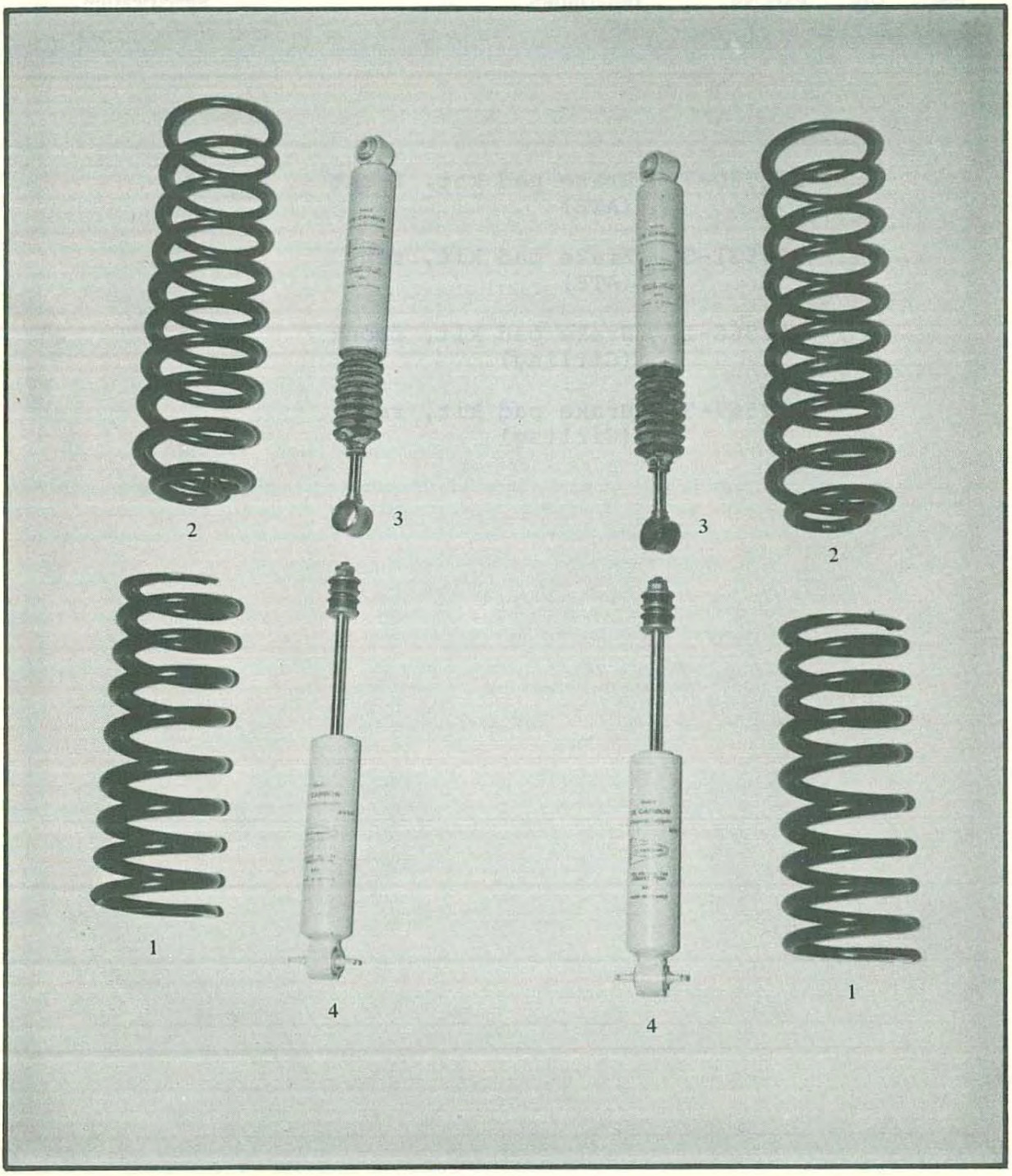
Pos	Qty	Part No.	Description	Specification
	1	*272530-7	Brake pad kit, front (ATE)	
	1	*274531-5	Brake pad kit, rear (ATE)	
	1	*272566-1	Brake pad kit, front (Girling)	
	1	*272567-9	Brake pad kit, rear (Girling)	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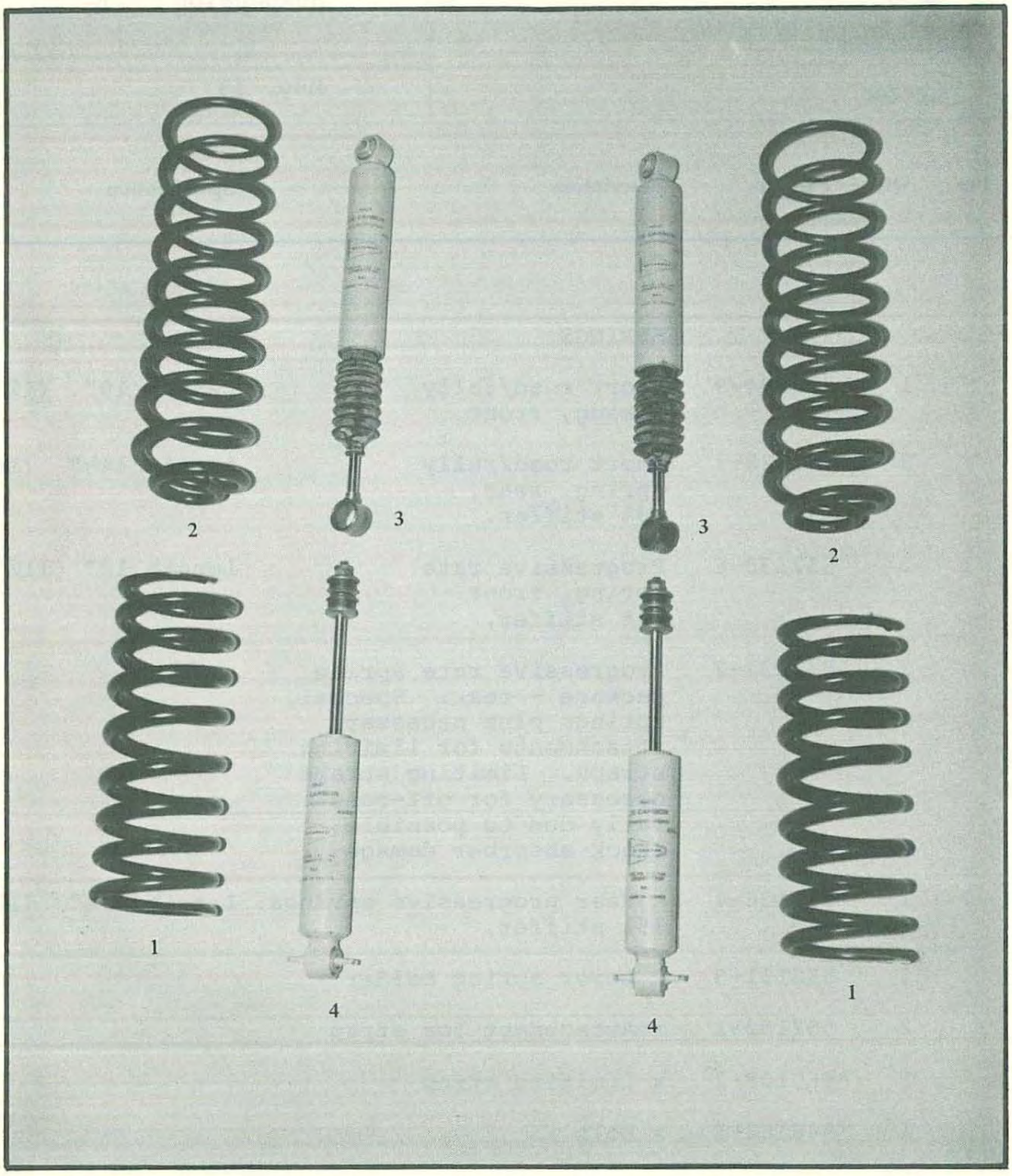
VOLVO

Competition Service

PROD	SECTION
164 Suspension	5
	NO. 8
DATE May, 1977	

Pos	Qty	Part No.	Description	Specification
			SPRINGS	
	1	552134-9	Short road/rally spring, front.	Length 10" (12")
	2	552128-1	Short road/rally spring, rear. 10% stiffer.	Length 14½" (16½")
1	2	552135-6	Progressive rate spring, front. 10% stiffer.	Length 12" (12")
	2	552137-2	Progressive rate spring package - rear. Special springs plus necessary attachments for limiting straps. Limiting straps necessary for off-road rally due to possible shock absorber damage.	
2	1	552136-4	x Rear progressive springs. 15% stiffer.	Length 17½" (16½")
	1	552151-3	x Lower spring holder	
	2	552152-1	x Attachment for strap	
	1	*660108-2	x Limiting strap	
	1	*940162-1	x Bolt	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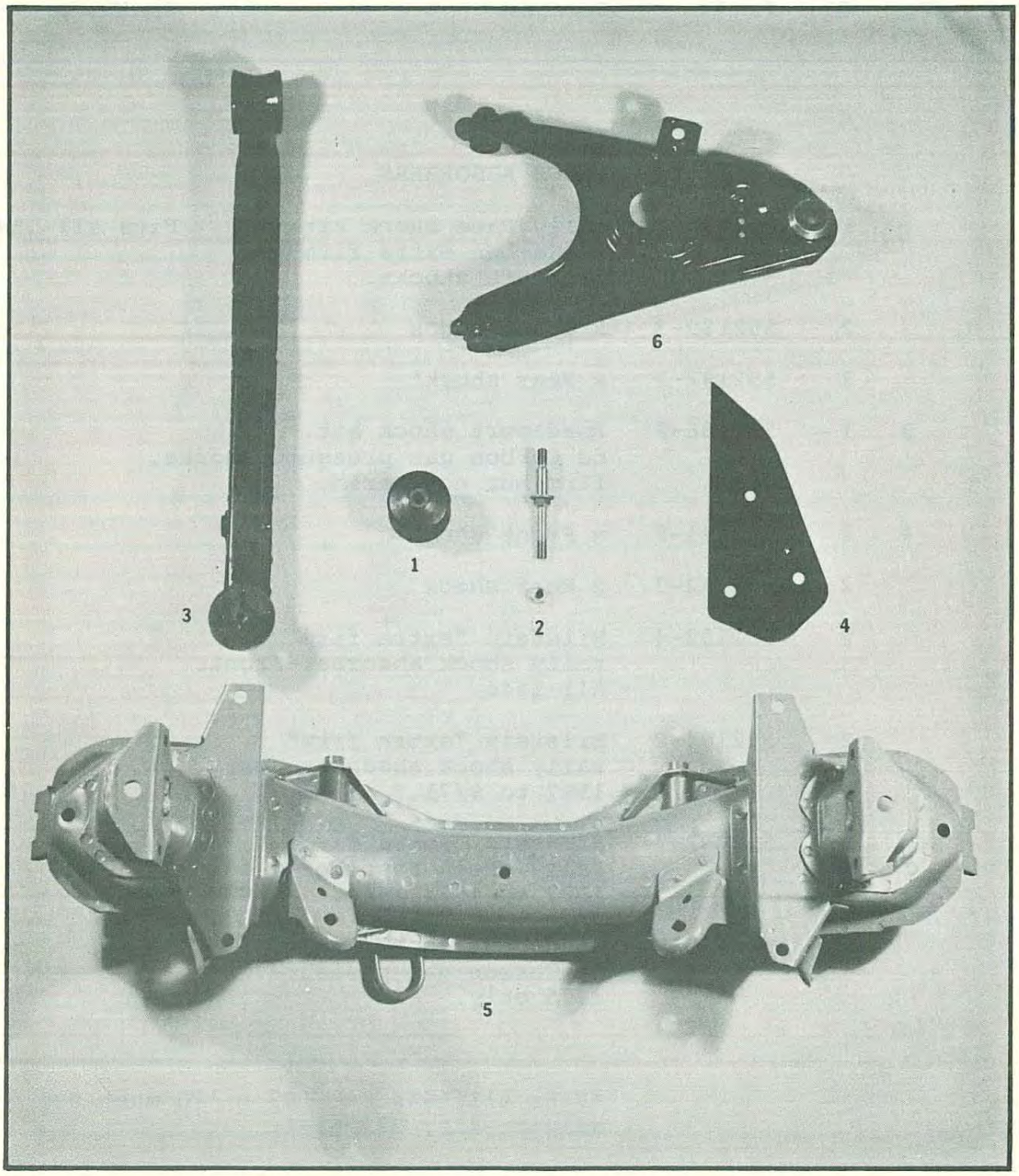
Pos	Qty	Part No.	Description	Specification
			SHOCK ABSORBERS	
	1	552185-1	Rally/Race shock kit. de Carbon extra firm gas pressure shocks.	Fits all 164s.
	2	552189-3	x Front shock	
	2	552192-7	x Rear shock*	
3	1	552186-9	Roadsport shock kit. de Carbon gas pressure shocks, firm but not harsh.	
4	2	552191-9	x Front shock	
	2	552192-7	x Rear shock	
	2	552103-4	Bilstein "extra firm" rally shock absorber-front. All 164s.	
	2	552104-2	Bilstein "extra firm" rally shock absorber-rear. 1967 to 9/71.	
	2	552092-9	Bilstein "extra firm" rally shock absorber-rear. 1972 to 1974 164s.	
	2	552196-8	Roadsport shock, rear. de Carbon gas pressure. 1975 only.	

*Fits all 164s but '69 - '70 must use adaptor kit, 282761-6.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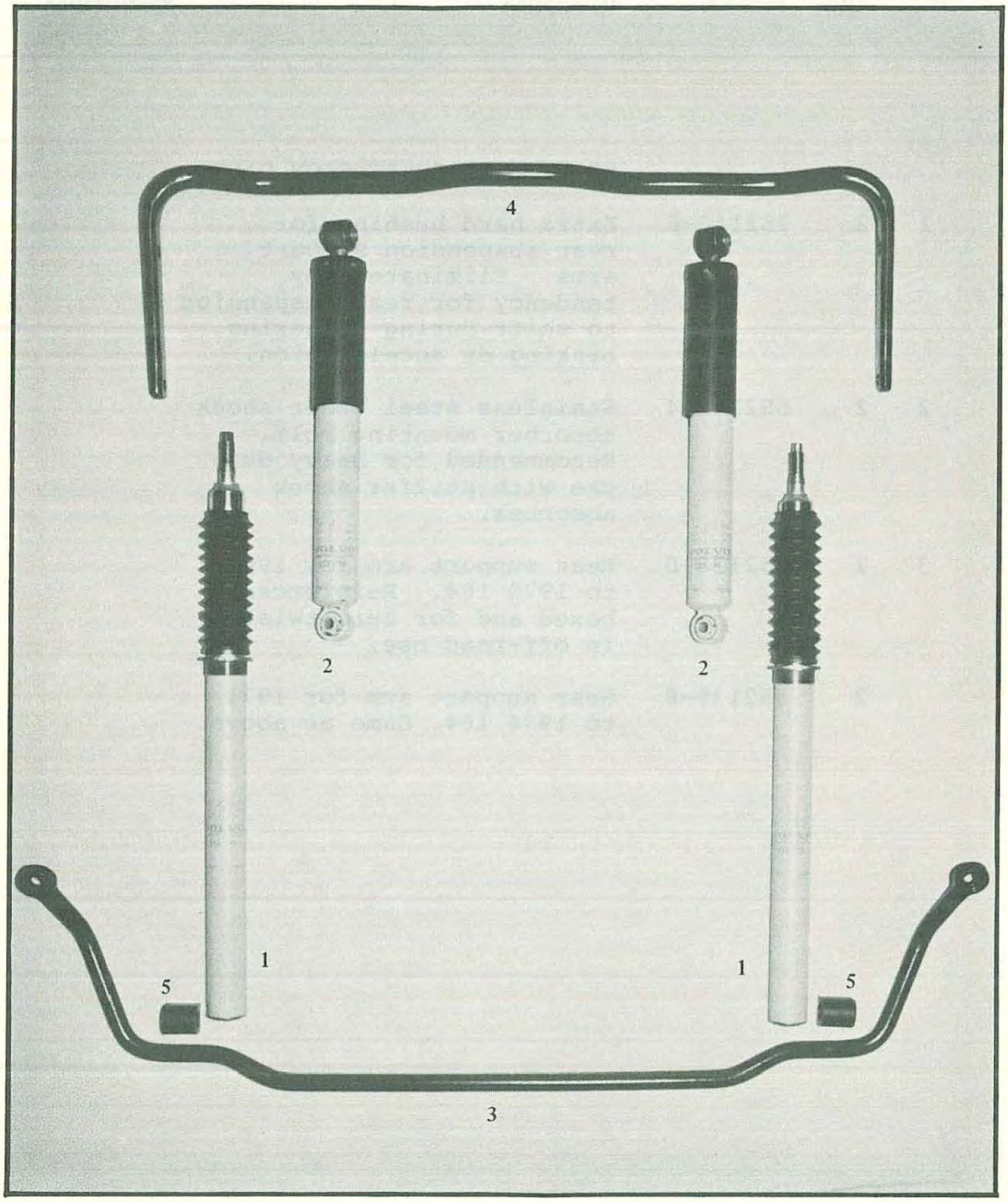
Pos	Qty	Part No.	Description	Specification
			HEAVY DUTY SUSPENSION PARTS	
1	2	552140-6	Extra hard bushing for rear suspension support arms. Eliminates any tendency for rear suspension to shift during cornering, braking or acceleration.	
2	2	552141-4	Stainless steel lower shock absorber mounting bolt. Recommended for heavy duty use with stiffer shock absorber.	
3	2	552138-0	Rear support arm for 1967 to 1970 164. Reinforced, boxed and for zero twist in off-road use.	
	2	552139-8	Rear support arm for 1971 to 1974 164. Same as above.	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VOLVO

Competition Service

PROD	SECTION
240/260 Series Suspension	5
	NO. 11
DATE May, 1977	

Pos	Qty	Part No.	Description	Specification
			SHOCK ABSORBERS	
1	2	552195-0	Roadsport gas pressure shock, front. Firm but comfortable.	
2	2	552196-8	Roadsport gas pressure shock, rear.	
			ANTI-SWAY BARS	
	1	552096-0	Anti-sway bar kit.*	
3	1	552097-8	x Anti-sway bar, front. 21mm.*	
4	1	552098-6	x Anti-sway bar, rear. 25mm.**	
5	2	1228841-1	x Rubber bushing for 552097-8.	

Anti-sway bar kit reduces body roll in cornering and adds greater stability in directional change and cross winds. The handling becomes more neutral and the ride slightly firmer.

*Front bar does not fit 260 series.

**Rear bar does not fit 1977 models.

FSC 041

SECTION 7

Competition Accessories
and
Sports Clothing

FSC 041

FLK 706

HUO 332

VOLVO

Competition Service

PROD	SECTION
Competition Accessories - Sport Clothing	7
	NO. 1
DATE May, 1977	

Pos	Qty	Part No.	Description	Specification
1	1	552305-5	"Recaro" driver's seat - Superior in construction and driving comfort. Complete with headrest and mounting base for tilt and fore and aft adjustment.	
			SPOILERS	
2		552165-3	120/130 series front spoiler without bumper only.	
3		552166-1	140 series front spoiler - with or without bumper.	
5		552167-9	Rear spoiler - 140/160/240/260 Mounts to trunk lid with 2 screws.	
4		552168-7	240 series front spoiler mounted to bumper.	
			Spoilers increase gas mileage, top speed and road-holding stability. Made of unpainted fiberglass. Complete with mounting kit and installation instructions. Spoilers are delivered unpainted.	
5		552306-3	White Volvo sports stripe	
		552307-1	Black Volvo sports stripe	

VOLVO

TEAM
VOLVO

Pos	Qty	Part No.	Description	Specification
			JACKETS	
1	1	552043-2	Rally Jacket	Extra Small - 34-36
	1	552044-0	Rally Jacket	Small - 36-38
	1	552045-7	Rally Jacket	Medium - 38-40
	1	552046-5	Rally Jacket	Large - 42-44
	1	552047-3	Rally Jacket	Extra Large - 46-48
			Medium weight rally jacket of 100% water repellent nylon in Volvo blue. Two white vertical stripes on the right front side with the "Volvo" badge sewn on the left. Lining is made of warm white nylon fleece with quilt lined sleeves. Two button collar and cuffs along with two front pockets. Machine washable with a twelve month warranty against defects in materials or workmanship.	
2	1	552930-0	Summer Jacket	Small
	1	552950-8	Summer Jacket	Medium
	1	552989-6	Summer Jacket	Large
	1	552990-4	Summer Jacket	Extra Large
			Volvo blue, 100% nylon, without liner. Black and white stripes follow outside length of sleeve. Full length zipper with button sleeve cuff. "Team Volvo" patch sewn on left side.	

SUPER
VOLVO

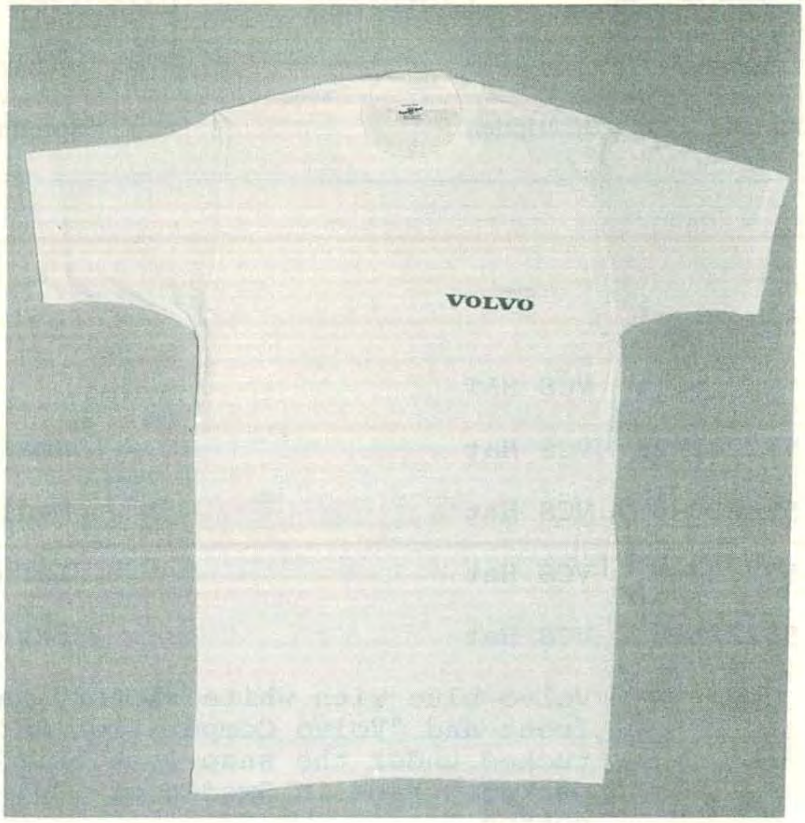
VOLVO

VOLVO
RALLY

VOLVO
RACING

TEAM
VOLVO

Pos	Qty	Part No.	Description	Specification
			VCS HAT	
1	1	552222-2	VCS Hat	Small
	1	552223-0	VCS Hat	Medium
	1	552224-8	VCS Hat	Large
	1	552225-5	VCS Hat	Extra Large
			Volvo blue with white victory hand on front and "Volvo Competition Service" tucked under the snap-lock brim and pocket. Made in Sweden of 100% washable cotton.	
			JACKET PATCHES	
2	10	552661-1	"Super Volvo" patch Full color 3" x 4½"	
3	10	552662-9	"Volvo" patch 4½" x 1½" Blue & white with black boarder	
4	10	552663-7	"Volvo Rally" 4½" x 1½" Blue & white with black boarder	
5	10	552664-5	"Volvo Racing" 4½" x 1½" Blue & white with black boarder	
6	10	552665-2	"Team Volvo" 4½" x 1½" Blue & white with black boarder	
	1	552921-9	Assortment pack. Contains one of each patch listed above.	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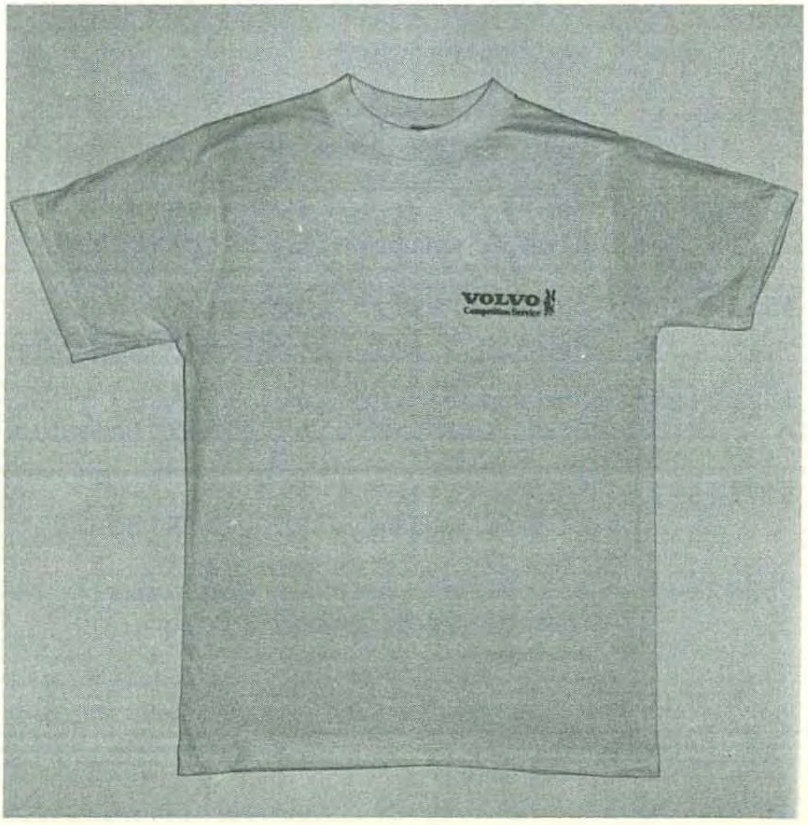
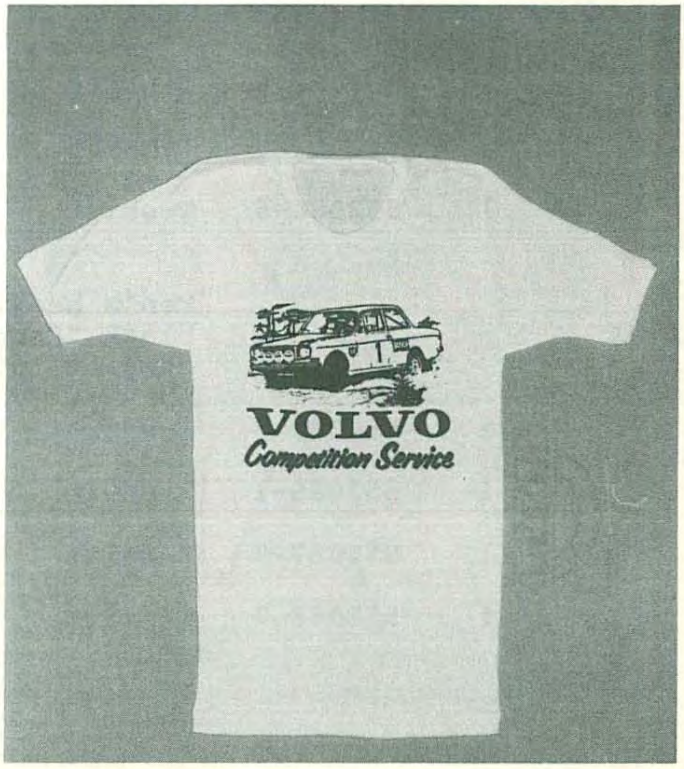

VOLVO

Pos	Qty	Part No.	Description	Specification
			MEN'S T-SHIRTS	
			Men's heavy white T-shirt with blue "Volvo" located on left chest. 100% cotton, machine washable, drip dry.	
1	1	552077-0	T-shirt	34-36
	1	552078-8	T-shirt	38-40
	1	552079-6	T-shirt	42-44
	1	552080-4	T-shirt	46-48
			Men's heavy light blue T-shirt with blue "Volvo" located on left chest. 100% cotton, machine washable, drip dry.	
1	1	552081-2	T-shirt	34-36
	1	552082-0	T-shirt	38-40
	1	552083-8	T-shirt	42-44
	1	552084-6	T-shirt	46-48
			Men's heavy yellow with blue "Volvo" and black "Competition Service" located on left chest. 100% cotton, machine wash, drip dry.	
2	1	552085-3	T-shirt	34-36
	1	552086-1	T-shirt	38-40
	1	552087-9	T-shirt	42-44
	1	552088-7	T-shirt	46-48

VOLVO

VOLVO
RALLY


VOLVO
Competition Service

Pos	Qty	Part No.	Description	Specification
			CHILDREN'S T-SHIRTS	
			White T-shirt with Volvo-badge in blue with word "RALLY" underneath.	
1	1	552231-3	T-shirt	4 - 8 years
	1	552232-1	T-shirt	8 - 12 years
	1	552969-8	T-shirt	12 - 16 years (ladies sm.)
			Yellow T-shirt with Volvo-badge in blue.	
2	1	552937-5	T-shirt	4 - 8 years
	1	552938-3	T-shirt	8 - 12 years
	1	552939-1	T-shirt	12 - 16 years (ladies sm.)
			Yellow T-shirt with Volvo-badge in blue with the word "RALLY" underneath.	
1	1	552944-1	T-shirt	4 - 8 years
	1	552945-8	T-shirt	8 - 12 years
	1	552946-6	T-shirt	12 - 16 years (ladies sm.)
			White T-shirt with picture of Volvo-car.	
3	1	552235-4	T-shirt	4 - 8 years
	1	552236-2	T-shirt	8 - 12 years
	1	552237-0	T-shirt	12 - 16 years (ladies sm.)
			Yellow T-shirt with picture of Volvo-car.	
3	1	552243-8	T-shirt	8 - 12 years
	1	552244-6	T-shirt	12 - 16 years (ladies sm.)

3 Competition Equipment

VOLVO

Competition Service

PROD	SECTION
Winter Jackets Sweat Shirts T-Shirts	3
	NO. 20:1
DATE October, 1974	

Ski Jacket design results in extra long sleeves to partially cover hands. Recommend one size smaller if normal sleeve length is desired. Delicate cylce wash or dry clean.

Part Number	Description	Size
552974-8	Rally Jacket	6 to 8 years
552976-3	Rally Jacket	10 to 12 years
552977-1	Rally Jacket	14 years (extra small ladies
552978-9	Rally Jacket	16 years (small ladies)
552979-7	Rally Jacket	Extra Small Men
552980-5	Rally Jacket	Small
552981-3	Rally Jacket	Medium
552982-1	Rally Jacket	Large
552983-9	Rally Jacket	Extra Large
552984-7	Rally Jacket	Extra Extra Large

Suggested retail price on sizes up to and including 16 years $33.00. All others $39.27.

- -

Part Number	Description	Size
552986-2	Summer Jacket	Small
552987-0	Summer Jacket	Medium
552988-8	Summer Jacket	Large

Suggest retail price $19.90.

- -

A very heavy jacket with fur collar and "Volvo" lining. Small Competition Service "victory hand" embroidered on front.

Part Number	Description	Size
552991-2	Heavy Winter Jacket	Extra Small
552992-0	Heavy Winter Jacket	Small
552993-8	Heavy Winter Jacket	Medium
552994-6	Heavy Winter Jacket	Large
552995-3	Heavy Winter Jacket	Extra Large

Suggested retail price $51.65. Special order from Sweden only. Allow 3 to 6 weeks for delivery.

4 Tuning Information

TUNING INFORMATION

General

The installation instructions, clearances, settings and tightening torques stated in the VOLVO Service Manual apply on the whole to the tuning kit. This tuning information only concerns deviations from the Service Manual.

OPERATIONS TO BE CARRIED OUT BEFORE INSTALLING TUNING KIT

Induction manifold

On the induction manifold, check that the drilled holes for the vacuum connection are free from burrs. Fit plug 422635, see Fig. 2, in the drilled hole on the induction manifold connecting flange against the cylinder head. Fit the stud and nipple for the vacuum connection. If more rapid evacuation of the brake booster is desired, it is recommended that the vacuum connection goes to both the induction manifolds, connection being made at the brake booster in the form of a T-junction.
Fit the control unit bracket on the front induction manifold.

Exhaust manifold

Remove any unevenness from the exhaust manifold flanges.

Front carburettor

Remove the front lever. Fit the lever and return spring supplied. The lever is fitted in the reverse direction compared with the rear lever (about 45° downwards-inwards towards the engine when the throttle is closed).
NOTE. When tightening the nut on the end of the throttle spindle, apply a "counterhold" (suitable wrench) to the lever under the nut which is to be tightened. This is to stop the throttle spindles from turning. Secure the nut with the locking tab. Remove the retainer for the choke cable sleeve.

Rear carburettor

Remove the rear lever. Move the bracket with idling screw from the rear lever to the front lever. Fit the lever and spring supplied to the rear end of the throttle spindle. The lever is fitted in the opposite direction to the front lever.
Secure the nut with the locking tab.

Fit the intermediary shaft with flanges between the carburettors. The ball on the intermediary lever is fitted facing forwards. Check that the pins on the flanges engage in the square holes in the levers. Fit stay 460047 to the air cleaner bottom plate on the front of the rubber suspension.

Fit a plain washer on each side of the rubber bushing and a plain washer outside the stay. The other end of the stay is then fitted to the engine mounting, see Fig. 4. Then fit together the air cleaner bottom plate to the carburettors using studs and Nylock nuts. Check that the intermediary shaft has axial clearance. Fit the induction funnels and secure them with lock screws and nuts on the carburettors. Then carefully tighten the air screws until they bottom and then back them off by 3/4 turn. Screw in the idling screws until they touch the lever. Then tighten them a further one and a half turns, see Fig. 3. Check that the throttle returns easily to the idling position. If the throttle does not do this, check the acceleration pump lever and push rod so that there is no leverage between these units. If necessary, adjust the angle to the push rod on the acceleration pump lever.

Fuel pump

Fit the fuel hose and the nipple to the fuel pump.

INSTALLATION OF TUNING KIT

Remove the exhaust manifold, carburettor, air cleaner and front section exhaust pipe from the standard engine.
The cylinder head, camshaft, flywheel, oil cooler, expansion tank, fuel pump, etc., are replaced according to the Service Manual with the exception of the timing gear casing which is to be centred on the belt pulley hub.
In connection with tough driving, it is advisable when installing the tuning kit to replace the clutch by a more robust unit:

clutch	part no. 418930
clutch plate	" " 418871
throw-out bearing	" " 380569

Cut up and remove the washer against which the throw-out bearing moves in the centre of the clutch.
Fit a primary resistor in the ignition system primary circuit between the ignition switch and the positive terminal of the ignition coil. The vacuum governor on the distributor is not to be connected up.

Fit the exhaust manifold. Locate and install the induction manifold and the intermediary flanges. Fit the carburettors with the air cleaner bottom plate. Fit the stay to the engine mounting. Fit the throttle control spindle. Fit the control rod.

Adjusting control rod length

Place a feeler gauge of 1.0 mm between the throttle control spindle lever and its idling shoulder on the bracket. Adjust rod length so that the flanges on the intermediary shaft just touch to open the throttle.

Connect up the fuel hose. Connect up the vacuum hose and ventilation hose. Connect and install the front section exhaust pipe. Clamp the manifold to the flywheel housing or the gearbox.

Fill up with oil and water.
Start the engine and run it warm.
Adjust the ignition and valve clearances.

Adjust the carburettors using a Synkrotest unit (idling speed 1,000 r.p.m.).
Carry out fine adjustment of the air screws until the engine runs evenly. (Unscrew = richer fuel mixture). Idling CO level max. 4.5%.

Stop the engine. Adjust the flanges on the intermediary shaft so that they influence the levers and open the throttle at the same time.

Adjustment of full throttle stop

Press the accelerator slowly and carefully all the way down. Tighten the screw on the control bracket against the control shaft arm so that the throttle flap does not bottom in the carburettors. This off-loads the throttle shafts from pedal force. Connect up the choke cable. If necessary, fit a longer cable. Screw the cable sleeve to the rear carburettor. Screw the cable to the choke control on both carburettors. Fit the air cleaner and housing.

RUNNING IN

If the tuning kit is being installed on a new engine, then the engine should be driven with a certain amount of care during the first period (up to about 2,000 km = 1,200 miles). Allow the engine to operate between 2,500 and 5,000 r.p.m. Avoid lugging in high gear. Avoid fast and hard acceleration. Momentary operation at higher engine speed under light loading (for example in down grades or short periods of acceleration up to about 6,000 r.p.m.) are permitted. Keep an eye on the temperature gauge. The temperature must not be too high.

ENGINE OIL

The general Volvo recommendations apply to the lubrication of a tuned engine, that is to say the use of multigrade oil of a well-known make.

TYRES

Vehicles fitted with a tuning kit should also be fitted with braced tread tyres which are approved for speeds of up to 180 km/hour.

Technical data

Output, h.p. at r.p.m. (DIN)	140/6000
Torque, kpm at r.p.m. (DIN)	19.6/4500
Compression ratio	11.0:1
Compression pressure (warm engine)	12-14 kp/cm^2
Camshaft marking	F
Surface treatment	Hard-chromed
Valve timing with valve clearance of 0.45 mm:	Intake opens 39° before TDC " closes 81° after BDC Exhaust opens 81° before BDC " closes 39° after TDC
Duration with valve clearance of 0.45 mm:	Intake 300° Exhaust 300°
Lift on camshaft lobe	7.5 mm
Valve lift (valve clearance = 0)	approx. 11.2 mm
Valve clearances (warm engine)	Intake 0.40 mm Exhaust 0.45 mm
Fuel pressure	0.15-0.25 kp/cm^2
Carburettors (2)	Solex 45 DDH-1
components:	
external venturi	C23352 NR 1
internal venturi	36
main jet	185
air jet	175
idling jet	62.5
starting jet	125

On the upper section of the carburettor flange, the carburettors are marked "-71" or with a symbol in the form of a glove, this signifying that the tuning kit satisfies the demands made on exhaust emission control in accordance with European standards. This is a demand with effect from 1971 models.

Idling speed	approx. 1000 r.p.m.
Spark plugs	Bosch W 240 T 1
Ignition setting (basic setting)	10 - 12° before TDC
Ignition setting at 5000 r.p.m. (centrifugal governor effect completely eliminated)	37 - 39° before TDC
Cam angle	Standard
Tightening torque, cylinder head bolts	10.5 - 11.0 kpm
Tightening torque, flywheel bolts, part no. 944741	7.5 - 8.0 kpm
Weight of flywheel	8 kg
Exhaust manifold outlet, internal diam.	2"

DESCRIPTION AND TECHNICAL DATA CONCERNING TUNING OF B20 TO STAGE II

The tuning of a B20 engine to Stage II (160 h.p.) is for competition operation and is a further development of the Volvo tuning kit giving 140 h.p. (Stage I).

The tuning consists of:

Modified combustion chambers

The combustion chambers are worked on by hand and polished to a level which provides optimum turbulence and combustion veloscity to obtain maximum output. The compression ratio is 11.7:1 which should not be exceeded since this implies a risk of uncontrolled combustion which results in high-speed knocking and burned systems.

Modified ports

The induction and exhaust ports are modified and polished. The induction manifold is polished and adapted to the cylinder head induction ports so that there is no edge which can cause disturbing turbulence at the transition point. These operations increase the volumetric efficiency of the engine.

Valves

The intake and exhaust valves are carefully adjusted by grinding and polished.

Valve springs

In order to obtain maximum spring force on all valves, each valve spring is measured and shims added to provide the correct compressed length.
Compressed length = blocks length of spring + 1 mm clearance + max. valve lift.

Push rods

The shorter push rods from the B30 engine are to be used.

Tappets (valve lifters)

The tappets (valve lifters) have their weight reduced, about 30 g/each.

Camshaft

Type R, hard-chromed. NOTE. For reasons of material strength, this camshaft is to be used together with tappets (valve lifters) part no. 552841.

Clutch

"Laplander" type.

Flywheel

The flywheel is made of aluminium alloy and weighs 3.5 kg. It is fitted by using the bolt with part no. 944741 and the washer, part no. 942336.

Main bearing seal

A rubber packing box is used as a rear main bearing seal and this replaces the felt seal.

Balancing

The crank shaft, flywheel and clutch are balanced together as one integral unit.

Cylinder head gasket

The protective edges round the cylinders are reinforced. The protective plate is double-folded on one side.

Spark plugs

Bosch W 280 T 13 S. A lower heat range than 280 should not be used.

Camshaft gear

A steel camshaft gear is to be fitted in competition engines.

Technical data

Output, h.p. at r.p.m. (DIN)	160/6200
Torque, kpm at r.p.m. (DIN)	20.6/4700
Compression ratio	11.7:1
Camshaft marking	R
Surface treatment	hard-chromed
Valve timing at valve clearance of 0.45 mm:	Intake opens 43° before TDC " closes 64° after BDC Exhaust opens 65° before BDC " closes 42° after TDC
Duration with valve clearance of 0.45 mm:	Intake 287° Exhaust 287°
Lift on camshaft lobe	7.6 mm
Valve lift (valve clearance = 0)	11.4 mm
Recommended valve clearances (warm engine)	Intake 0.25 mm Exhaust 0.25 mm
Valve disc diameter	Intake 44 mm Exhaust 35 mm
Carburettors	Solex 45 DDH-1

TUNING INFORMATION

General

For this tuning kit, the installation instructions, clearances, timing values and tightening torques contained in the VOLVO Service Manual mainly apply. The tuning information in this bulletin concerns only deviations from the Service Manual.

When fitting the tuning kit, the clutch plates should be replaced simultaneously by harder ones of standard type. (The clutch should be of the Borg & Beck diaphragm type.) With extremely hard competition driving, however, clutch 418930 should be fitted.

Technical Data

(Only that data deviating from that for the standard engine is described herewith. Other data: see the Volvo Service Manual for the B 20 engine.)

Output, h.p. at r.p.m. (DIN	140/6000
Torque, kpm (lb.ft.) at r.p.m. (DIN)	19.6 (141.3)/4500
Compression ratio	11:1
Compression pressure (warm engine)	12-14 kp/cm^2 (170-200 p.s.i.)
Camshaft, marking	D
Valve clearance for checking the camshaft setting (cold engine)	1.4 mm (0.055")
Intake valve should then open at	5.5° B.T.D.C.
Valve clearance, intake and exhaust valve (warm engine)	0.40-0.45 mm (0.16-0.18")
Fuel pump, pressure (at 1000 r.p.m.)	0.15-0.25 kp/cm^2 (2.0-3.5 p.s.i.)
Carburettors (2)	Solex 45 DDH - 1
Jets:	
Outer venturi	36
Inner venturi	C 23352 NR 1
Main jet	185
Air jet	175
Idling jet	55
Idling jet, air	120
Emulsion tube	C 24186

Starting jet	125
Idling speed	900 r.p.m.
Spark plugs	Bosch W 240 T 1
Distributor	
Basic timing (at low idling speed)	10° B.T.D.C.
Max. pre-ignition (at 5800 r.p.m.)	38° B.T.D.C.

MEASURES TO BE TAKEN BEFORE FITTING THE TUNING KIT

On engine:

The principal features of the kit are: new cylinder head complete, 2 twin carburettors with controls, air cleaner, intake manifolds, exhaust manifold, fuel pump with hoses and connections, camshaft, flywheel, timing gear casing with hub for pulley, oil cooler, water pipe, coolant hose, ignition coil and spark plugs. These parts should thus be removed from the engine.

On tuning kit

Remove the centre straight pin, 950586, on the surface facing the exhaust manifold. Fit plug 422635 in the hole with Ø 3.2 mm (0.126") on the connection flange of the intake manifold facing the cylinder head, see Fig. 2.

Move the connection nipples for brake servo, 943199, and crankcase ventilation, 430262, from the standard engine, see Fig. 4.

Fit the studs, 953461, on the intake manifold flanges facing the carburettors.

Fit bracket 460039 for the throttle control with 2 screws 955512 on the front intake manifold, see Fig. 3.

Clean off any unevenness in the intake manifolds. Grind the centre flange of the exhaust manifold.

Front carburettor

Remove the front lever and fit the new lever and return spring. The lever is turned so that it comes in the opposite direction to the rear lever (approx. 45° downwards - inwards towards the engine with closed throttle flap).

Rear carburettor

Remove the rear lever. Remove the bracket with the idle trimming screw and fit it at the front lever. Fit the new lever and return spring. The lever is turned so that it comes in the opposite direction to the front lever (approx. 45° downwards - inwards towards the engine with closed throttle flap). Lock the four nuts for the levers with the lock tabs.

Air cleaner

Fit rod 460047 for the air cleaner to the rubber suspension by means of screw 955536, 2 washers 960142, washer 940097 and Nyloc nut 950354. The other end of the rod must be attached later to the right engine mounting. See Fig. 4.

FITTING THE TUNING KIT

Fit the parts in accordance with the Service Manual.

Carburettors with controls

Fit the rubber flanges 862463 with spacer gaskets 819769 against both intake manifolds and carburettors. Tighten the flanges with nuts 955847 and washers 955894. Install the carburettors and tighten union shaft 684901 with Nyloc nuts 950363 and washers 955894. The union shaft is fitted between the carburettor throttle flap shafts with the ball turned forwards. Make sure that the lever shafts fit into the holes in the carburettors, see Fig. 3.

Mount the upper throttle control shaft complete, 684899, in the corresponding way as for the standard engine (see Fig. 3). Connect it to the union shaft ball cup with control rod 943936, ball cup 959088, ball cup 942837, nuts 955780 and 942836. The control rod and ball cups should have a length of 129 mm (1 5/64") (centre - centre, ball cups).

Air cleaner

Fit the studs for the air cleaner.

Fit spacer gasket 419906 and the base plate of the filter and tighten with the aid of studs 953032 and Nyloc nuts 10591. Push the four air intakes 824708 into the respective carburettor throats and tighten with lock screws from the underside of the carburettor. Tighten the rod at the front engine mounting with the existing Nyloc nut and washer. Fit the cleaner insert and cover plate.

Fuel pump

Fit nipple 943818 in the pump intake port. Fit the fuel pump and connect it to the fuel pipe from the tank. Install fuel pipe 825856 between pump and carburettors by means of inlet fitting screw 825857, gasket 957173 and strainer 825858.

Oil cooler

When using an oil cooler, the existing expansion tank 673624 must be replaced by tank 676558 and pressure cap 673233 replaced by cap 673336 to reduce pressure in the cooling system. (The boiling point of the coolant is in this way reduced by approx. 8° C.) The spliced coolant hose and a water pipe are used for the oil cooler.

Timing gear casing

When fitting the timing gear casing, the casing and sealing ring must be centred in relation to the crankshaft (hub for pulley). Should the centering sleeve of the standard engine not suit, the casing should be fitted as follows:

Fit on the hub for the pulley. Fit the casing and tighten the bolts by hand. Check that the sump gasket does not press the casing upwards. First tighten the bolts for the casing and then the sump bolts.

SETTING

Distributor

Set the timing (after having checked and adjusted the breaker points) to 10° B.T.D.C. at such a low idling speed that the centrifugal governor has not yet started to function. Check that max. pre-setting, 38°, is obtained at 5800 r.p.m.

Carburettors

Before the carburettors are connected together, a basic setting should be carried out, with one carburettor at a time, that is, the throttle flap of the other carburettor should be completely closed. (Idle trimming screw screwed-out.)

1. Screw in both the idling air volume screws (1, Fig. 3) completely for the carburettor to be adjusted. Then unscrew them 1 1/4 turn. Start the engine and adjust the idle trimming screw so that 900 r.p.m. is obtained. Adjust the two idling air volume screws (4) until the most suitable idling speed is obtained.
2. Unscrew the idle trimming screw so that the throttle flap closes completely and repeat the procedure with the other carburettor.

3. Adjust the idle trimming screws by means of a synchro test, that is, the same throttle flap opening for both the carburettors. Set the idling speed to 900 r.p.m.

   Adjust and tighten the carburettor union shafts so that the levers are actuated exactly at the same time.

Choke cable

If the basic engine was a B 20 A:
Replace the cable by a longer one and pare the sleeve so that the wire can be attached to the choke connections of both carburettors.

If the basic engine was a B 20 B:
Exclude one of the cables and pare the sleeve on the other so that it can be attached to the choke connections of both carburettors.

Pull out the knob on the dashboard approx. 10 mm (3/8"). Make sure that the choke levers on the carburettors are at their stop positions and tighten the choke cable.

Vacuum hoses

Connect the vacuum hoses as shown in Fig. 1.

RUNNING-IN

If the tuning kit is fitted on a new engine, the engine should be run with a certain amount of caution for the first period (up to approx. 2 000 km = 1 200 miles). Let the engine work between 2000 - 5000 r.p.m. Avoid driving at low speed in high gear. Avoid fierce acceleration. Driving for short periods with high speed and light load can be permitted, for example, when driving downhill or when accelerating for a short period up to approx. 6000 r.p.m. Keep an eye on the temperature gauge. The temperature must not rise too much.

ENGINE OIL

For lubrication of a tuned engine, Volvo's general recommendations apply, that is, use multigrade oil of a well-known make.

TYRES

Cars fitted with a tuning kit should be equipped with belt tyres, which are approved for speeds up to 180 km.p.h. (110 m.p.h.).

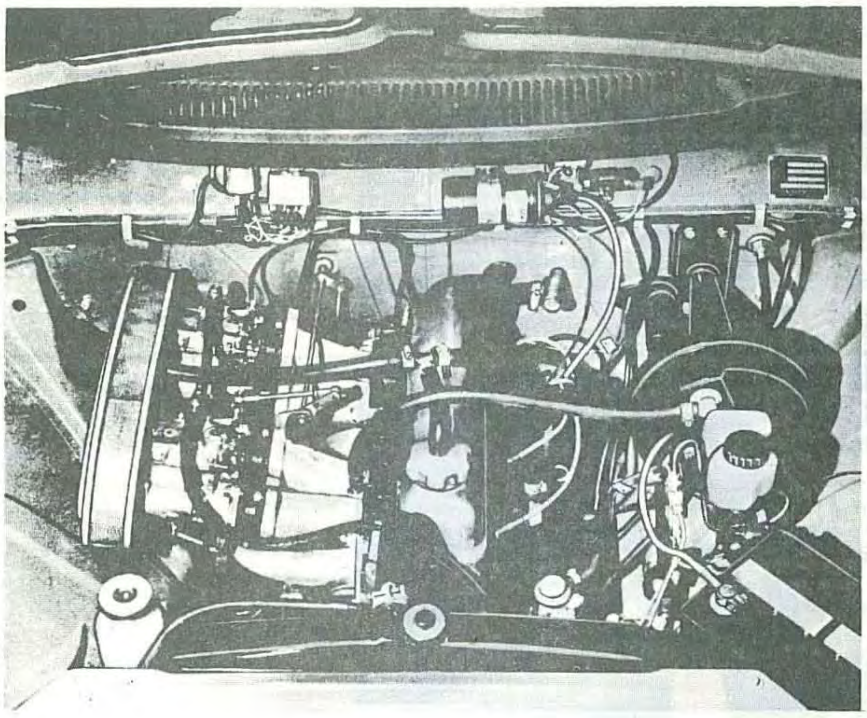


Fig. 1. Engine in car

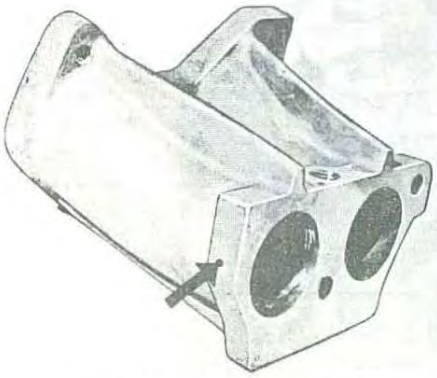


Fig. 2. Intake manifold
(Location of plug)

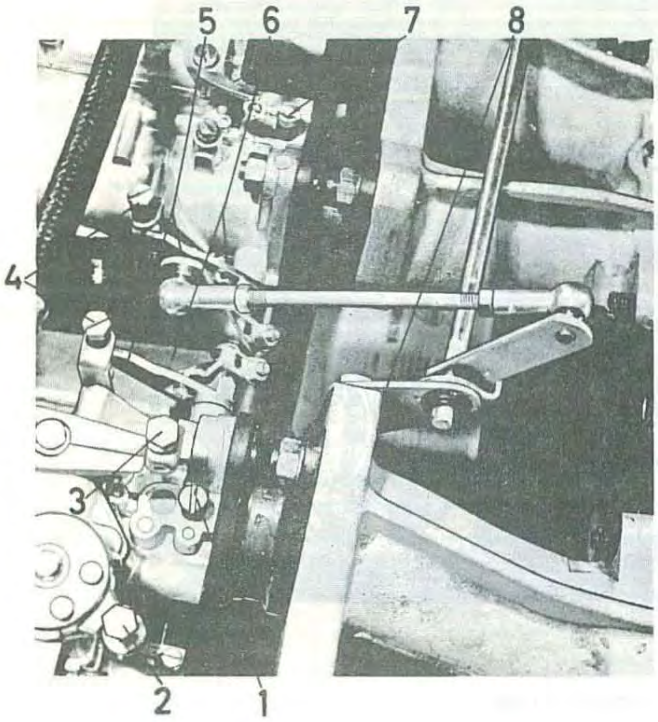


Fig. 3. Carburettors

1. Idling air volume screw
2. Screw for choke cable
3. Screw for sleeve
4. Idle trimming screw
5. Lever
6. Flange
7. Idling air volume screw
8. Bracket

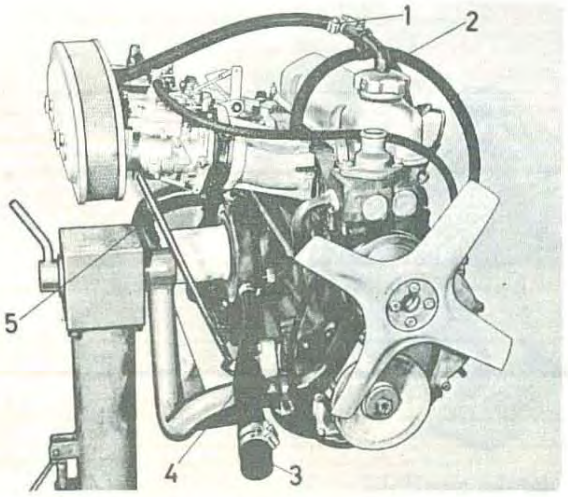


Fig. 4. Tuning kit fitted
(except exhaust manifold)

1. 3-way union
2. Hose to brake servo
3. Extension pipe
4. Coolant hose
5. Rod for air cleaner

VOLVO

Competition Service

Prod	Avd Section	40
Tuning Kit B20 Supplement	Nr No	3
Datum Date	December 1972	

FASTER EVACUATION OF BRAKE SERVO SYSTEM

For faster evacuation of the brake servo system, and thereby faster brake action, we recommend that vacuum outlets should be fitted to both branches of the induction manifold.
Fit screwed nipples to the manifold. From these, run hoses - securely clipped - to a T-piece, part no. 419446. The T-piece should then be connected to the brake servo unit.

5 Prices

VOLVO Competition Service

1955 190th STREET
TORRANCE, CA 90509

(213) 770-1550

DISTRIBUTION

Price List

DATE

January 1974

Part No.	Description	Retail	Notes
10591-6	Nut		B-18, B-20 Tuning Kit
16218-0	Angle Coupling Oil Pressure Sender		Instrument Panel
71816-3	Vacuum Plunger Spring		B-18 Tuning Kit
181330-2	Needle Bearing		Needle Bearing Trans. Conversion
181331-0	Needle Bearing		
191701-2	Nut, Oil Cooler		B-20 Tuning Kit
237248-0	Metering Needle		B-18 Tuning Kit
237435-3	Carburetor	104.76	Solex 45 DDH
238624-1	Spark Plug		Bosch W240 T1
240571-0	Spark Plug		Bosch W280 T13S
241086-8	Ignition Coil		B-18, B-20 Tuning Kit
241612-1	Resister		B-18, B-20 Tuning Kit
254670-3	Close Ratio Trans.	686.19	w/Remote Control
272530-7	Front Brake Pad Kit		140, 164 ATE
272531-5	Rear Brake Pad Kit		140, 164 ATE
272534-9	Front Brake Pad Kit		140, 164 Girling
272535-6	Rear Brake Pad Kit		140, 164 Girling
275894-4	Front Brake Pad Kit (Special)		140, 164 Girling and 130 Ch 312500-
275895-1	Rear Brake Pad Kit (Special)		140, 164 Girling
277751-4	Halogen Bulb, 55 W		

Part No.	Description	Retail	Notes
380217-0	1st Speed Gear		Needle Bearing Trans. Conversion
380218-8	2nd Speed Gear		Needle Bearing Trans. Conversion
380305-3	Speedo Drive Gear, Sm.		x 254670/4:88:1 Axle Conversion
380382-2	Input Shaft, M-40	136.19	Close Ratio Trans. Conversion-70
380422-6	Gear Cluster M-40	144.05	Close Ratio Trans. Conversion-70
380423-4	3rd Speed Gar M-40	45.00	Close Ratio Trans. Conversion-70
380569-4	Throw-out Bearing		Stage II, to be used w/418930
380789-8	Speedo, Output Shaft Gear, Large	23.14	x 254670 4:88:1 Axle Conversion
380824-3	Gear Cluster	154.52	Close Ratio Trans. Conversion-70
384479-2	Limited Slip Differential M-30		130
384498-2	Limited Slip Differential M-30		140, 67-69
384727-4	Limited Slip Differential M-30		140, 70-
403315-5	Valve Lock		B-18 Tuning Kit
403390-8	Exhaust Valve Guide		B-18 Tuning Kit
403500-2	Valve Spring Washer		B-18 Tuning Kit
405357-5	Valve Spring Ring		B-18 Tuning Kit
418260-6	Special Oil Pan	Replaced by 552847-6	
418264-8	Belt Pulley Hub		B-18, B-20 Tuning Kit
418423-0	Valve Lifter		B-20 Tuning Kit (Replaces 552844)
418433-9	Oil Cooler	83.28	B-20 Tuning Kit
418445-3	Water Pipe Gasket		B-20 Tuning Kit

x - Contained in Kit #

Part No.	Description	Retail	Notes
418601-1	Nipple		B-20 Tuning Kit
418651-6	Water Pipe		B-20 Tuning Kit
418668-0	Seal, Timing Gear Cover		B-18, B-20 Tuning Kit
418693-8	Timing Gear Cover w/Seal		B-18, B-20 Tuning Kit
418737-3	Valve Spring		B-18, B-20 Tuning Kit
418871-0	Clutch Disc		B-20 Tuning Kit Stage II
418930-4	Clutch Pressure Plate	47.10	B-20 Tuning Kit Stage II
419258-9	Camshaft D Replaced by 460487-2		B-18 Tuning Kit
419315-7	Intake Valve		B-18 Tuning Kit
419316-5	Exhaust Valve	11.41	B-18 Tuning Kit
419378-5	Intake Valve Guide	5.79	B-18 Tuning Kit
419381-9	Exhaust Manifold	72.00	B-18, B-20 Tuning Kit
419392-6	Flywheel Complete	99.00	B-18, B-20 Tuning Kit
419393-4	Headgasket	9.32	B-18 Tuning Kit
419395-9	Oil Pump Cover	7.71	B-18 Tuning Kit
419643-2	Valve Spring Ring		B-20 Tuning Kit
419644-0	Valve Spring Washer		B-20 Tuning Kit
419652-3	Intake Valve Guide		B-20 Tuning Kit
419653-1	Exhaust Valve Guide		B-20 Tuning Kit
419658-0	Headgasket	9.64	B-18 Tuning Kit .040 Overbore
419702-6	Valve Seal		B-20 Tuning Kit
419735-6	Exhaust Valve		B-20 Tuning Kit
419763-8	Headgasket		B-20 Tuning Kit 0.8mm
419764-6	Exhaust Manifold Gasket		B-20 Tuning Kit

Part No.	Description	Retail	Notes
419766-1	Intake Valve		B-20 Tuning Kit
419882-6	Stage I Cylinder Head	222.62	B-20 Tuning Kit
419883-4	Intake Manifold Front	32.14	B-20 Tuning Kit
419884-2	Intake Manifold Rear	32.14	B-20 Tuning Kit
419906-3	Air Cleaner Gasket	.39	B-20 Tuning Kit
422635-3	Intake Manifold Plug	.22	B-20 Tuning Kit
460033-4	Engine Support		1800
460039-1	Throttle Control Bracket	4.05	B-20 Tuning Kit x 552611
460047-4	Air Cleaner Retainer	4.63	B-20 Tuning Kit
460464-1	Water Inlet Pipe		B-20 Tuning Kit
460509-3	Camshaft F	102.14	B-20 Tuning Kit Stage I
460783-3	Reinforced Crakshaft Pully		B-20
460814-7	Camshaft R	123.10	B-20 Tuning Kit Stage II Replaces 460911
460911-1	Camshaft		Replaced by 460814
500984-0	Gear Set 4:88:1	161.85	M27
525060-0	Front Progressive Spring	29.57	130
525061-8	Rear Progessive Spring	27.00	130
525880-1	Gear Set 4:88:1	165.00	M30
538445-8	Limited Slip Rear Complete	366.67	M30 67-69 4:88:1
552026-7	Bosch 180 Knick Light	36.00	
552030-9	Halogen Bulb 100 W	18.00	
552031-7	Adjusting Stay for 552026		
552101-8	Front Shock Absorber	45.00	130
552102-6	Rear Shock Absorber	51.00	130

Part No.	Description	Retail	Notes
552105-9	Front Progressive Spring	33.00	140
552106-7	Front Progressive Spring Harder	36.00	140
552111-7	Front Skid Plate Aluminum	298.57	130 39.65 lbs.
552112-5	Rear Skid Plate Aluminum	120.48	130 24.23 lbs.
552113-3	Front Skid Plate Aluminum	150.00	140 67-70 44.06 lbs.
552114-1	Rear Skid Plate Aluminum	144.05	140 17.62 lbs.
552116-6	Front Skid Plate Aluminum	150.00	140 70- 44.06 lbs.
552120-8	Safari Suspension Kit		No longer available
552121-6	x Side Member, Front,Left	54.00	x
552122-4	x Side Member, Front, Right	54.00	x
552123-2	x Side Member, Rear, Left	45.00	x
552124-0	x Side Member, Rear,Right	45.00	x 552120
552125-7	x Inner Wheel Housing Rear, Left	48.00	x 552120
552126-5	x Inner Wheel Housing Rear, Right	48.00	x 552120
552127-3	x Reinforcement Plate Anchor	7.07	x Upper Rear Shock Mount
552130-7	Front Axle Cross Member	209.52	140, 164
552131-5	Lower Wishbone, Left	57.07	140, 164
552132-3	Lower Wishbone, Right	57.07	140, 164
552135-6	Front Progressive Spring	42.00	164
552136-4	Rear Progressive Spring	34.20	x 552137 140, 164
552137-2	Rear Spring Package	46.20	140, 164 (01 st each side)

x - Contained in Kit #

Part No.	Description	Retail	Notes
552138-0	Rear Support Arm	51.00	140, 164 67-70
552139-8	Rear Support Arm	51.00	140, 164 70-
552140-6	Harder Rubber Bushing Support Arm	25.71	
552141-4	Lower Shock Absorber Bolt	19.28	
552142-2	Reinforcement Plate for Support Arm Journalling	7.71	
552151-3	Lower Washer	5.01	x 552137
552152-1	Upper Washer	1.92	x 552137
552156-2	Rear Engine Cross Member	28.93	
552158-8	Intermediate Bearing Suspension	16.07	Fits transmission
552170-3	Front Sway Bar 18mm	Replaced by 552171-1	
552171-1	Front Sway Bar 18mm	54.00	140 70-
552172-9	Front Sway Bar 20mm	57.60	140 70-
552173-7	Rubber Bushing	4.63	Required w/ 552172
552180-2	Safari Suspension Kit	251.43	140 70-
552181-0	x Side Member Rear, Left	48.60	
552182-8	x Side Member Rear, Right	48.60	
552183-6	x Inner Wheel Housing Rear, Left	52.20	
552184-4	x Inner Wheel Housing Rear, Right	52.20	
552191-9	Front Shock Absorber	27.00	de Carbon 140, 164
552192-7	Rear Shock Absorber	28.93	de Carbon 140, 164
552208-1	x Exhaust Clamp w/Bolt	2.09	x 552211
552211-5	Rallye Exhaust System Complete	51.00	
552212-3	x Pipe Over Rear Axle	33.00	
552213-1	x Tail Pipe	9.64	

x - Contained in Kit #

Part No.	Description	Retail	Notes
552214-9	x Bracket w/Clamp	6.43	
552221-4	Tank Spacer Frame	48.00	
552301-4	Dished Drivers Seat	83.81	
552303-0	x Seat Base	64.34	
552304-8	Spare Tire Retainer	33.00	
552305-5	RECARO Drivers Seat	193.80	140 Only
552501-9	Front Brake Pad Kit	28.93	130 - Ch 312499
552551-3	T-Union for Crankcase Vent.	3.86	B-20 Tuning Kit
552601-7	Carb. Gasket/Packing Kit Complete	10.93	Solex (02)
552602-5	Carb. Reconditioning Kit	65.46	Solex (02)
552604-1	Jet-Idle Nozzle 57.5	1.60	
552605-8	Jet-Idle Nozzle 60.0	1.60	
552606-6	Jet-Idle Nozzle 62.5	1.60	
552607-4	Jet-Idle Nozzle 65.0	1.60	
552610-8	Carburetor Kit Complete	466.19	140 B-20
552611-6	Control Kit/Linkage for Carb.	21.21	Solex Dual -72
552620-7	Air Cleaner Element	22.50	
552621-5	Air Cleaner Nut	2.73	
552622-3	Air Cleaner Washer	1.12	
552703-1	Instrument Panel	130.95	140 67-70
552704-9	Instrument Panel	144.04	164 67-70
552705-6	x Tachometer	61.55	140
552706-4	x Tachometer	61.55	164

x - Contained in Kit #

Part No.	Description	Retail	Notes
552708-0	x Temp. Guage	23.14	
552709-8	x Fuel Guage	23.14	
552711-4	x Rheostat	11.57	(Panel Lighting)
552712-2	x Tank Level Unit	19.28	
552713-0	x Temp. Guage Sender	7.71	
552714-8	x Oil Pressure Guage & Warning Light Sending Unit	23.14	
552715-5	x Speedometer	39.00	
552716-3	x Tank Level Unit	19.28	71 - 72
552717-1	x Oil Pressure Guage	21.21	
552718-9	x Speedometer Not available in miles		4:88:1 R/A Ratio
552723-9	Instrument Panel	130.95	140 71 - 72
552724-7	Instrument Panel	144.04	164 71 - 72
552725-4	x Warning Light Parking, Brakes	3.21	67 - 72
552726-2	x High Beam Light	3.21	67 - 72
552727-0	x Alternator Light	3.21	67 - 72
552728-8	x Oil Pressure Warning Light	3.21	67 - 72
552729-6	x Turn Indicator Light	3.21	67 - 72
552730-4	x Over-Drive Indicator Light	3.21	67 - 72
552732-0	Instrument Panel Not available in miles		140 67 - 70 4:88:1 R/A Ratio
552734-6	Instrument Panel Not available in miles		140 71-72 4:88:1 R/A Ratio
552840-6	Aluminum Flywheel	275.00	7.71 lbs.
552841-9	Lightened Valve Lifter	11.57	B-20 Tuning Kit Stage II
552842-7	Cylinder Head	561.00	B-20 Tuning Kit Stage II

x - Contained in Kit #

Part No.	Description	Retail	Notes
950354-1	Nut		
950586-8	Cylinder Stud		
951789-7	Radiator Hose Clamp		
952069-3	Plug, Oil Cooler		B-20 Tuning Kit
952075-0	Plug, Intake Manifold		
953032-0	Stud Bolt		x 552611
953461-1	Stud Bolt	.19	
955512-9	Screw, Water Pump		
955536-8	Screw		
955780-2	Nut		x 552611
955826-3	Nut		Carb. Linkage
955847-9	Nut		Carb. Linkage
957173-8	Gasket, Banjo Screw		Fuel Line
959088-6	Ball Socket		x 552611 Throttle Linkage
960142-8	Washer, Air Cleaner Screw		
6000116-1	Main Jet	1.54	Solex Repair Parts
6000117-9	Main Jet	1.54	Solex Repair Parts Marine Engine
6000350-6	Starter Jet	.96	Solex Repair Parts
6010134-2	Emulsion Tube Carrier Assembly	3.47	Solex Repair Parts
6010136-7	Carrier Assembly Emulsion Tube	3.47	Solex Repair Parts Marine Engine
6020029-2	Injector Pump Assy.	1.92	Solex Repair Parts
6030038-1	Valve, Complete	3.47	Solex Repair Parts
6100035-2	Throttle Butterfly	3.69	Solex Repair Parts

x - Contained in Kit #

Part No.	Description	Retail	Notes
6550005-0	Diaphragm Complete	5.59	Solex Repair Parts
6600154-6	Pump Intermediate Actuating Lever	1.54	Solex Repair Parts
6600188-4	Spring Lever	.96	Solex Repair Parts
6600189-2	Throttle Control Lever	1.92	Solex Repair Parts
6601190-0	Throttle Control Lever	1.92	Solex Repair Parts
6620037-9	Pump Control Rod	1.92	Solex Repair Parts
6630083-1	Throttle Spindle w/Lever	10.92	Solex Repair Parts
6700035-6	Cable Fixing Screw	.38	Solex Repair Parts
6700038-0	Slow Running Adjust. Screw	.57	Solex Repair Parts
6700046-3	Volume Control Screw	.57	Solex Repair Parts
6700059-6	Bracket Fising Screw	.38	Solex Repair Parts
6700067-0	Choke Tube Screw	.57	Solex Repair Parts
6700077-8	Pump Assembly Fixing Screw	.22	Solex Repair Parts
6700080-2	Float Chamber Assy. Screw (Short)	.57	Solex Repair Parts
6700083-6	Air Cap Fixing Screw	.38	Solex Repair Parts
6700116-4	Screw, Pump Lever	.57	Solex Repair Parts
6700118-0	Pump Cover Fixing Screw	.22	Solex Repair Parts
6700138-8	Central Diffusor Screw	.57	Solex Repair Parts
6700155-2	Floatchamber Assy. Screw (Long)	.96	Solex Repair Parts
6700156-0	Throttle Stop Screw	.57	Solex Repair Parts
6700161-0	Roller Bracket w/Screw Assembly	.96	Solex Repair Parts
6700179-2	Throttle Fixing Screw	.22	Solex Repair Parts
6700180-0	Tulip Fixing Screw	.77	Solex Repair Parts
6710005-7	Throttle Lever Nut	.55	Solex Repair Parts
6710011-5	Nut	.22	Solex Repair Parts
6710015-6	Nut	.22	Solex Repair Parts

Part No.	Description	Retail	Notes
6710019-8	Adjusting Nut, Pump Control Rod	.38	Solex Repair Parts
6720002-2	Screw Spring	.22	Solex Repair Parts
6720007-1	Starter Valve Spring	.57	Solex Repair Parts
6720062-6	Pump Control Rod Spring	.57	Solex Repair Parts
6720063-4	Diaphragm Center Spring	.38	Solex Repair Parts
6720080-8	Throttle Spindle Return Spring	.96	Solex Repair Parts
6730035-0	Circlip	.22	Solex Repair Parts
6730038-4	Stop Washer	.77	Solex Repair Parts
6730047-5	Control Rod Retaining Washer	.38	Solex Repair Parts
6735011-6	Bushing (Teflon)	2.31	Solex Repair Parts
6740250-3	Needle Valve Seat	12.72	Solex Repair Parts
6740271-9	Grub	.38	Solex Repair Parts
6750008-2	Float Toggle Spindle	.57	Solex Repair Parts
6760003-1	Ball	.22	Solex Repair Parts
6760516-2	Pump	.57	Solex Repair Parts
6760517-0	Grub w/Sealing Ring	.57	Solex Repair Parts

VOLVO CLOTHING

Rally Jacket - Blue (Winter)	31.41	Size 6 yrs. to 16 yrs.
Rally Jacket - Blue (Winter)	39.27	Extra Small to Extra Extra Large
Summer Jacket - Blue	19.90	All Sizes
Sweat Shirt - Yellow	10.47	All Sizes
Sweat Whirt - White	10.47	All Sizes
T Shirt - White	4.71	All Sizes
T Shirt - Yellow	4.71	All Sizes
T Shirt - Blue	4.71	All Sizes

VOLVO Competition Service

Part No.	Description	Retail	Dealer Net	Dis-count	Notes
552093-7	Shock Absorber Front	29.92		C	444/544
552094-5	Shock Absorber Rear	33.92		C	444/544
552101-8	Shock Absorber Front	27.93		C	120/130/1800
552102-6	Shock Absorber Resr	31.42		C	120/130/1800
552095-2	Shock Absorber Front	29.92		C	142/144/145 1966 to present
552096-0	Shock Absorber Rear with Lower Bushing	33.92		C	142/144/145 1966 to 9/71
552097-6	Shock Absorber Rear without Lower Bushing	33.92		C	142/144/145 10/71 to present
552098-6	Shock Absorber Front	29.92		C	164 All
552099-4	Shock Absorber Rear with Lower Bushing	33.92		C	164 1969 to 9/71
552100-0	Shock Absorber Rear without Lower Bushing	33.92		C	164 10/71 to present
552103-4	Rally Sweden Shock Front	29.92		C	140/160 Extra Firm
552104-2	Rally Sweden Shock Rear with Lower Bushing	33.92		C	140/160 Extra Firm 1966 to 9/71
552092-9	Rally Sweden Shock Rear without Lower Bushing	33.92		C	140/160 Extra Firm 10/71 to present

VOLVO Competition Service

Part No.	Description	Retail	Dealer Net	Dis-count	Notes
241529-7	Distributor Stage II	51.09		C	B18/B20
552020-0	160mm Foglight	19.95		D	Hella Clear Lens
552021-8	160mm Spotlight	19.95		D	Hella Clear Lens
552022-6	170mm Foglight	25.20		D	Hella Clear Lens
552023-4	170mm Spotlight	25.20		D	Hella Clear Lens
552024-2	192mm Foglight	32.92		D	Hella Clear Lens
552025-9	192mm Spotlight	32.92		D	Hella Clear Lens
552028-3	Large Lamp Cover	1.40		D	With Emblem
552029-1	Medium Lamp Cover	1.40		D	With Emblem
552032-5	Auxiliary Light Wiring Kit	7.14		D	Includes Harness, Relay, Terminals, Switch
552308-9	Safari Jerrican	10.63		D	5 Gallon Capacity
552309-7	Filler Hose	3.20		D	Use with 552308-9
552907-8	G.T. Identification Kit	2.33		D	140 Series
552908-6	G.T. Identification Kit	9.03		D	140 Series
552909-4	G.T. Identification Kit	9.03		D	140 Series
552910-2	G.T. Bumper Strip	5.53		D	73 140/160 Front and Rear
552911-0	G.T. Bumper Strip	5.53		D	74 140/160 Front and Rear
552912-8	Grille Light Kit	95.65		A	66-70 Foglight
552913-6	Grille Light Kit	95.65		A	66-70 Spotlight
552914-4	Grille Light Kit	93.23		B	71-72 Foglight
552915-1	Grille Light Kit	93.23		B	71-72 Spotlight

6 Bulletins

VOLVO Competition Service

1955 190th STREET
TORRANCE, CA 90509

(213) 770-1550

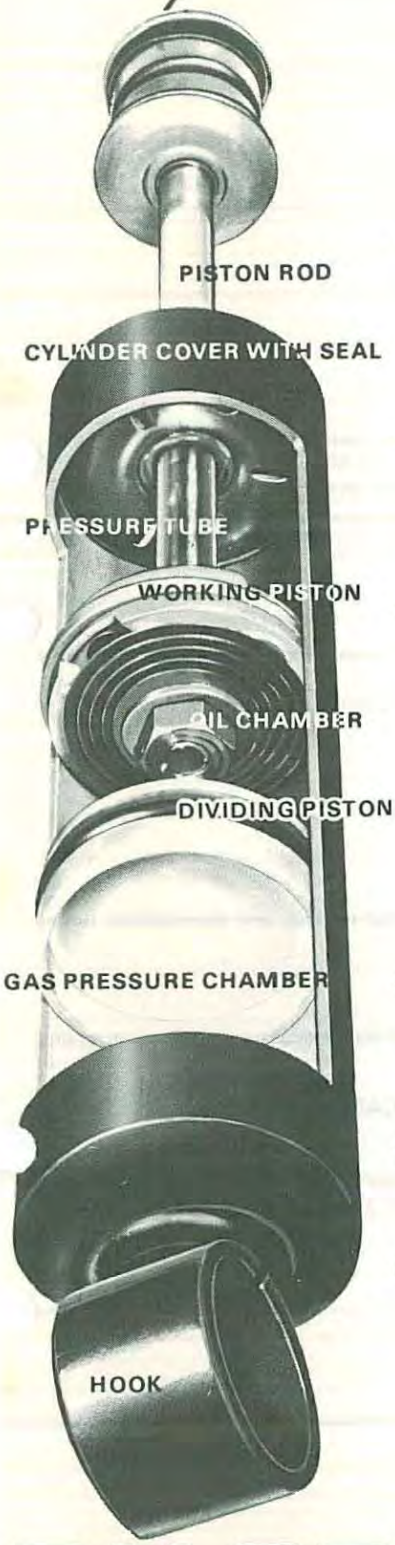
DISTRIBUTION	DATE
All holders of Volvo Competition Service Binder - U.S.A.	November 1973

Bulletin Number 1 Section 4

Camshaft Data

Part #	Designation	Intake	Exhaust	Lift	Valve Lash Hot	Duration
419258	D	29-71		10.4mm	0.40/0.45mm	280°
			71-29	10.4mm	0.40/0.45mm	280°
460509	F	31-89		10.8mm	0.40/0.45mm	300°
			89-31	10.8mm	0.40/0.45mm	300°
460814	R	43-64		11.2mm	0.25mm	287°
			65-42	11.2mm	0.25mm	287°
824706	G (Marine)	52-76		11.6mm	0.40/0.45mm	308°
			92-36	11.6mm	0.40/0.45mm	308°

Note: As is apparent from the intake and exhaust specifications, the R & G Camshafts are of non-symetrical design.



ANSWERS TO QUESTIONS MOST FREQUENTLY ASKED ABOUT THE BILSTEIN "RISING RATE" GAS PRESSURE SHOCK ABSORBER.

1. Q: **WHAT DO YOU MEAN BY "GAS PRESSURE" SHOCK ABSORBER?**

   A: The BILSTEIN Gas Pressure Shock Absorber is a telescopic, mono-tube unit filled with nitrogen gas and hydraulic oil. The gas, sealed in a special compartment at 25 times atmospheric pressure, exerts constant high pressure on the oil column eliminating cavitation and foaming. The **absolute elimination of foaming** results in uninterrupted damping, for even the smallest wheel deflections, (2mm); a performance which no other type of shock can claim or match.

2. Q: **WHAT DO YOU MEAN BY "RISING RATES"?**

   A: Rising rate means that the rate or damping coefficient increases as suspension movements become more rapid, such as on rough surfaces or high speed cornering.
   With BILSTEINS, a smooth comfortable ride is provided at all times with exactly the right amount of control for changing terrain, road and driving conditions.

3. Q: **WHAT ARE THE ADVANTAGES OF SINGLE TUBE DESIGN?**

   A: The advantages are:
   a) better heat dissipation, which means, better performance. A shock absorber is an "energy converter"; "spring energy" has to be converted into "thermal energy" and the resulting heat has to be dissipated as fast as possible.
   A shock absorber's effectiveness is directly proportional to its ability to dissipate heat. A BILSTEIN shock can handle working temperatures of up to 480 degrees without changing characteristics.

   b) Much greater piston area: greater sensitivity for small piston movements.

   c) They are lighter; reduced "unsprung mass" allows wheels and tires to respond more readily to surface irregularities for improved control; also by lowering the unsprung masses, wear of suspension and steering components is reduced.

4. Q: **HOW LONG WILL THEY LAST?**

   A: Like any precision machine, they cannot last forever. Operating conditions will determine their life. However, BILSTEINS contain no ball check valves or moving parts other than the pistons; no springs and no hinge pins to wear out, deteriorate or get weak with age, use and heat. They outlast almost any other shock absorber in the same application.

5. Q: **HOW DOES BILSTEIN COMPARE WITH OTHER SHOCK ABSORBERS?**

   A: BILSTEIN "rising rate" shocks cannot be compared with any multi-tube reservoir shock. BILSTEIN technology is so far ahead and so different that performance cannot be equaled.

6. Q: **WHY AREN'T BILSTEINS ADJUSTABLE?**

   A: A BILSTEIN doesn't need adjustment to compensate for wear or for varying surfaces. The shock responds instantaneously to the speed of suspension movement to provide the exact damping characteristics required for maximum control, safety and performance.
   Other shocks need adjustment because the settings are a compromise. They need adjustment according to how they are to be used.

BILSTEIN BILSTEIN GAS PRESSURE SHOCK ABSORBER ®
CORPORATION OF AMERICA
11760 SORRENTO VALLEY RD., SAN DIEGO, CA 92121, 714/453-7723

VOLVO
Competition Service.

NEW 240 HANDLING PACKAGE

Sharp bends, high speeds . . . It takes more than good tires to stay on the road.

Now from Competition Service, de Carbon gas-pressure shocks and front and rear anti-sway bars for the 240 series.

Superior gas-pressure shock absorbers that won't foam or fade. Firmer setting controls wheel movement under the most demanding conditions.

New and larger anti-sway bars improve road stability, increase resistance to cross-wind and reduce body roll during cornering.

GAS-PRESSURE SHOCK ABSORBERS
for both the 240 and 260 series

Qty.	Part Number	Description	Model
2	552195-0	Front Shock	240/260
2	552196-8	Rear Shock	240/260

ANTI-SWAY BARS

Qty.	Part Number	Description	Model
1	552096-0	Front and Rear Sway Bar Kit	75-76 240
1	552097-8	21mm Front Sway Bar only	75-77 240
1	552098-6	25 mm Rear Sway Bar only	75-76 240/260

For further information concerning handling equipment for our other models, see the new section 5 of your Competition Catalog.

VOLVO
Competition Service.

NEW T-SHIRTS

A new men's heavy weight t-shirt is now available exclusively from Volvo Competition Service. Your choice of three colors and two logo types makes it the perfect wearing apparel for all Volvo owners.

High quality construction and 100% cotton make for a well tailored and long lasting t-shirt.

WHITE WITH BLUE "VOLVO"		BLUE WITH BLUE "VOLVO"		YELLOW WITH BLUE "VOLVO" AND BLACK "COMPETITION SERVICE"	
Part Number	Size	Part Number	Size	Part Number	Size
552077-0	Small	552081-2	Small	552085-3	Small
552078-8	Medium	552082-0	Medium	552086-1	Medium
552079-6	Large	552083-8	Large	552087-9	Large
552080-4	X-Large	552084-6	X-Large	552088-7	X-Large

For further details concerning sports clothing from Competition Service, see the new section 7 of your Competition Catalog.

VOLVO Competition Service

1955 190th STREET
TORRANCE, CA 90509

(213) 770-1550

June 17, 1974

Mr. Thomas H. Morris
8018 Tarbell Road
Houston, Texas 77034

Dear Mr. Morris:

We sincerely thank you for your recent letter regarding competition equipment for the Volvo.

Volvo Competition Service is a newly formed department under the management of Volvo of America Corporation. Based at Volvo Western Distributing in Torrance, California, we handle all competition activities and distribution of equipment for the entire United States. Since we are a direct extension of our factory competition service in Gothenburg, Sweden, we offer primarily rally oriented equipment that is especially designed for the 120 and 140 series, but in many instances can be applied to our 544, 1800, 164 models.

We offer a very comprehensive competition service catalogue, which outlines all parts and equipment available for high-performance applications. The catalogue contains the following information in six different sections:

1. Complete Homologation Forms for 120 and 140 series.

2. Competition Parts which cover the following areas:

   a. Hi-performance engine parts for B-18, B-20 models.
   b. Stage I, II, III tuning kits (140 to 185 h.p.) B-20.
   c. Exhaust systems.
   d. Power-train components.
   e. Suspension, spring and brakes.
   f. Protection plates.
   g. Drivers' seats.
   h. Instruments.
   i. Lighting equipment.
   j. Safety parts.
   k. Body reinforcements.
   l. Fiberglass body parts.
   m. Spare parts for Solex carburetors.

VOLVO Competition Service
1955 190th STREET
TORRANCE, CA 90509
(213) 770-1550

3. Competition Equipment, such as:

   a. Factory - Competition winter rally jackets.
   b. Wind-breakers.
   c. Sweat-shirts.
   d. T-shirts.
   e. Badges.

4. Tuning Information for Stage I and II engines.

5. Price Lists.

6. Miscellaneous Bulletins.

Since the four-ring loose-leaf binder is rather extensive, we are forced to charge a nominal fee of $4.95 to cover production costs. A check or money order made payable to Volvo Western Distributing will assure you of a catalogue with an unlimited up-dating service which includes future bulletins and technical information. Due to the demand and lengthy production, please allow several weeks for delivery.

Volvo Competition Service (America) is presently engaged in developing hi-performance equipment more suitable to the United States market. Such things as shorter springs and anti-sway bars shall soon be announced via our up-dating service. We currently do not offer any contingency awards for anyone racing a Volvo in competition events. However, if you hold a current competition license or club membership card you may apply to us for direct shipment of parts at a reduced price, otherwise all parts are to be ordered through your local Volvo dealer. They will be happy to let you use their competition catalogue for ordering purposes.

If I can be of any further assistance, please feel free to contact me directly.

Sincerely yours,

Wayne M. Baldwin

Wayne M. Baldwin, Manager
Competition Service Department

WMB/jd

VOLVO
Competition Service.

October, 1974

NEWSLETTER

RACE AND RALLY ACTIVITY

Jim Walker, New Car Salesman of Ann Arbor Volvo, and Terry Palmer of Jackson, Michigan have just accomplished their third victory in four events of the S.C.C.A.'s Pro Rally Series. Walker and Palmer are now second in Pro Rally point standings while Volvo retains third place in the Manufactures National Rally Championship.

Walker and Palmer will be formidable contenders in this year's running of America's only International F.I.A. World Championship Rally - The "Press-On-Regardless".

Bob Hourihan of Michigan, long time successful rallyist, has also decided to drive a Volvo in the October 29 thru November 2 event, as well as 122s owner, Tom Tolls of Michigan.

Congratulations to your past achievements and we wish you good, safe running in the P.O.R.

The recent running of the Score Baja International (Baja 500) and Mickey Thompson's Score World Championship of Off-Road Racing saw Dennis Lundstedt of Fullerton, California pilot his Volvo 142 to 4th and 3rd places respectively in production sedan class. Congratulations Dennis.

In the racing world, we find several owners becoming leading contenders in S.C.C.A. B sedan and E production. In particular, Dr. Arthur Mollin of New York continuously places 1st through 3rd in the very competitive Northeast. Carlo and Mario Gardini of McKevitt Volvo in Berkeley, California captured a 1st place at Laguna Seca late September, and Herb Adams of San Rafael, California has just completed his first I.M.S.A. season with Volvo competing successfully in the Goodrich Racing Sedan Series. Volvo Competition Service wishes to congratulate you all for a good, fun and safe racing season.

TECHNICAL NOTES

Dealers and owners of Bilstein gas pressure shock absorbers should make note of proper installation procedures.

1. The front shocks of all 140 and 160 models are extremely large in diameter and do not fit properly through the opening of the bottom A-arm. About one minute of filing to remove 1/16" of A-arm material will allow the shock to slide through.

2. There has been some complaint of rear suspension noise from 140 and 164 owners using the "Rally Sweden" (extra firm) Bilstein. The shock firmly dampens even very small movement and thus may cause a noise at certain suspension mounts, notably, the upper shock mounting bolt and the support arm/axle mounting point. Make sure they are tight and free of play.

Volvo Competition Service has just completed "Project Express", a promotional vehicle and rolling test bed for present and future competition products. The 145 based Swedish delivery van features a variety of suspension changes undergoing test as well as our new 2200 c.c. Stage III B-20. After 2000 miles, our Express engine is developing 182 Din H.P. at 6250 R.P.M. with 177 ft. lbs. of torque at 4250 R.P.M. It is very flexible and streetable with a steady idle at 950 R.P.M. Skid pad and other performance data will be included in the next Newsletter.

VOLVO
Competition Service.

October, 1974

NEW PRODUCT INFORMATION

ENGINE - STAGE III VALVES

Polished, lightened, dished and Stellite hardened just like our Stage II valves. Primarily designed for the 2190 c.c. Stage III, they have proven to extract another 6 h.p. out of our Stage II and other highly modified cylinder heads.

Part Number	Description	Suggested Retail
552823-7	45mm Intake Valve	17.63 ea.
552824-5	37mm Exhaust Valve	22.99 ea.

ENGINE - FORGED ALUMINUM PISTONS

Volvo original equipment cast aluminum pistons have proven to be race and rally worthy in all but the most demanding conditions. They should remain satisfactory until the following limits:

1. 12:1 COMPRESSION RATIO
2. 40° TOTAL ADVANCE
3. 7000+ R.P.M.'s

If you plan to run higher than any of the above limits, contact us about genuine Volvo Forged Aluminum Pistons. Available in 2000 c.c. and 2200 c.c. sizes.

SUSPENSION - ANTI-SWAY BARS

Developed in Sweden for the Volvo Cup series. 25mm front and 20mm rear adjustable sway bars for those who don't mind giving up a good ride for absolute flat cornering. Reduces body lean and tire roll-over to race track specifications. Surfaced in rust resistant black, shot-peened for uniform surface flex and dependability. Made, tested and proven by AB Volvo. Not recommended for street due to harsh ride and rear suspension noise.

Part Number	Description	Suggested Retail
552174-5	Front & Rear Sway Bar Kit	234.35

Not stocked, special order from Sweden only. Allow 3 to 6 weeks for delivery.

CLOTHING -

WINTER JACKETS - Fur collar, very heavy lining for severe weather conditions. Not stocked, specially ordered from Sweden only. Allow 3 to 6 weeks for delivery.

RALLY JACKETS - All sizes in plentiful stock. Sizes run a little long in arm length. Recommend one size smaller than normal if shoulders are not extremely broad. (Wash on delicate cycle only or dry clean.)

SUMMER JACKETS - All sizes in plentiful stock.

T-SHIRTS - Strongly recommend ordering at least one size larger than normally worn. A new T-Shirt is beginning to replace our present stock of the tight-sleeved variety. Made in Sweden, the new design resembles American made counterparts with large sleeves, high neck, and slightly larger chest and overall length.

Additional jacket brochures available upon request.

VOLVO
Competition Service.

April, 1975

NEWSLETTER

The January issue of the VCS Newsletter has been combined with our April issue due to the lack of competition activity during the winter months and the fact that we have been extremely busy in producing a new Competition Catalogue.

That's right, a completely new and revised Competition Catalogue to take the place of your present one. The new catalogue will follow the format of our Volvo Parts Book/Microfiche, with sections One through Ten pertaining to various areas of the vehicle. Ninety percent of the parts will be accompanied by a photgraph, technical description and a note describing the difference between standard and competition performance.

NEW PRODUCTS

The two enclosed sheets picturing the Mobelec Ignition and Volvo Jacket Patches should be inserted into Section 3 of the Competition Service Catalogue.

Both data sheets can be referred to for specifications, applications and part numbers.

240/164 Series Suspension Parts

There have been many requests for improved handling kits and separate components for the 75 models. Most requests have stemmed from articles appearing in a few magazines, who erroneously assumed that since Volvo had a Competition Department, they must have the new parts.

Sweden is just now completing tests on heavier front and rear sway bars and stiffer shocks and springs for the 240 series. We hope to offer this equipment to the U.S. Volvo Dealer some time in June or July. Price has not been determined yet.

A larger front anti-sway bar for the 164 should be available about the same time.

RACE AND RALLY ACTIVITY

The competition season for 1975 is just now underway and Volvo owners are off to a good start. In the S.C.C.A. Pro Rally Series, styled after the European endurance events, Volvo ties for first place as leading Manufacturer in the first two of twelve events.

This was accomplished by a 2-3 finish in both events - thanks to the efforts of Michiganites Jim Walker/Joe LeBeau in the Ann Arbor Volvo 142, Bob Hourihan/Doug Shepherd in the McConnell Motors 142, and Tom Tolles/Virginia Reese in their Volvo 122.

Hourihan will be the only Volvo entered in the upcoming Washington/Oregon events in an effort to gain championship points for himself and Volvo.

On the race track we find Art Mollin in his 142 departing temporarily from his S.C.C.A. activity to tackle the G.T. class of I.M.S.A. at the "24 Hours of Daytona" and the "Sebring 12 Hour". Art is the first to enter a Volvo against the very fast and competitive factory works cars of Porsche and B.M.W. Art retired after 12 hours of running at Daytona but hopes to put the experience gained to good use at Sebring.

On the west coast, Carlo and Mario Gardin of McKevitt Volvo have switched from their competitive 122 of last season to a fresh looking 142. Both Gardin and Mike Lipscomb in his 142 should be top contenders in the San Francisco region's B sedan class for 1975.

TECHNICAL

We are still receiving a few complaints about a slight knocking noise occuring from the installation of rear Bilstein shock absorbers on 140/160 models. Investigation has shown that in nearly 100% of the cases, the top shock absorber mount is at fault. This problem is a result of one of following:

1. Excessive clearance between top shock absorber bushing and mounting bolt. Check for wear.

2. Top mounting bolt may be too long, thus "bottoming out" on inside of body member before sufficiently tightening shock.

3. Top bushing of shock should be 1 3/4" in length to insure tight fit.

4. Any deformation or out of round condition of top bushing can cause noise and should be replaced.

VOLVO
Competition Service.

NEW PRODUCT INFORMATION

MOBELEC ELECTRONIC IGNITION SYSTEM

A new, heavy duty, competition proven elctronic ignition is now available for most Volvo models.

Used successfully for two years in European rally competition, the Mobelec system has been found to offer several advantages over conventional and C.D. or other electronic ignition systems.

1. Magnetic pick-up eliminates the need for points and condenser forever. There is never any point float, gap setting, dwell, or condenser failure to worry about. Eliminates all but spark plug maintenance on the ignition side of the tune-up.

2. Timing will never vary because there are no points to wear down.

3. Extremely high voltage will continue to fire spark plugs thousands of miles beyond their normal life.

4. Intense spark means more efficient combustion for increased gas mileage, stronger, smoother performance, easier starts.

5. High voltage across entire R.P.M. range means spark plugs of one or two grades colder may be used. Especially good for competition or hard street driving.

6. Reliability that is unparalled in electronic ignition systems.

Part Number	Description	Suggested List
552033-3	Mobelec Ignition	$98.50

MOBELEC ADAPTER PLATE APPLICATION

Year	Model	Engine
1969-1972	140	B20A/B20B
1969-1974	1800	B20B/B20E/B20F
1971-1974	140	B20E/B20F
1969-1974	164	B30A/B30F

Installation of Mobelec in below models requires cutting and removal of armor cable between ignition switch and coil.

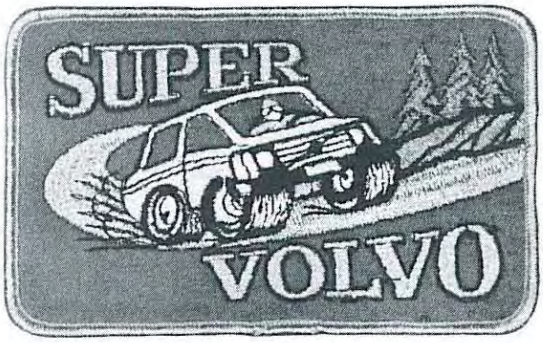
1962-1968	544,120,1800	B18

VOLVO
Competition Service

• JACKET PATCHES •

(A)

(B)



(C)

(D)

(E)

ITEM	PART NO.	DESCRIPTION			PRICE RETAIL
(A)	552 917-7	Large Racing	4½" x 1½"	blue/white/black	.75
(B)	552 918-5	Volvo Rally	4" x 1½"	blue/white/black	.60
(C)	552 916-9	Super Volvo	3" x 4½"	full color	1.19
(D)	552 920-1	Team Volvo	4" x 1½"	blue/white/black	.60
(E)	552 919-3	Small Racing	4" x 1½"	blue/white/black	.60
(F)	552 921-9	Assortment Pack (one of each)			3.73

VOLVO
Competition Service.

JUNE, 1975
No. 2-75

NEW PRODUCT INFORMATION

SUMMER JACKETS

A new Summer Jacket is now available from Volvo Competition Service. This new jacket replaces our earlier "Finnish" jacket that sold for $21.00. We are pleased to offer this new, re-designed Summer Jacket for a greatly reduced price of $14.90, suggested list.

Please review the enclosed flyer and the below for ordering information.

Old Part Number	New Part Number	Description
552986-2	552930-0	Small
552987-0	552950-8	Medium
552988-8	552989-6	Large
	552990-4	X-Large

VOLVO
Competition Service
SUMMER JACKETS

100% nylon, machine washable, Volvo blue in color with black and white stripes running length of sleeve. Complete with hip zipper pocket, "Team Volvo" patch and button cuffs.

PART NO.	SIZE AND DESCRIPTION	SUGGESTED PRICE	DEALER DISC. CODE
552930-0	Small 34-36 summer jacket	14.90	C
552950-8	Medium 36-40 summer jacket	14.90	C
552989-6	Large 42-44 summer jacket	14.90	C
552990-4	Extra Large 46 summer jacket	14.90	C

VOLVO
Competition Service.

July, 1975

NEWSLETTER

CATALOG HOLDERS ! !

It's with extreme pleasure that we finally enclose our totally new Competition Service parts and equipment catalog, with our compliments.

As we're sure you have noticed, gone is the blue loose-leaf binder, homologation papers, lack of technical description and specification, and general overall vagueness and disorganization.

The new catalog is less expensive, more readily available, far more easier to use, and contains nearly twice the information.

It will be up-dated and re-printed about once a year and become available at your local Volvo dealer.

However, due to the catalog's new format, it cannot be easily up-dated by the holder - only by us in the form of a complete reprint. We fully realize that this was not the case when you purchased our former catalog which included occasional up-dates.

For those of you who still wish to receive our up-dates, we have attached a form for you to fill out and return to us. This will indicate to us that you still desire up-dates and also afford us a chance to up-date our records.

Future up-dates will be keyed to the format of the new catalog, and not the old.

Hope you enjoy the new catalog.

VOLVO COMPETITION SERVICE

VOLVO
COMPETITION SERVICE

VOL.I NO.I
Torrance, California
June 28, 1974

NEWSLETTER

VCS has decided to introduce a newsletter for our enthusiastic owners and employees. The newsletter, along with other support materials, will be distributed to all competition catalogue holders every 8 to 10 weeks.

The newsletter will highlight new products and developments, technical advice and Volvo owner's racing activities.

- PROMOTION MATERIALS -

Full color posters and brochures shall be available to all participating Volvo dealers in the near future. Details will be announced.

- PARTS INFORMATION -

A new set of jets have been developed for Solex 45DDH carburetor. Specs:

Main Venturi -	40mm
Main Jet -	150
Emulsion Tube -	120

This jet set is designed for all stage II engines (or any engine using a highly modified cylinder head) and supplements the earlier "marine setting". Results are more horsepower over a wider range of R.P.M.'s.

Part Number	Description	Suggested List
1155115-7	Solex Jet Set	$62.33

Includes all necessary parts for both carburetors.

We now have a huge stock (hundreds) of the additional items enclosed with this mailing. All Volvo clothing is available with the exception of summer rally jackets: 552986, 552987, and 552988. We are sorry for this back order situation. Sweden still has no E.T.A.

Part number 552308-9 Safari Jerrican and part number 552309-7 Filler Hose are no longer available due to U.S. Federal regulation.

- RACING ACTIVITIES -

It seems that since we decided to re-establish a competition department in the U.S., many owners are trying to re-establish Volvo as a dominent force in race and rally events.

In the rally world, our sincere congratulations go to Jim Walker and Terry Palmer of Ann Arbor, Michigan.

Jim and Terry have piloted their 72 142 on to two first overall victories in the S.C.C.A. Pro Rally Series. Since they have only been able to enter two of the past five events, their record remains perfect. Palmer and Walker are running a close second in championship points in this, America's foremost rally series.

In the racing world, we offer our sincere congratulations to Herb Adams of Santa Ana, California.

Herb is campaigning a 1968 142 in the I.M.S.A. Goodrich Radial Challenge Series. Adams is faced with overwhelming odds as he battles against factory supported B.M.W.'s, 6 cylinder A,C Gremlins, Dodge Colts and a host of other road racing machinery.

With very little time for preparation, Adams entered his very first race with the Volvo at Laguna Seca in Monterey a few weeks ago. Adams found himself driving to 4th overall after 3 hours of racing. The following week, Adams captured 7th at Ontario Motor Speedway. Not bad after two events. Herb packs his bags for the June 29th event in mid-Ohio. Check your sports section for the outcome.

VCS would like to hear racing results from anyone driving a Volvo.

Due to the fact that most S.C.C.A. racing is regional, we only receive results for the nationals.

Anyone interested in race result, upcoming events, rules and regulations or participation, should contact either Volvo Competition Service or the race organization itself.

VOLVO
COMPETITION SERVICE

NEW PRODUCT INFORMATION

STEEL TIMING GEARS:

The kit includes a steel camshaft gear rather than the standard fiber type. Designed for B-18, B-20 and B-30 engines that are continuously subjected to 6000+ R.P.M.'s.

An absolute must for competition use. CAUTION: If used in standard muffled engine, a slight "whrrr" type noise may occur.

Part Number	Description	Suggested List	Dealer Net
875375-8	Steel Timing Gears	74.13	59.30

Available only from VCS.

STAGE II COMPETITION CLUTCH:

A clutch designed to withstand the increase horsepower and torque of our Stage II engines (165 Din H.P.).

This Borg & Beck diaphragm clutch has a 40% greater clamping force than standard, yet only requires 15% more pedal pressure. Release action remains the same through maximum R.P.M.'s. Recommended for all high performance B-18 and B-20 engines.

Part Number	Description	Suggested List	Dealer Net
418930-4	Clutch Pressure Plate	47.10	32.97

Available only from VCS.

Accompanying disc and bearing available from all Volvo distributors.

Part Number	Description
418871-0	Disc
380569-4	Release Bearing

VOLVO

Volvo of America Corporation
Western Division
COMPETITION SERVICE

1955 190th Street
Torrance, California 90509
Phone: 213-770-1550
Telex: 67277

October 10, 1977

To: All Catalog Holders

With this mailing comes information concerning three widely varied subjects; performance, looks, and entertaining information.

Performance refers to our new Rally Exhaust System available for most 4 cylinder models. Many of the important features are outlined on the enclosed leaflet, but a few points have been left out. Like, how it compares to other after market exhaust systems.

Our engineers designed this system for maximum performance, durability under extreme conditions, and long life. Other systems tend to consider appearance and sound as their most important criteria.

Additionally, our system is manufactured to fit in exactly the same way as a standard Volvo system. Other systems sometimes require bending, drilling or even a muffler shop to install it.

The price? We feel you will be pleasantly surprised when compared to other after market systems. Please contact a Volvo dealer in your area for price information.

To add that GT look to your Volvo, side rally stripes are available for all 2 door, 4 door and wagons of the 140/160 and 240/260 series. It is an inexpensive way to quickly change a standard looking car into something more sporty. The stripe works exceptionally well when used in conjunction with our GT mag wheels, black sidewalls, and a front spoiler. The price has just been reduced on these stripes so, again, kindly contact your Volvo dealer for price information.

The entertaining information comes in the form of a reprint from "Road Test Magazine" featuring the Volvo "RoadSport". It should be pointed out that the pricing information may not be valid at this time as the information gathered for this article was well over a year ago. Additionally, shorter firmer springs as mentioned in the story will not be available for another few months.

We hope you find the story entertaining and interesting. If you care to read Part III of "Volvo RoadSport", it can be found on the cover of the October 1977 issue of "Road Test Magazine".

Volvo Competition Service

VOLVO
Competition Service

RALLY EXHAUST SYSTEM

A complete free-flow exhaust system is now available for all 120, 140 and 1975 240 models.

Features include:

- Larger two inch pipe and free-flow muffler design for reduced back-pressure
- Performance increase between 6 and 10 DIN horsepower
- A deep but pleasant tone that won't disturb neighbors
- Uses existing attachment points with mounting kit included
- A complete package that includes all pipes, mufflers, hangers, clamps and gaskets. Designed to bolt onto the standard exhaust manifold.

Part Number	Description	Model
552299-0	120 Rally exhaust system (does not fit 120 series wagon)	120/130 up to and including 1966
552300-6	120 Rally exhaust system (does not fit 120 series wagon)	120/130 1967 - 1968
552298-2	140 Rally exhaust system	140 1967 - 1973
552289-1	140/240 Rally exhaust system	1974 140 without EGR; 1975 240 B20 without EGR or catalytic converter

VOLVO
Competition Service

RALLY STRIPES

- Adds that sporty GT look especially when used with GT mag wheels
- Top quality material resists boiling sun, freezing snow and damaging mud and sand
- Fits all 140/160 and 240/260 models
- Available in white with thin black line or black with white thin line
- Installation instructions included

Part Number	Description
552306-3	White rally stripes
552307-1	Black rally stripes

VOLVO
Competition Service.

October 1975

To All Catalog Holders

NEWSLETTER

The various new product brochures enclosed with this mailing represents the beginning of a new direction in "street" performance parts rather than our familiar all-out competition equipment.

In the next few months several new products intended for street use will be appearing in our line along with the continuing development of full-race competition parts.

As in the past, you will be informed of any new developments via our up-dating service.

RACE AND RALLY ACTIVITY

Volvo owners have been doing very well in the S.C.C.A.'s Pro Rally Series this year. The 142's of Bob Hourihan of Texas and Jim Walker of Ann Arbor Volvo, Michigan, have managed to keep Volvo as a top contender for the Manufacturer's Rally Championship.

Major racing activity has primarily taken place in the S.C.C.A.'s B-sedan category. The West Coast seems to be the most popular for Volvo this year with eight different owners campaigning four different models.

Volvo Competition Service wishes to congratulate all drivers, co-drivers and crews for a very successful, competitive and safe race and rally season.

Sincerely,

VOLVO COMPETITION SERVICE

VOLVO
Competition Service

October, 1975

RALLY EXHAUST SYSTEM

Now a complete free-flow exhaust system is available for the 140 series up to and including 1973.

Features:

- Larger 2 inch pipe for reduced back pressure
- Straight thru muffler design for increased horsepower and fuel economy
- Pleasant but sporty exhaust tone
- Uses existing mounting points

Each kit includes front and rear mufflers, cross-over and tail pipe and a complete mounting kit.

Part Number	Description	Sugg. List
552279-2	140 Exhaust	101.65

Note: For maximum efficiency, the front muffler has been designed to connect with the larger diameter of the front manifold pipe on all fuel injected engines, part number 684198. Therefore, 1971 and earlier models with carburetors must either change to the F.I. pipe or have a shop install a pipe reduction adaptor for smaller pipe.

Exhaust systems for 120, 1974 140, 160 and 240 will be available late this year.

Chrome exhaust tip shown in color wall poster is presently not available.

VOLVO
Competition Service

SPOILERS

THE TRUE GT LOOK OF SPOILERS DESIGNED AND BUILT BY VOLVO

- Improves road holding stability
- Increases top speed
- Better fuel economy from reduced vehicle air drag

VCS Express

Part Number	Description and Mounting	Sugg. List
552165-3	120 Spoiler attached to body (without front bumper only)	59.39
552166-1	140 Spoiler attached to body	59.39
552168-7	240 Spoiler attached to front bumper only	65.69

Spoilers are made of unpainted fiberglass but can easily be matched to original Volvo finish by our convenient touch-up spray cans that are keyed to each color code. Each spoiler is supplied with mounting kit and installation instructions.

Additional brochures available upon request.

VOLVO
Competition Service

VCS HAT

DESIGNED AFTER THE "AUSTRALIAN BUSH" HAT!

- Washable, 100% Swedish cotton
- Volvo blue with the white victory hand on front and "Volvo Competition Service" tucked under the snap-lock brim and pocket.
- Perfect for keeping the sun off your head at your favorite outdoor event.

Part Number	Description	Sugg. List
552222-2	Small VCS Hat	7.10
552223-0	Medium VCS Hat	7.10
552224-8	Large VCS Hat	7.10

VOLVO
Competition Service.

NEWSLETTER

Catalog Holders February, 1976

RACE AND RALLY ACTIVITY

Rally

Before the 1976 competition season gets under way, Volvo Competition Service wishes to congratulate all Volvo competitors in 1975 for one of the finest seasons Volvo has enjoyed for some time.

Thanks to the fine performances of such talented Volvo rallyists as Bob Hourihan, Jim Walker, Thomas Tolles and Taisto Hienonen, Volvo managed to capture 2nd place, just one point behind first in the 1975 Manufacturer's Rally Championship.

Race

On the track, Mario and Carlo Gardin of McKevitt Motors, Berkeley, California were the first to ever be invited and enter a Volvo 142 in the S.C.C.A. Road Racing Classic in Atlanta, Georgia. Mario placed an impressive 9th in a class of 24 at his first race ever at the Road Atlanta Track.

Dr. Art Mollin and Richard Straub of New York continued to campaign their 142 in the I.M.S.A. GT Series throughout 1975. They closed the season at the "Daytona 250" in November with a 6th place finish in the under 2.5 liter GT class.

Again, we congratulate all of you for a very safe and successful 1975 and wish you the very best for 1976.

LIMITED SUPPLY OFFER

Fiberglass fenders, hoods, trunk lids and plastic rear windows for the 140 series are no longer manufactured and shall no longer be available when present stocks are depleted.

We have just 18 sets of fenders and 8 sets of hoods and trunks remaining. Remember, these are quality built, factory body parts developed for the European Rally circuit.

They are lightweight, rust-free, and dent resistent.

Part No.	Description	Sugg. List	Savings in Weight
552901-1	Front Left Fender	$ 54.00	7 lbs.
552902-9	Front Right Fender	54.00	7 lbs.
552903-7	Hood	112.61	35 lbs.
552904-5	Trunk Lid	112.61	30 lbs.
552905-2	Plastic Rear Window	58.80	20 lbs.
552906-0	Special Hood Springs	5.78	

TECHNICAL NOTES

1800 Rally Springs

It has been found that front 120/1800 progressive rate rally spring, P.N. 525060-0, may not correctly fit 1970 and later 1800's.

The larger circumference of the spring introduced on the 1970 model utilizes an upper spacer plate/spring holder that is larger than the rally spring. A special spacer plate will accompany the rally spring at a later date.

Mobelec Electronic Ignition, P.N. 552033-3

There have been a few isolated reports that the Mobelec Ignition may not provide spark when outside temperatures are below freezing. This is due to the slow cranking speed at such temperatures that is not sufficient enough to excite the magnetic pickup located on the distributor plate. To overcome this problem, simply eliminate the gap and have the pickup lightly contact the surface of the timing disc (black plastic ring). This contact will result in a spark under all conditions, provided the power module is working properly.

VOLVO
Competition Service.

February, 1976
Catalog Holders

NEW PRODUCT INFORMATION

Several new products have been introduced for 1976 with still many more to follow. Most of these new products are "street" oriented and are designed to add the look and feel of a true GT sports sedan.

Rear Spoiler

A new fiberglass rear spoiler has been designed to fit the trunk lids of all 140/160/240/260 series Volvo. Although not as functional as our front spoiler at today's highway speeds, it offers a totally new and different GT look that appeals to the younger and more sports minded market. This rear spoiler was designed to enhance and balance the front spoiler of the 140/240 and 260 series.

Part No.	Description	Sugg. List
552167-9	Rear Spoiler	58.02

240/260 Series Rally Shock Absorbers

New gas pressure shock absorbers manufactured exclusively for Competition Service by internationally famous de Carbon.

These shocks are approximately 20% firmer than standard and are designed for sporty street driving rather than all out competition.

Part No.	Description	Sugg. List
552195-0	Front 240 Shock	55.56
552196-8	Rear 240 Shock	36.63

140/160 Competition Shock Absorbers

A new, extra hard front shock absorber has been developed for competitors primarily using Volvo "progressive rate" springs in race or rally. The special de Carbon shock is double the firmness of standard and 30% stiffer than our normal de Carbon.

Part No.	Description	Sugg. List
552189-3	Front Comp. Shock	40.44

Extra Large VCS Hat

A new, extra large hat has now been introduced into our range:

Part No.	Description	Sugg. List
552222-2	VCS Hat Small	7.10
552223-0	VCS Hat Medium	7.10
552224-8	VCS Hat Large	7.10
552225-5	VCS Hat X-Large	7.10

These hats have been fully tested and approved in competition by Sweden's and America's best rallyists. One year warranty covers defects in workmanship or material.

VCS Decal

A new, self-adhesive, vinyl surfaced sticker is now available in packages containing 5 large reflective type and ten smaller type (actual size shown).

As with all the above products, the new decals can only be ordered through your local Volvo dealer.

Part No.	Description	Sugg. List
552002-8	VCS Decals	$4.99

Note-- Prices quoted above are manufacturers suggested retail. Dealers are free to establish whatever price necessary primarily due to variations in shipping methods and distance from warehouse.

VOLVO
Competition Service

Smaller Size

VOLVO
Competition Service.

NEW RALLY JACKET

A New Medium Weight Rally Jacket Has Been Introduced Into Our Clothing Range.

This new versatile jacket is neither heavy nor bulky but warm enough to keep the chill out.

Features Include:

- Water repellent nylon with warm white fleece lining and quilt lined sleeves.
- Two-button collar and cuffs with two front pockets.
- Two white vertical stripes on the right front side with the Volvo badge located on the left.
- Machine washable with a twelve month warranty against defects in materials or workmanship.
- Made in the U.S. exclusively for Competition Service at a very special savings to Volvo enthusiasts.

Part No.	Description	Size
552043-2	Extra Small Rally Jacket	34-36
552044-0	Small Rally Jacket	36-38
552045-7	Medium Rally Jacket	38-42
552046-5	Large Rally Jacket	42-44
552047-3	Extra Large Rally Jacket	44-48

VOLVO
Competition Service.

SHOCK ABSORBER KITS

For 142, 144, 145

New "Gas Pressure" Shock Absorbers Developed Exclusively for Volvo Competition Service

A complete set of four shocks in a new attractive package under just one part number.

- Manufactured for VCS by world famous "deCarbon", the inventors of the original gas pressure shock absorber.
- Single tube design means less heat, longer life.
- Gas pressure provides gentle ride on smooth surfaces but automatically stiffens when excessive motions begin, such as in cornering and rough roads.
- Available in two settings:

  Sport — For all street enthusiasts who desire firmer control but never a harsh ride.

  Rally — An extra firm setting on the front for vigorous street use and all out competition in the dirt or on the track. (This setting also recommended if progressive rate springs are fitted.)

Part No.	Description	Suggested List Price
552185-1	Rally Shock Kit	$145.05
552186-9	Sport Shock Kit	$138.60

Note: Early 140 series ('67 - '70) must use late type lower rear shock mount. Installation kit part number 282761-6.

VOLVO Competition Service

1955 190th STREET
TORRANCE, CA 90509

(213) 770-1550

DISTRIBUTION	DATE
	May 1974

Volvo has long meant durability in a road car. Now, Volvo adds a new dimension to the competition equipment area by offering Volvo Competition Service equipment for the Volvo owner interested in closed course or off road use.

Already extensively used in competition in Europe, Africa and South America, both in road races and rallyes, Volvo Competition Department equipment is now available in the United States to assist you in your various racing efforts.

All parts listed in this catalog may be ordered through your local Volvo Dealer.

We hope the parts in this catalog will help you, whether you are a racer or an auto enthusiast who just wants a little extra from his Volvo.

For those of you who may have questions about the application of items to your circumstances, please feel free to contact us at:

Volvo Competition Service
1955-190th Street
Torrance, California 90509

Warranty:

All Volvo competition service parts carry the same warranty as any other original Volvo part, i.e., under normal use they are warranted for twelve (12) months with no mileage limit.

This warranty does not apply, however, to any vehicle used in a competitive event.

It should be noted that the installation of equipment which deals with engine modifications and certain other modifications may result in the vehicle not meeting federal or state standards for use on public roads. Check the laws of your home state.

For example, the lighting equipment Bosch "Knick" is expressly for off-road use and is illegal for road use in California.

VOLVO

1955 190th STREET
TORRANCE, CA 90509

(213) 770-1550

Competition Service

DISTRIBUTION	DATE
To All Catalog Holders	Nov. '76

We are pleased to introduce a new Rally Jacket this Fall. The enclosed leaflet details the many features of our exclusive design.

Drop by your local authorized Volvo dealer for a closer inspection. We're sure you'll find it to be a real value for the price and the ideal jacket for your next club meeting, racing event, and the rapidly approaching holiday season.

Please note that our heavy Winter/Ski Rally Jacket from Sweden will only remain available while present supplies last.

Product News

Ever since the comprehensive story about our Competition prepared "242 Roadsport" appeared in the October issue of "Road Test" magazine, Competition Service has been deluged with inquiries concerning the availability of performance parts for the 240 series.

At the time the article was written, many of the parts were prototypes and not yet available. However, most are now in production and the first to arrive will be front and rear anti-sway bar kits, available early in December through your authorized Volvo dealer. Information bulletins and leaflets will be distributed as the new parts become available.

We are sorry to report that the 240 front spoiler, part number 552168-7, will no longer be available until further notice. However, spoilers for 140 and 120 series are still available in good supply.

VOLVO

1955 190th STREET
TORRANCE, CA 90509

(213) 770-1550

Competition Service

DISTRIBUTION	DATE
To All Catalog Holders	Sept. '76

We are pleased to provide you with three new color leaflets describing our Competition Equipment in detail.

Although we don't expect everyone to rush out and purchase a complete tuning kit or engine, we do hope the information will be beneficial to you at sometime in the future.

We are also pleased to introduce a new line of gas pressure shock absorbers for the 140 series.

These new performance shocks were tested and developed by our department in Sweden ard are exclusively made for VCS by world famous "de Carbon" of France, the inventors of the gas pressure shock.

The de Carbon's are of the same quality and design as our previously offered Bilstein shock, but have proved to be a better value in both performance and price.

The shocks are available in either a kit of four or individually. Note that there is a price savings when ordered in kit form.

Two settings are available:

Sport - For improved street handling and control but never a harsh ride.

Rally - Extra firm for maximum control on the street, track or dirt.

Part No.	Description	Suggested List Price
552185-1	Rally Shock Kit (Front & Rear)	$145.08
552186-9	Sport Shock Kit (Front & Rear)	$138.60

Shock absorbers may be ordered individually under the following numbers.

552189-3	Front Rally Shock	40.44
552191-9	Front Sport Shock	36.92
552192-7	Rear R/S Shock	40.44

- TUNING KITS AND CAMSHAFTS -

All tuning kits are special ordered from Sweden and take three to six weeks for delivery. The kits are intended for off-road use only as late model engines fitted with kits will not comply with federal emissions standards.

All camshafts and lifters are stocked in our warehouse in Los Angeles. Do not confuse our camshafts with the borrowed design profiles from other makes used on re-ground camshafts here in the U.S.

VCS camshafts are exclusive profile designs developed in the engine test bed by our Competition Engineer, Mr. Brage Sundstroem. They are cast and machined as a new competition camshaft, not a simple re-grind.

Note - All camshafts except type "K" are <u>not</u> suitable for engines with electronic fuel injection due to manifold pressure sensor. Additionally, these camshafts are intended for off-road use only as they can alter emission levels.

VOLVO

1955 190th STREET
TORRANCE, CA 90509

(213) 770-1550

Competition Service

DISTRIBUTION	DATE
All Catalog Holders	May, 1976

Dear Volvo Enthusiast:

We are pleased to enclose a copy of an article about our VCS Express that appeared in the March issue of Road and Track Magazine.

Henry Manney's entertaining writing points out how our fine 140 series can be easily transformed into an exciting road machine by using our factory performance parts and equipment.

Your Volvo dealer will be happy to assist you in any of your ordering needs and, should you need any detailed technical information, please feel free to contact us directly.

Cordially,

Wayne M. Baldwin

Wayne M. Baldwin, Manager
Competition Service Department

VOLVO

VOLVO WESTERN
Division of Volvo of America Corporation
COMPETITION SERVICE

1955 190th Street
Torrance, California 90509
Phone: 213-770-1550
Telex: 67277

June 13, 1977

TO: ALL VOLVO COMPETITION CATALOG HOLDERS

SUBJECT: NEW PRODUCT INFORMATION

NEW 240/260 SERIES SUSPENSION EQUIPMENT

We are pleased to introduce new high-performance suspension equipment to improve the handling of the 240/260 series.

Larger front and rear anti-sway bars to reduce body roll in corners and add greater stability in directional change and cross-winds.

Gas pressure shock absorbers designed by Competition Service in conjunction with de Carbon, inventors of the world famous gas pressure principle.

The unique gas pressure shock offers superior performance without a sacrifice in ride comfort. Monotube construction and gas pressure design eliminate excessive heat build-up and subsequent fade. Drive the car hard, and the de Carbon shock automatically becomes firmer to control body lean, brake dive and excessive spring oscillation.

Combine the anti-sway bars with the gas pressure shocks and you have best handling package ever designed for Volvo. Engineered and tested for over two years to assure the best possible handling, safety, and durability.

ANTI-SWAY BARS

Anti-sway bars can be ordered either separately or in a handsome display package at a price savings.

Part #	Description	Model
552096-0	Anti-sway bar kit	75-76 240
552097-8	21mm Front anti-sway bar	75-77 240
552098-6	25mm Rear anti-sway bar	75-76 240/260

GAS PRESSURE SHOCK ABSORBER
(SOLD SEPARATELY ONLY)

Part #	Description	Model
552195-0	Front shock absorber	All 240/260
552196-8	Rear shock absorber	All 240/260

For additional suspension parts and equipment for older models, please review the new Section 5 of the Competition Catalog, enclosed in this envelope.

NEW T-SHIRTS

We are also pleased to announce the introduction of an entire new line of quality T-shirts from Volvo Competition Service.

As the enclosed leaflet describes, they are available in three colors and two logo designs and are made of top quality 100% cotton for that well taylored and long lasting look. Please visit your local authorized Volvo dealer for a look at our new T-shirt. We think you will agree that it is a top quality T-shirt offered at a very reasonable price.

A complete listing of our new T-shirts as well as other sports clothing from Competition Service can be found in the all new Section 7 of the Competition Catalog, enclosed in this envelope.