



Saab Sport & Rally är ett helt nytt begrepp för marknadsföring av högeffekt- och specialdelar till Saab.

Saab Sport & Rally utvidgar den försäljning av tävlingsdelar som tidigare sköts av tävlingsavdelningen.

Det ökade behovet av sportigare utrustningsdetaljer för vardagsbruk skall också tillgodoses och vidareutvecklas.

Säkerheten får man inte ge avkall på. Allt som ingår i sortimentet är noggrant testat och kontrollerat av Saabs tävlingsavdelning. Alla detaljer som påverkar bilens effekt eller köregenskaper åtföljs av certifikat som visar att de till alla delar uppfyller gällande normer.

Sortimentet består av tre huvudgrupper:

- Tävlingsdetaljer
- Sportsatser
- Tillbehör

Saab Sport & Rallys sortiment säljs till såväl tävlingsförare som vardagsbilister genom samtliga Saabs återförsäljare.

Saab Sport & Rally means quite new sales channel for high-capacity and special spare parts for Saab.

Saab Sport & Rally is extending the sales of racing parts earlier handled by Saab competitions department.

The increased demand for more tuning car parts for every day use will also be met and developed.

Safety must not be renounced. All items included in the assortment have been thoroughly tested and checked by Saab competitions department. For all parts affecting the car's capacity or driving conditions a certificate is enclosed stating that all parts comply with stipulated norms.

The assortment is divided into three main groups:

- Competition parts
- Tuning kits
- Accessories

Saab Sport & Rally's assortment is marketed by Saabdealers all over the world.



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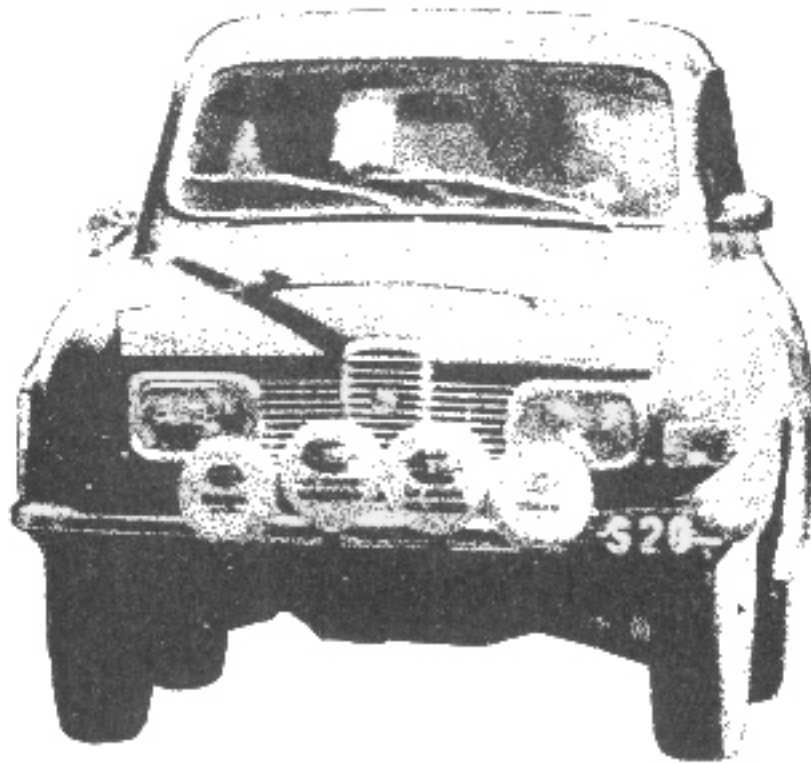
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## Information

### Tävlingar med Saab Competitions with Saab 1:1 A



#### Varför tävlar Saab?

Man får erfarenhet genom hårda rallyn. De kan aldrig helt ersättas av vanlig testkörning.

Förbättringar på standardbilarna blir resultatet:  
Bättre bromsar, kylning, transmission, styrning etc.

Under tävlingsförhållanden testas också redan färdiga konstruktioner. Då märks det om teorierna varit riktiga.

Saab vinner inte alla rallyn. Men i kamp med många sportbilar visar det sig att en trimmad standardbil kan hävda sig mycket väl.

Saab trimmar bilarna för att kunna hänga med i tuffa, snabba rallyn. Men grundkonstruktionen är densamma. Det är den som avgör om en bil är bra eller dålig. Stoppar den för 100-tals hårda rallymil stoppar den också för vardagskörning. Det är det Saab vill veta och det är vad Saab vill visa.

Därför tävlar Saab.

#### Why is Saab participating in rallies?

You gain experience in hard rallies which can never be completely replaced by test driving in the ordinary way.

It often results in improvements of standard cars such as brakes, cooling, transmission, steering etc.

As also already completed constructions are tested in racing conditions, you can learn if theories were right.

Saab does not win all rallies. It has, however, become evident that a tuned standard car maintains its position very well when competing with sports cars.

Saab cars are tuned to be adapted to hang on in the tough, fast rallies but the basic construction is the same and is always decisive whether it is a first-class car or not. If the car stand thousands of hard rally miles, it also stands everyday driving. This is what Saab wants to know and what Saab wants to prove.

That is just the reason why Saab is participating in rallies.



## Information

Saab's tävlingsavdelning  
Saab competitions department  
1:2 A



### Saab's tävlingsavdelning

I januari 1950 rullade den första Saab-bilen fram till startlinjen i en biltävling.

Det var den 25 hästkrafter starka 92:an som inledde en rad framgångar för Saab som tävlingsbil.

Efterhand som tävlingsverksamheten växte bildades en avdelning vars huvuduppgift är att tävla med Saab samt vidarebefordra vunna erfarenheter till konstruktörer och övriga tekniker. Dessa erfarenheter har blivit ett ovärderligt underlag för vidareutveckling av Saab-bilen.

Tävlingsavdelningen har numera även en annan viktig uppgift – att utveckla och testa samtliga detaljer som marknadsförs av Saab Sport & Rally.

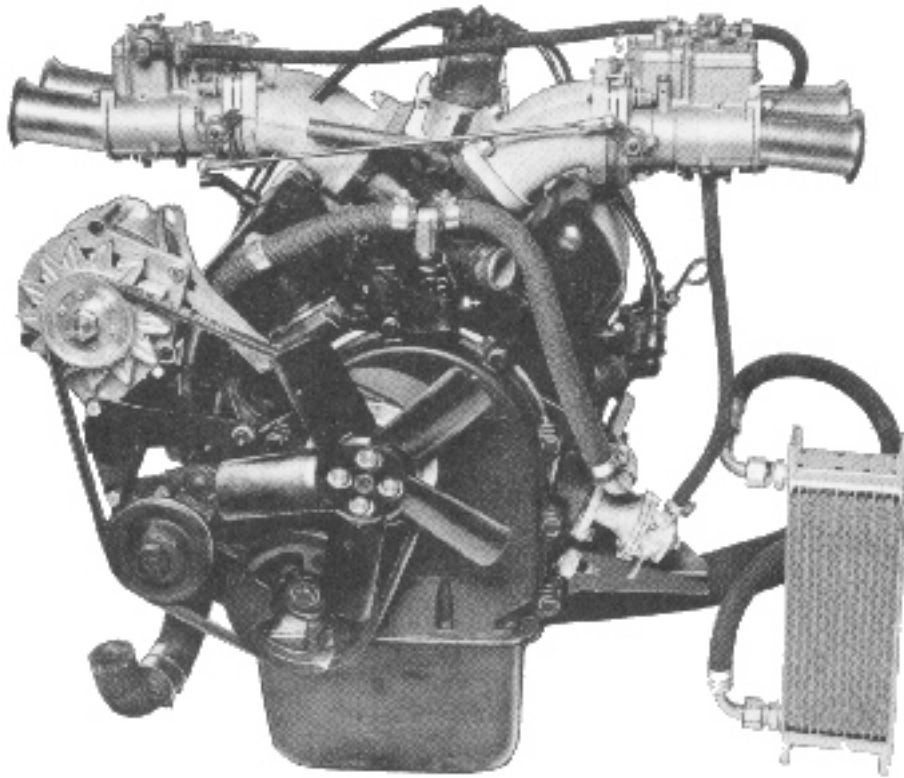
### Saab competitions department

In January 1950 a Saab car was for the first time driven up to a rally starting line.

That was the Saab 92 with the 25 HP engine which now began the uninterrupted series of successes with Saab as a competition car.

Gradually, as competition activities increased, a department was established, the principal aim of which was to participate with the Saab in competitions and to forward the experiences gained to engineers and technicians. This experience has been of great value to further development of Saab.

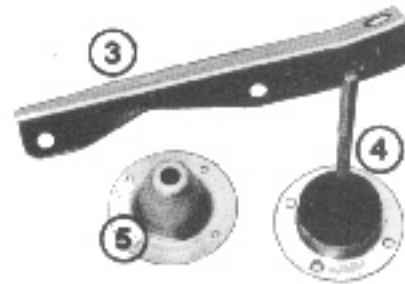
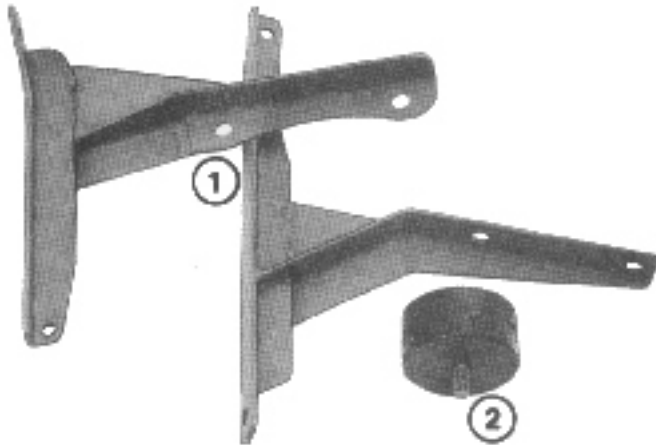
Another of the competitions department's most important tasks is the developing and testing of all parts which are marketed by Saab Sport & Rally.



Tävlingsdetaljer  
 Competition parts  
 Motorer  
 Engines  
 2:1 A

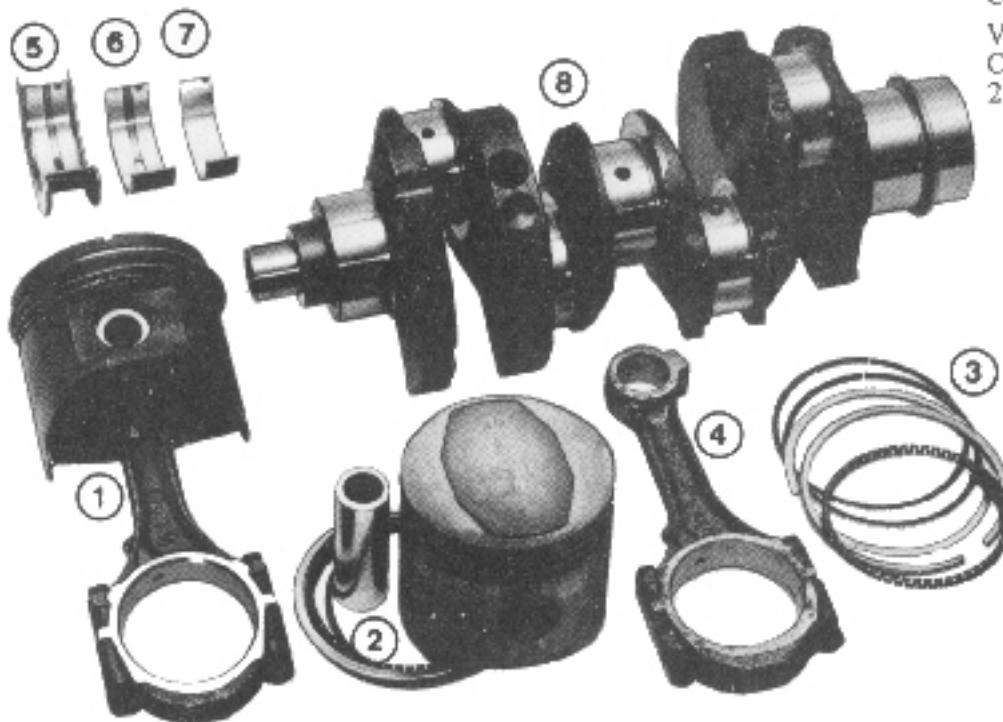
Benämning	Ant Qty	Pos	Det nr Part no	Anmärkning Remarks	Description
Motor grp 2	1	1	1000		Engine grp 2

Tävlingsdetaljer  
 Competition parts  
 Anslutningsdetaljer  
 Connecting parts  
 2:2 A



Benämning	Ant Qty	Pos	Det nr Part no	Anmärkning Remarks	Description
Järn (motorfäste)	1	1	1018		Bracket (engine support)
Gummikudde (motorfäste)	2	2	(10)880170		Engine cushion
Fäste (växellåda)	1	3	(10)710469		Bracket (gear box)
Stödkudde (växellåda)	1	4	(10)733239		Support cushion (gear box)
Fäste (växellåda)	1	5	(10)717642		Bracket (gear box)

Tävlingsdetaljer  
Competition parts  
Vevaxel och kolvar  
Crankshaft and pistons  
2:3 A



Benämning	Ant Qty	Pos	Det nr Part no	Anmärkning Remarks	Description
Kolv kpl m vevstake, gjuten, 90 mm	4	1	1001	1700 cc	Piston assy with con- necting rod, cast, 90 mm
Kolv kpl m vevstake, gjuten, 91 mm	4	1	1002	1700 cc	Piston assy with con- necting rod, cast, 91 mm
Kolv kpl, smidd, 91 mm	4	2	1003	1500 cc	Piston assy, forged, 91 mm
Kolv kpl, smidd, 91 mm	4	2	1004	1700 cc	Piston assy, forged, 91 mm
Kolvringar, sats	4	3	1006	1003, 1004	Piston ring, set
Vevstake	4	4	1005	1003, 1004	Connecting rod
Ramlager, mittre, blå	2	5	(10)881241		Bearing, centra, blue
Ramlager, mittre, röda	2	5	(10)881240		Bearing, centra, red
Ramlager, yttre, blå	4	6	(10)881239		Bearing, outer, blue
Ramlager, yttre, röda	4	6	(10)881238		Bearing, outer, red
Vevstakslager, blå	8	7	(10)881122		Bearing, con.rod, blue
Vevstakslager, röda	8	7	(10)881121		Bearing, con.rod, red
Vevaxel (modifierad)	1	8	1062	1700 cc	Crankshaft (modified)





Tävlingsdetaljer  
 Competition parts  
 Ventilsystem  
 Valve system  
 2:4 A

Benämning	Ant Qty	Pos	Det nr Part no	Anmärkning Remarks	Description
Kamaxel 7,2	1	1	1007		Camshaft 7,2
Kamaxel 7,6	1	1	1008		Camshaft 7,6
Kamaxel 8,1	1	1	1170		Camshaft 8,1
Avgasventil, 37 mm	4	2	1010		Valve, exhaust, 37 mm
Avgasventil, 38 mm	4	2	1167		Valve, exhaust, 38 mm
Insugningsventil, 42 mm	4	3	1009		Valve, inlet, 42 mm
Insugningsventil, 44 mm	4	3	1168		Valve, inlet, 44 mm
Ventiltjäder	8	4	1011		Valve spring
Ventiltjäderbricka	8	5	1087	Första montering 1:st assembly	Valve spring retainer
Ventiltjäderbricka	8	6	1012	Andra mont 2:nd assembly	Valve spring retainer
Ventillyftare	8	7	1013		Tappet
Knaster	16	8	(10)883395		Lock



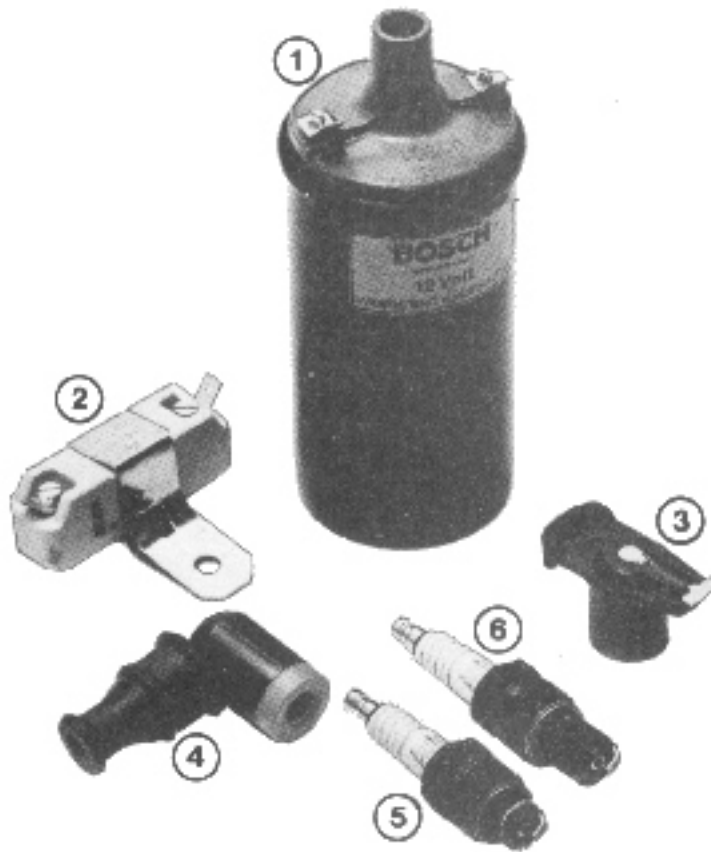
Tävlingsdetaljer  
 Competition parts  
 Motorpackningar  
 Engine gaskets  
 2:5 A

Benämning	Ant Qty	Pos	Det nr Part no	Anmärkning Remarks	Description
Topplockspackningar	1	1	1173	Grå motor Grey engine	Head gaskets
Topplockspackningar	1	1	1017		Head gaskets
Topplockspackningar	1	2	1015	Utan skoning Without lining	Head gaskets
Tättningsringar	1	3	1016	1015	Seal rings



Tävlingsdetaljer  
Competition parts  
Smörjsystem  
Lubrication system  
2:6 A

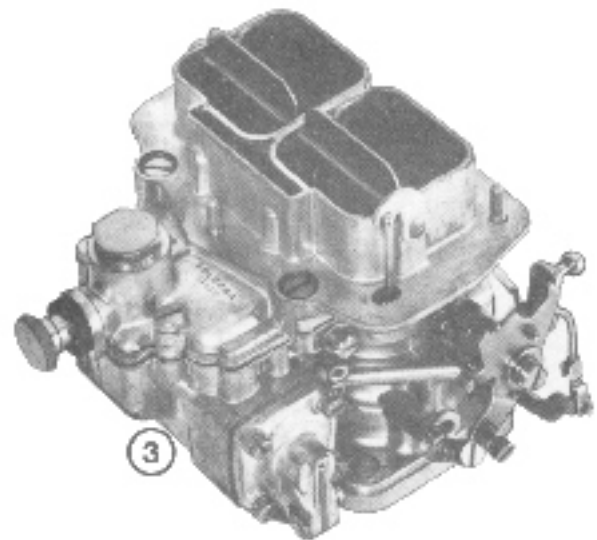
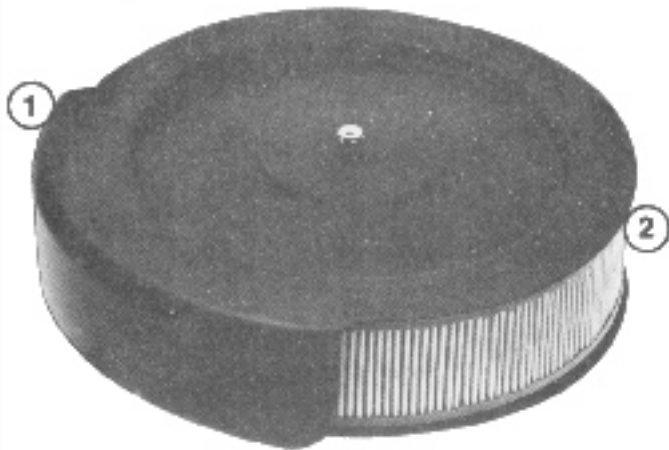
Benämning	Ant Qty	Pos	Det nr Part no	Anmärkning Remarks	Description
Fjäder, oljepump	1	1	1014		Spring, oil pump



Tävlingsdetaljer  
 Competition parts  
 Tändsystem  
 Ignition system  
 2:7 A

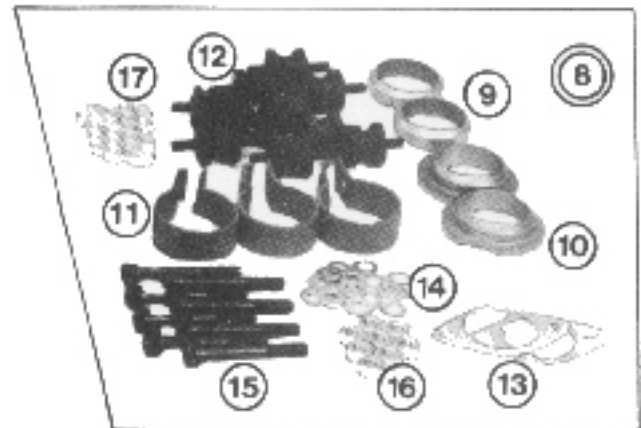
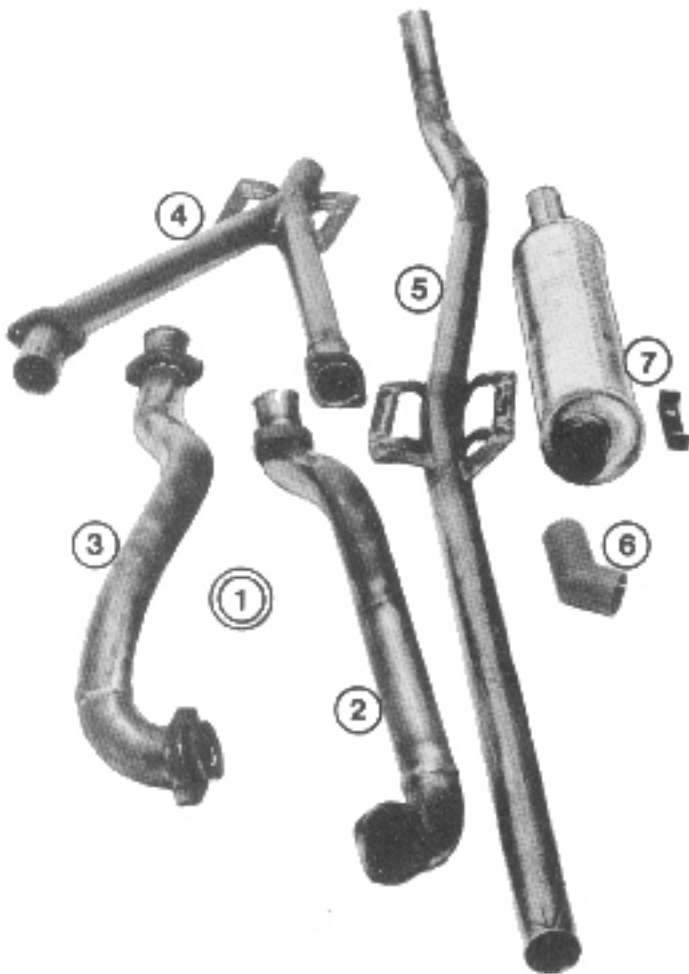
Benämning	Ant Qty	Pos	Det nr Part no	Anmärkning Remarks	Description
Tändspole	1	1	(10)850663		Ignition coil
Förkopplingsmotsstånd	1	2	(10)830059		Serial resistance
Fördelararm	1	3	1177		Distributor arm
Tändstiftsanslutning	4	4	1178		Spark plug connection
Tändstift AE 901	4	5	1176	Grå motor Grey engine	Spark plug AE 901
Tändstift AG 901	4	6	1099		Spark plug AG 901

Tävlingsdetaljer  
 Competition parts  
 Bränslesystem  
 Fuel system  
 2:8 A



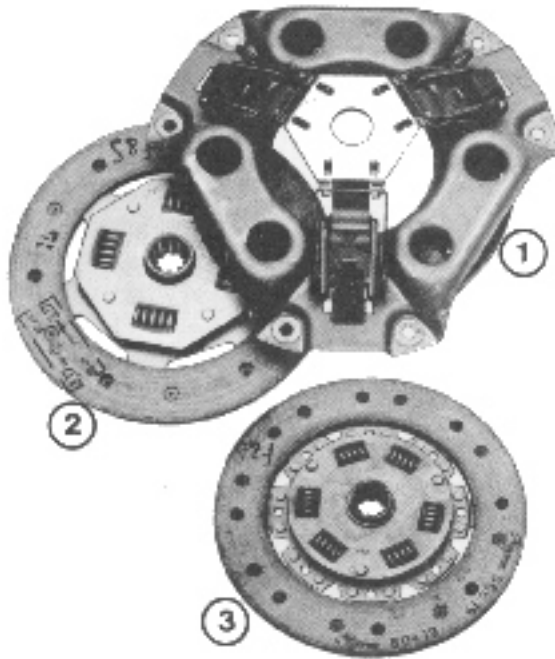
Benämning	Ant Qty	Pos	Det nr Part no	Anmärkning Remarks	Description
Luftfilter	1	1	1021		Air cleaner
Insats	1	2	(10)880355		Insert
Packning	1		1156	1021	Gasket
Förgasare	1	3	1019	Weber DFI 40/2	Carburettor
Tomgångsmunstycke 65			1036		Idle jet 65
Huvudmunstycke 190			1037		Main jet 190
Huvudmunstycke 200			1038		Main jet 200
Huvudmunstycke 210			1039		Main jet 210
Huvudmunstycke 230			1040		Main jet 230

Tävlingsdetaljer  
Competition parts  
Avgassystem  
Exhaust system  
2:9 A



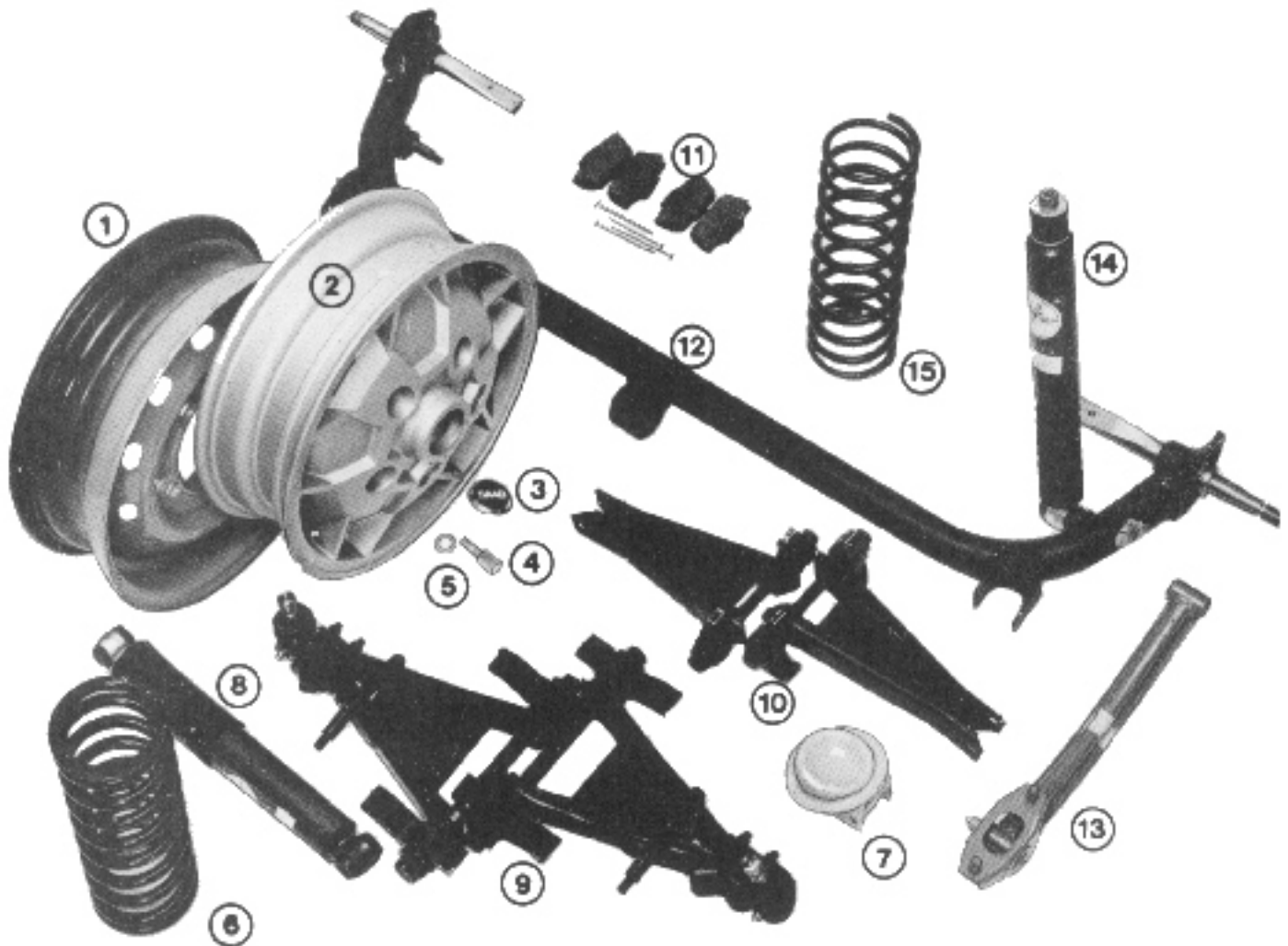
Benämning	Ant Qty	Pos	Det nr Part no	Anmärkning Remarks	Description
Avgassystem kpl	1	1	1091	Grp 2	Exhaust system assy
.Främre rör, vänster	1	2	1025		.Front pipe, left
.Främre rör, höger	1	3	1026		.Front pipe, right
.Y-rör	1	4	1027		."Y"section
.Bakre rör	1	5	1029		.Rear pipe
.Skarvrör	1	6	1030		.Connecting pipe
.Ljuddämpare	1	7	1032		.Muffler
Monteringssats	1	8	1092		Mounting kit
.Tätningarring	2	9	1028		.Seal ring
.Fläns	2	10	1031		.Flange
.Klamma	3	11	1063		.Clamp
.Gummikudde	10	12	1130		.Rubber cushion
.Packning	2	13	1145		.Gasket
.Bricka	20	14	1146		.Washer
.Skruv	4	15	1148	M 10x50	.Screw
.Skruv	4	15	1153	M 10x70	.Screw
.Mutter	8	16	1154	M 10	.Nut
.Mutter	20	17	(10)881022		.Nut

Tävlingsdetaljer  
 Competition parts  
 Kraftöverföring  
 Transmission  
 2:11 A



Benämning	Ant Qty	Pos	Det nr Part no	Anmärkning Remarks	Description
Koppling	1	1	1052		Clutch
Lamell	1	2	1053		Clutch disc
Lamell	1	3	1131	Extra förstärkt Extra reinforced	Clutch disc

Tävlingsdetaljer  
 Competition parts  
 Fjädring, hjul, bromsar  
 Suspension, wheels, brakes  
 2:12 A



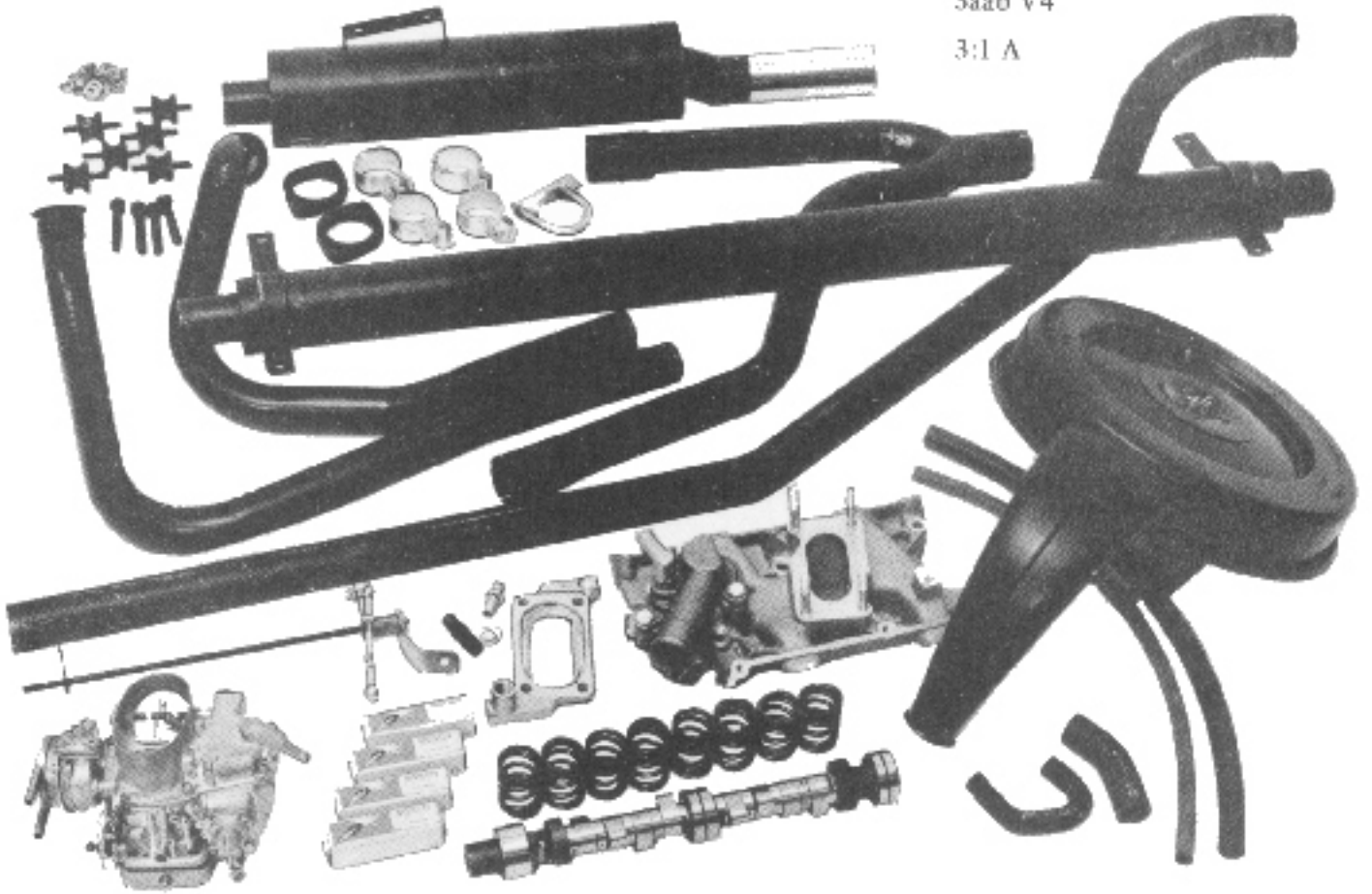
Benämning	Ant Qty	Pos	Det nr Part no	Anmärkning Remarks	Description
Hjul	5	1	(10)741207		Wheel
Hjul	5	2	1120	Aluminium	Wheel
Emblem	5	3	1123	1120	Emblem
Skruv	20	4	1121	1120	Screw
Bricka	20	5	1122	1120	Washer
Fjäder, fram	2	6	1057	Rally special	Spring, front
Fjäderstöd, fram	2	7	1088		Spring support
Stötdämpare, fram	2	8	1059		Shock absorber, front
Svängarmar, nedre	1	9	1054		Swinging arms, lower
Svängarmar, övre	1	10	1055		Swinging arms, upper
Bromsklotssats	1	11	1056	Ferodo DS 11	Brake pads
Bromsklotssats	1	11	(10)786828	Ferodo 2430	Brake pads
Bakaxel	1	12	1061		Rear axle
Länkarm, bakre	2	13	1089		Link arm, rear
Stötdämpare, bakre	2	14	1060		Shock absorber, rear
Fjäder, bakre	2	15	1058	Progressiv	Spring, rear



Sportsatser  
 Tuning kits

Saab V4

3:1 A



Benämning	Ant Qty	Pos	Det nr Part no	Anmärkning Remarks	Description
Sportsats	1	1	1124		Tuning kit
.Avgassystem kpl	1		1147		.Exhaust system assy

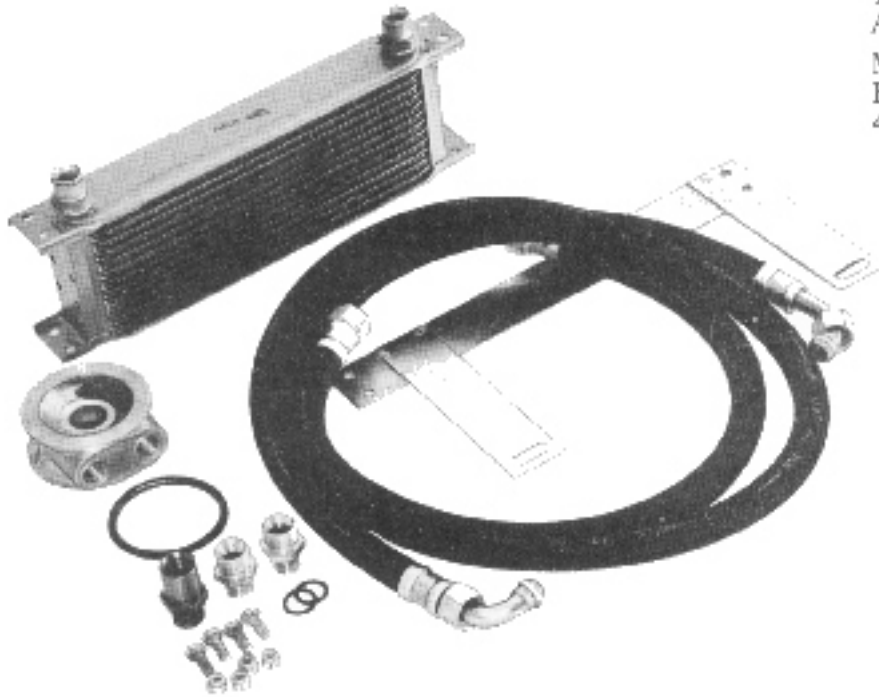


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Strålkastare	6	Extra lights
Kartläsningsutrustning	7	Co-driver's equipment
Nödutrustning	8	Emergency equipment

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Tillbehör  
Accessories  
Motorutrustning  
Engine equipment  
4:l A

Benämning	Ant Qty	Pos	Det nr Part no	Anmärkning Remarks	Description
Oljekylare kpl	1	1	1023		Oil cooler assy

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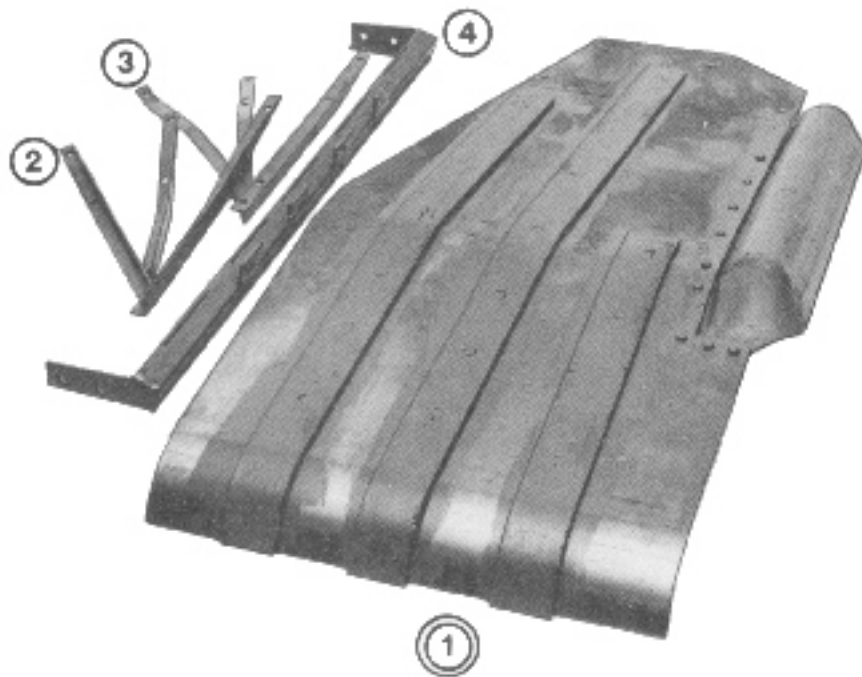


Tillbehör  
 Accessories  
 Motorinstrument  
 Engine instruments  
 4:2 A

Benämning	Ant Qty	Pos	Det nr Part no	Anmärkning Remarks	Description
Varvräknare	1	1	1101		Revolution counter
Fäste	1	2	1074		Bracket

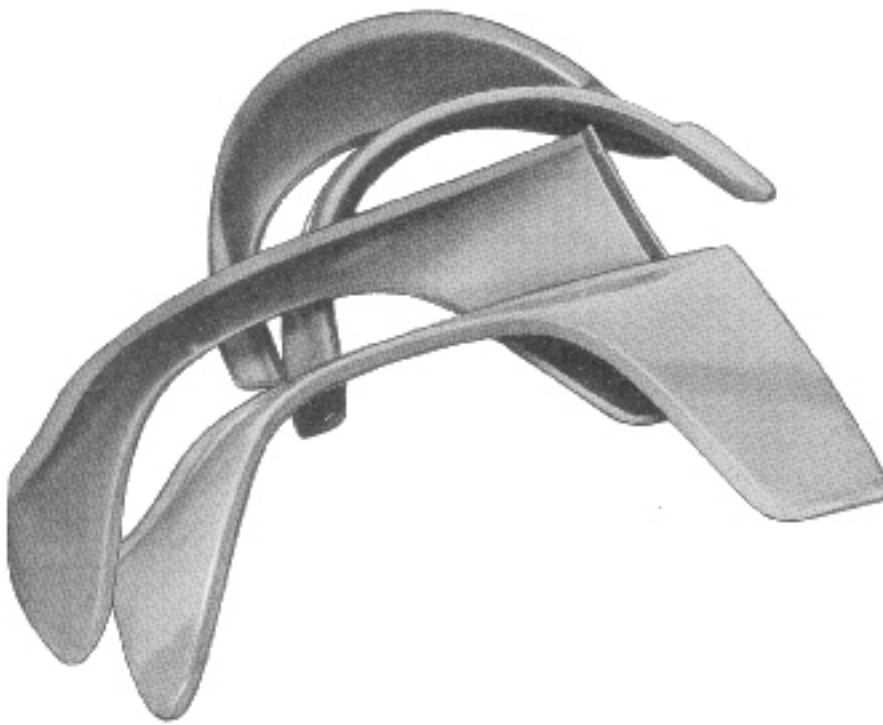
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Tillbehör  
Accessories  
Skyddsplåtar  
Protection plates  
4:3 A

Benämning	Ant Qty	Pos	Det nr Part no	Anmärkning Remarks	Description
Skyddsplåt kpl	1	1	1100	Grp 1	Protection plate assy
.Sidostag, vänster	1	2	1064		.Sidebracket, left
.Sidostag, höger	1	3	1068		.Sidebracket, right
.Fästjärn, främre	1	4	1066		.Bracket, front



Tillbehör  
 Accessories  
 Karosseritillbehör  
 Body accessories  
 4:4 A

Benämning	Ant Qty	Pos	Det nr Part no	Anmärkning Remarks	Description
Skärmbreddningssats	1	1	1070		Wing extensions

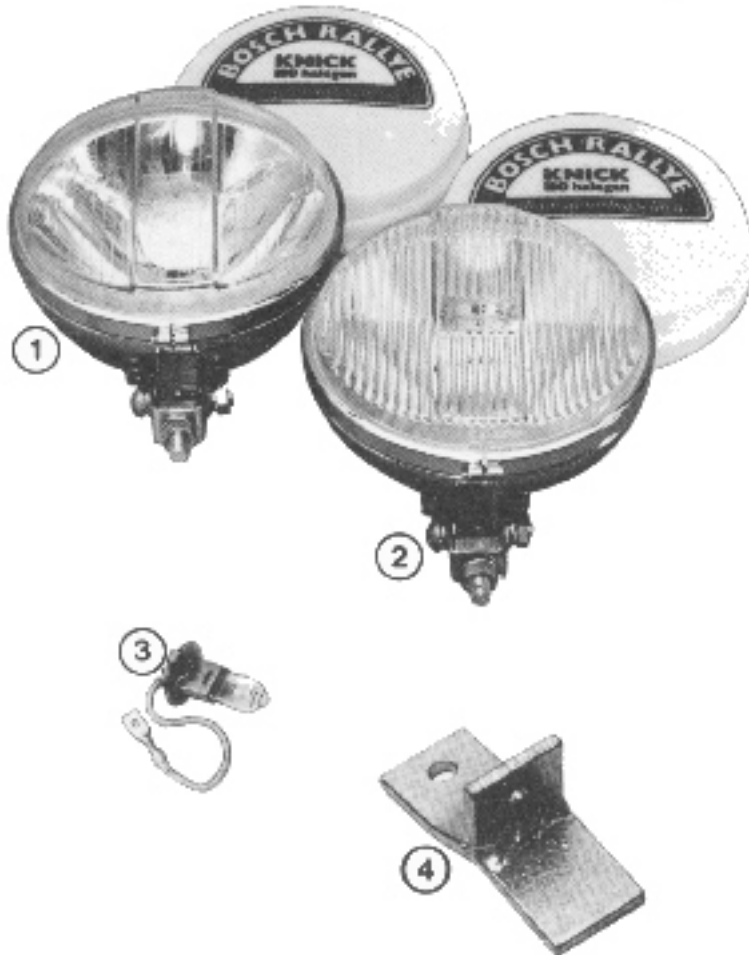
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Tillbehör  
 Accessories  
 Stolar  
 Seats  
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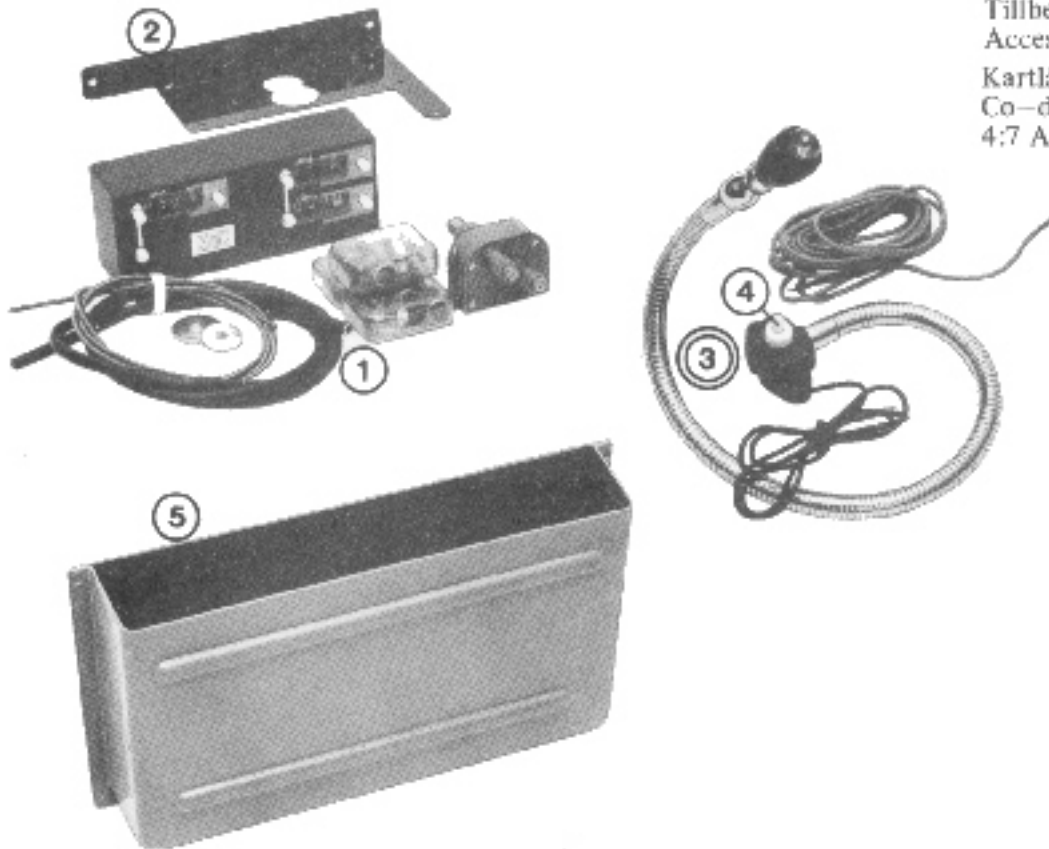
Benämning	Ant Qty	Pos	Det nr Part no	Anmärkning Remarks	Description
Förarsätol	1	1	1071		Drivers seat
Kartläsarstol	1	2	1072		Co drivers seat
Nackstöd	2	3	1155		Head rest
Stolunderrede	2	4	1073		Seat frame



Tillbehör  
 Accessories  
 Strålkastare  
 Extra lights  
 4:6 A

Benämning	Ant Qty	Pos	Det nr Part no	Anmärkning Remarks	Description
Fjärrstrålkastare		1	1082	Exkl 1084	Long distance light
Kurv- och dimstrålkastare		2	1081	Exkl 1084	Foglight
Halogenlampa 100 W		3	1084		Halogen bulb 100 W
Hållare		4	1075		Bracket





Tillbehör  
 Accessories  
 Kartläsningsutrustning  
 Co-driver equipment  
 4:7 A

Benämning	Ant Qty	Pos	Det nr Part no	Anmärkning Remarks	Description
Trippmätare	1	1	1079		Tripmaster
Fäste	1	2	1080		Bracket
Kartläsningslampa	1	3	1119		Map light
.Kontakt	1	4	1129		.Switch
Kartfack	1	5	1078		Map box

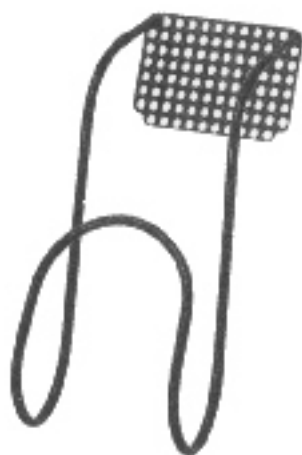


Tillbehör  
 Accessories  
 Nödutrustning  
 Emergency equipment  
 4:8 A

Benämning	Ant Qty	Pos	Det nr Part no	Anmärkning Remarks	Description
Eldsläckare	1	1	1098		Fire-extinguisher
Förbandslåda	2	2	1096		First aid box
Värmefilt	2	3	1097		Safety blanket

Saab-Ana Aktiebolag

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Personlig utrustning  
Personal equipment  
Hjälmar  
Crash helmets  
5:1 A

Benämning	Ant Qty	Pos	Det nr Part no	Anmärkning Remarks	Description
Hjälmhållare	2	1	1076		Crash helmet holder

Saab-Ana Aktiebolag

Nov 1971



Tuning and assembling

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Directions for competition  
modification of the  
Saab V4

Installation instructions  
for the tuning kit in Saab V4

Installation instruction  
Carburetor kit no 1160  
(Weber 40 DFI)

**Additional tuning information**



## Directions for competition modification of the Saab V4

(Group 2 Special Standard)

The following tuning instructions are for competition purposes. Carried out in a proper way the tuning will, depending on the carburetion system chosen, deliver

1500 cc Engines 105–130 HP DIN 1700 cc Engines 125–145 HP DIN

Experience has proven the engine to be very reliable in operation, provided the tuning modifications are made carefully and reliable parts are used. The parts furnished from the Saab Sport & Rally Department in Sweden have been tested in laboratories and during numerous competition events and give the best possible insurance against failures.

The parts you will find in the following tuning instructions can be ordered from a franchised Saab dealer.

### ENGINE BLOCK

Clean the engine block with an oil-dissolving detergent, flush it with water and blow it clean with compressed air.

Use a steel brush to clean casting surfaces in the crankcase and the camshaft housing. Grind or mill off any rough edges.

Clean carefully the gasket surfaces.

After these operations the block has to be cleaned again and dried carefully.

### Inspections

1. Check the bolt hole threads making sure that they are clean and in perfect order. The holes for the bearing cap bolts and the cylinder head bolts are especially important. Take the bolts separately and screw them in until they bottom. Check that they are approximately 2 mm deeper than in the position when they are finally installed. Cut the bolts if necessary.

2. Bearings for camshaft and balance shaft. Check that the oil channels in the block and bearings match.

Tuning and assembling  
Tuning instructions

Group 2  
Saab V4  
Page 1

Check also that the bearings are in good condition and not scratched or worn.

3. Tappet holes. Check for scratches in the tappet holes. Minor scratches can be honed.

4. Surfaces. All surfaces must be checked for finish and alignment and straightness, especially the surfaces for the oil filter, head gaskets, and bearings. They must be absolutely even and undamaged.

5. Bearing positions. Install the main bearings and torque to 70 ft. lbs (10 kpm). Check:

- that the cap and block mating surfaces are straight and even
- that the bearing surfaces are even.
- that the out-of-round is no more than .0002-inches (0.005 mm).

When the block has been checked and approved, the next step depends on what type of piston and head gasket is to be used:

### ENGINE BLOCK MODIFICATIONS

#### I. Cylinder

A. The part number for the cast piston is 884834 for the 1500 cc engine and number 1001 for the 1700 cc engine. Hone the cylinder to 3.545" (90.06 mm) which gives a piston clearance of 0.0024–0.0032" (.06–.08 mm) depending upon piston class.

B. The part number for the 1 mm oversize cast piston is 884836 for the 1500 cc engine and 1002 for the 1700 cc engine. As before, the piston clearance should be 0.0024–0.0032" (.06–.08 mm). If there are any doubts, the piston diameter should be checked with a micrometer. Check the diameter at a right angle to the wrist pin approximately 0.6" (15 mm) from the pistons lower end.

C. The part number for the 3.58" (91 mm) forged pistons are 1003 for the 1500 cc engine and 1004 for the 1700 cc engine.

The cylinders should be bored to 3.584" (91.03 mm) and then honed to 3.585" (91.06). During the boring and honing procedure the bearing caps should be installed and tightened to 70 ft. lbs. Cylinder out-of-round and taper may not exceed 0.004" (.01 mm).



Installation instructions for the tuning kit, part no. 1124, in Saab V4 96 (with modifications of the exhaust system; also in the Saab V4 95)

The tuning kit, part no. 1124, without modifications can be installed on all blue and black engines; i.e., from the 1968 model year onwards (from chassis no. 487639). After some modifications it can also be installed on grey engines (up to and including chassis no. 487638).

The modification consists of the following steps:

1500 cc

1. Installation of a new induction system.
2. Installation of a new camshaft and stiffer valve springs.
3. Installation of a new exhaust system.

The parts contained in the kit can be found in Enclosure No. 1 and engine tuning specifications in Enclosure No. 2. Installation of the tuning kit on the 1500 cc engine can be done with the engine in the car. For the 1700 cc modification the engine has to be removed.

For engine rebuilding see the instructions in "Saab V4 Service Manual", pages 215-4 to 215-7. If the tuning kit should be installed on engines used more than 12,000 miles (20,000 km), the camshaft and balance shaft gear tolerances have to be checked before the camshaft is removed. A steel balance shaft gear is recommended.

The valves and valve seats should be checked and, if necessary, also regrinded when the new valve springs are installed. The valve lifter condition should be checked when the camshaft is changed. It is important that the base area is free from scratches and damages.

Torque all nuts and screws according to the "V4 Service Manual". At the installation of the new intake manifold, the following parts from the old manifold should be used:

1. Thermostat housing cover and thermostat
2. Water temperature transmitter
3. Connector for water hose from intake manifold to heater
4. The manifold bolts and studs. If the engine is a model 1969 or later, the two middle bolts have to be exchanged with the two bolts in the kit.

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A spacer plate is installed between the carburetor and the intake manifold. It has connections for power brake and crankcase ventilation hoses. The crankcase ventilation connector should be connected to the left valve cover. If the car does not have power brakes, the connector should be plugged. The hose from the by-pass tube and the thermostat housing in the carburetor has to be replaced with the hose in the kit which should be cut to 310 mm before installation. Fuel hose connections at the carburetor and the pump should be clamped.

#### THROTTLE LINKAGE

Install the shaft, part number 1134 in the kit, on the manifold the same way as the standard installation. Install the short link between the shafts front lever and the carburetor. When the throttle linkage has been installed, check that a full throttle opening is obtained when the throttle pedal is depressed. If not, the throttle linkage has to be adjusted accordingly.

#### EXHAUST SYSTEM

The following parts are included in the new system:  
Right and left front pipe  
"Y" connection  
Front muffler  
Rear Pipe  
Resonator  
All necessary hardware for installation of the system is included.

Frist connect the two front pipes to the exhaust ports, but do not tighten the bolts. The distance between the pipe and the front edge of the hole in the engine floor should be 15 – 20 mm.

The "Y" connection should be installed with the longer branch towards cylinder 3 and 4 in line with the front muffler and centered in the recess in the car floor. Now the exhaust bolts should be tightened.

With the remaining exhaust system suspended, the rear pipe should be jacked up directly behind the front muffler so the clearance between the front muffler and the floor is approximately 15 mm. Install the resonator in the normal position and then tighten the clamps starting in front.