

Saab Sport & Rally

ORIGINAL TRIMNINGSDETALJER OCH UTRUSTNING FÖR SAAB V4 OCH SAAB 99 2,



SAAB SPORT & RALLY

Vi kan se tillbaka på en lång och segerrik tävlingsverksamhet och, förhoppningsvis, väntar oss många segrar även i framtiden. Den aktiva tävlingsverksamhet vi bedriver ska ses som ett komplement till vår testverksamhet.

Under tävlingsförhållanden sätter vi inte bara nya utrustningsdetaljer på hårda prov. Vi provar också färdiga konstruktioner och mycket av den erfarenhet tävlandet ger oss överförs till de seriebyggda bilarna.

Men alla erfarenheter kan givetvis inte komma de seriebyggda bilarna till godo. Det är här Saab Sport & Rally kommer in i bilden.

Inom Saab Sport & Rally ser vi som främsta mål att till Dig föra vidare de erfarenheter vi vinner i de stora nationella och internationella tävlingarna, som RAC-rallyt, Arctic Rally, KAK-rallyt och många andra.

De trimningsdetaljer och den utrustning som klarat de extrema påfrestningarna under de hårdast tänkbara yttre förhållandena har vi samlat i denna broschyr. Vissa detaljer har vi "varvat ner" för att passa till mer vardagsbetonad körning. Andra detaljer däremot är avsedda för Dig som är ute efter ren tävlingsutrustning.

Så antingen Du är tävlingsförare eller helt enkelt vill ha en sportigare Saab, hittar Du Din utrustning i denna broschyr. Saab Sport & Rally-sortimentet finns hos de auktoriserade Saab-handlarna över hela landet och hos dem kan Du också få råd och ytterligare information.

Håll Din Saab i trim.

KOMPLETTA TRIMNINGSSATSER

Sportsats 1500 cc, Saab V4

Komplett trimningssett, som höjer motoreffekten från 48 kW (65 hk DIN) till 59 kW (80 hk DIN). Satsen innehåller en 2-portsförgasare av registertyp, luftfilter, insugningsrör, kamaxel, hårdare ventilfjädrar, avgassystem och monteringsdetaljer. Trots effekthöjningen blir bensinförbrukningen inte nämnvärt högre.

Det nr 11247

Sportsats 1700 cc, Saab V4

Ökar motorvolymen till 1700 cc och höjer effekten från 48 kW (65 hk DIN) till 66 kW (90 hk DIN). Satsen innehåller samma delar som 11247 plus:

Det nr 15081 — 4 st kompletta kolvar med vevstakar.

Det nr (10)8848269 — vevaxel.

Rallysats 1700 cc, Saab V4

Lämplig trimningssett för nybörjare i rallytävlingar i klass Special. Satsen består av en 2-ports Weberförgasare av registertyp, luftfilter, insugningsrör, kamaxel, hårdare ventilfjädrar, motorfästen, oljepumpsfjädrer, hårdare tryckplatta och lamell, vevaxel, kolvar samt avgassystem. Rallysatsen består av grundsats, det nr 14001, plus som alternativ antingen:

Det nr 13995

— Topplocksats — 2 st maskinbearbetade topplock med större insug- och avgaskanaler och upptagna ventilsäten. Dessutom hårdare ventilfjädrar och brickor.

eller Ventilats

— Större insug- och avgasventiler (det nr 10090 respektive 10108), hårdare ventilfjädrar (10116) och ventilfjädrbrickor (10876), lättade ventillyftare (10132) samt knaster (8833956).

Sportsats, Saab Sonett III

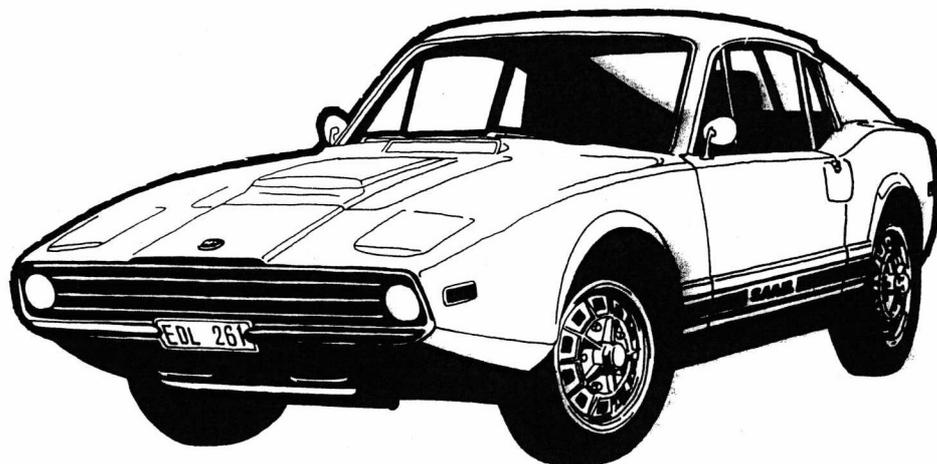
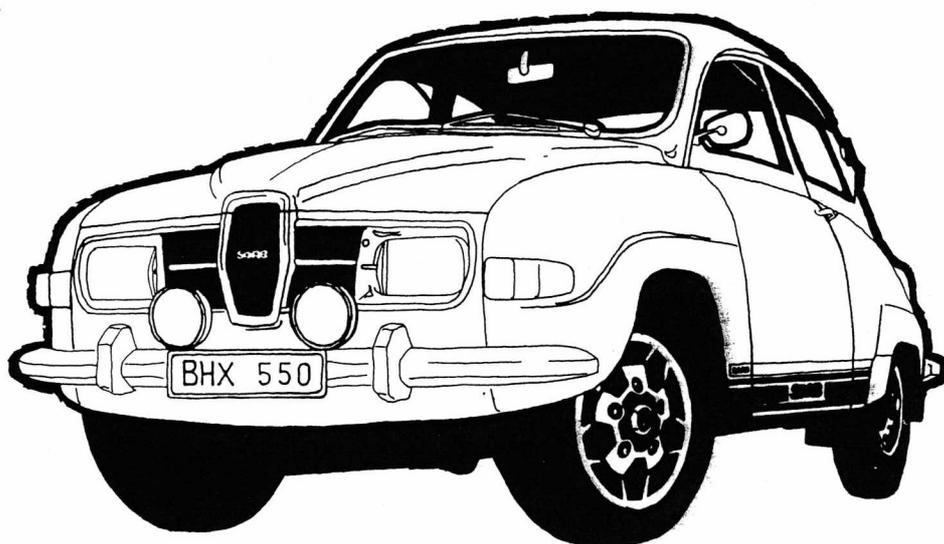
Komplett trimningssett i två steg. Steg I ökar motoreffekten från 48 kW (65 hk DIN) till 59 kW (80 hk DIN), medan steg II ökar effekten till 66 kW (90 hk DIN).

Det nr 13953 — Steg I

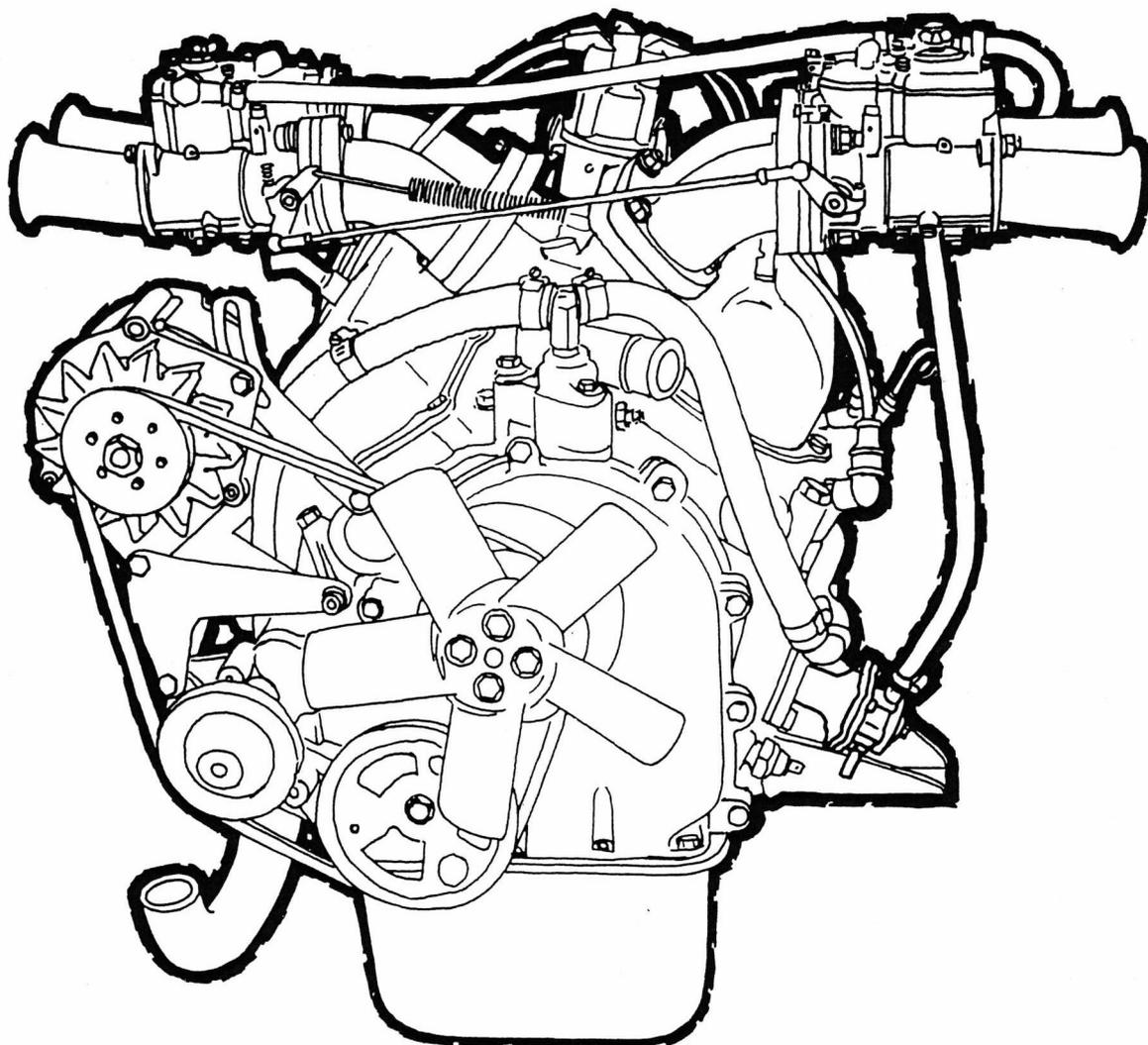
Det nr 13953 plus det nr 15081 (4 st kompl kolvar med vevstakar)

— Steg II

Samtliga satser är godkända av Svensk Bilprovning (t.o.m. m/75).



MOTOR



pletta tävlingsmotorer, Saab V4

Finns med effekter från 74 kW (100 hk DIN) till 118 kW (160 hk DIN). Levereras efter individuella önskemål. Begär offert.

Topplöck, Saab V4

Det nr 13995 — Topplöcksats kpl (se rallysats 14001/13995).

Bearbetade topplock med upptagna kanaler, större insug- och avgasventiler, hårdare ventilfjädrar och brickor. Det nr 12849 — Topplöcksats kpl (enkelport).

Topplöck med dubbla avgasportar, upptagna avgaskanaler, lösa ventilstyrningar och modifierade för större ventiler (avgas 38 mm, insug 44 mm). Ger en effektökning på 9–11 kW (12–15 hk DIN). Levereras per styck. Det nr 14225 — Topplöck. OBS! Åtgår 2*/motor.

Gjutna högkompressionskolvar, Saab V4

Kompletta med kolringar och vevstake. Levereras i standard- eller överdimensioner.

Det nr 15081 — \varnothing 90 mm 1698 cc

Smidda högkompressionskolvar, Saab V4

Inkl kolvbult och kolringar. Tillverkat i aluminium av högsta kvalitet. Levereras endast i överdimension.

Det nr 10033 — \varnothing 91 mm, 1530 cc

Det nr 10041 — \varnothing 91 mm, 1740 cc

Det nr 12732 — \varnothing 93 mm, 1815 cc

Vevstake, Saab V4

Förstärkt genom polering och kulblästring.

Det nr 13144

Vevaxlar, Saab V4

Det nr (10)8848269

— Ingår i rallysats 1700 cc.

Det nr 10629

— Vevaxel modifierad för motorer med effekter kring 88 kW (120 hk DIN) och därutöver.

Det nr 13706

— Specialhårdad genom teniferbehandling för ökad hållfasthet (1700 cc). Bör användas i tävlingsmotorer med höga effekter.

Svänghjul, Saab V4

Det nr 11692

— Tillverkat i gjutjärn. Lättat till 5,2 kg, som ger varvilligare motor (standardvikt 7,3 kg).

Det nr 13656

— Smitt; nödvändigt till bilar utrustade med solfjäderkoppling.

Kamaxlar, Saab V4

Finns med tre skilda kamprofiler för olika ändamål.

Det nr 10074

— Lyfthöjd 7,2 mm; landsvägs-/rallykörning.

Det nr 10082

— Lyfthöjd 7,6 mm; i samband med rally-/rallycrossstävlingar.

Det nr 12765

— Lyfthöjd 8,3 mm; i samband med rallycross-/bantävlingar.

Insugnings- och avgasventiler, Saab V4

Större ventiler av hårdare legering och förkromade skaft för minskat slitage.

Det nr 10090 — Insug \varnothing 42 mm

Det nr 10108 — Avgas \varnothing 37 mm

Det nr 11684 — Insug \varnothing 44 mm

MOTOR

Vr fjädrar, Saab V4

Tillverkade av en modifierad kromvadinlegering, som är hårdare än standard. För maximal säkerhet mot brott.

Det nr 10116

Ventilfjäderbrickor, Saab V4

Nödvändiga vid montering av stora ventiler. Tillverkade i aluminium.

Det nr 10876

— Avsedda för första montering

Det nr 10124

— Används vid renovering.

Öntillyftare, Saab V4

Speciellt framtagen för tävlingsmotorer med höga varv. Vikt 79 g (standard 104 g).

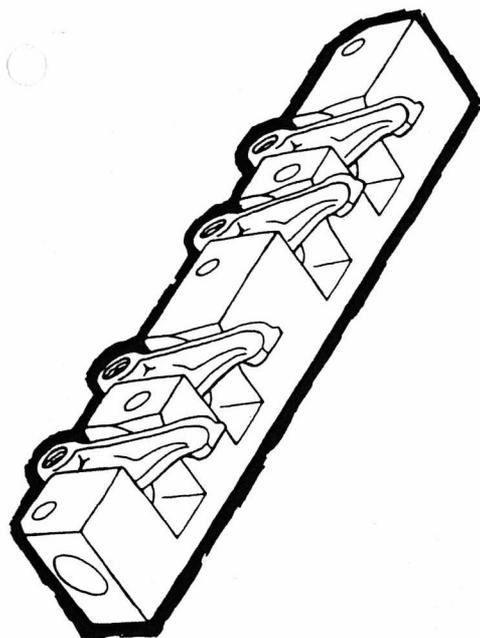
Det nr 10132

Separata ventilstyrningar, Saab V4

Det nr 11726 — Passar insug-/avgasventil \varnothing 42/37 mm

Det nr 15057 — Passar insug-/avgasventil \varnothing 44/38 mm

Det nr 13664 — Oljetätning.



Väpparmsbrygga, Saab V4

Ger högre varvtalsgräns och minskat behov av ventiljustering. Förstärkt lagerbock och extra fästbultar.

OBS! Åtgår 2 st/motor.

Det nr 13045

Topplöckspackningar, Saab V4

Kompletta satser tillverkade med förstärkt stålskoning.

Det nr 10173

Det nr 11734 — (för s k grå motor).

Packnings- och tätningssatser för tävlingsmotorer med höga effekter.

Det nr 10157

— Packningssats \varnothing 91 mm

Det nr 10165

— Tätningssats \varnothing 91 mm

Det nr 12757

— Packningssats \varnothing 93 mm

Det nr 12740

— Tätningssats \varnothing 93 mm

Oljepumpfjäder, Saab V4

Används vid all trimning. Ger ökat oljetryck upp till 7,0 kp/cm².

Det nr 10140

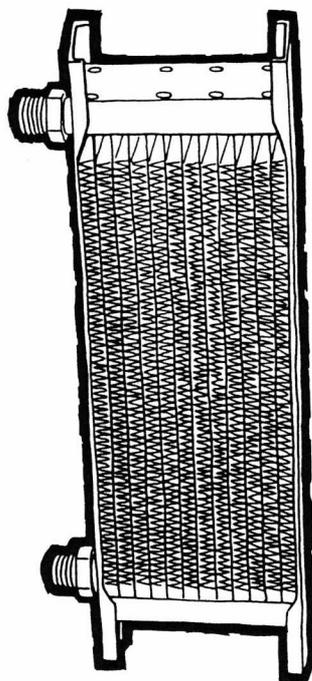
Specialkylare, Saab V4

Förhindrar överhettning vid hårdare trimning.

Det nr 11668 — Kylare

Det nr 11643 — Expansionskärl

Det nr 11650 — Slangsats.



Oljekylare, Saab V4

Det nr 12302

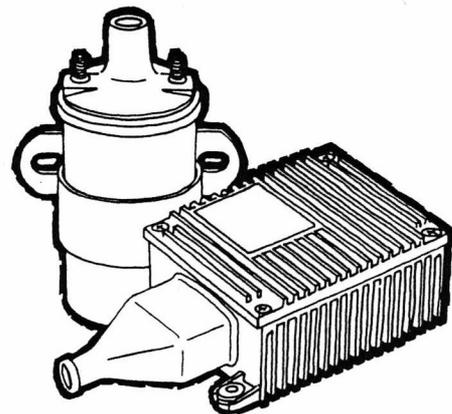
Det nr 15818 — Fäste.

Oljekylare, Saab 99 2,0

Det nr 15933

Kompletta oljekylarsatser, speciellt avpassade för trimmade motorer med effekter över 74 kW (100 hk DIN).

TÄNDSYSTEM



Kondensatorzündning, Saab V4

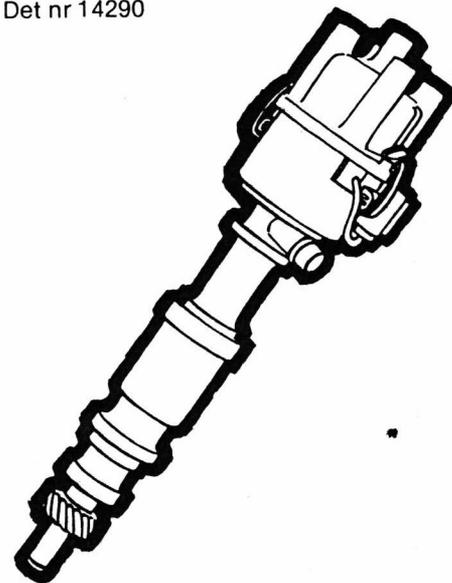
Ger högre överslagsspänning vid tändstiftens elektroder. Underlättar start och ger renare gång.

Det nr 14308

Tändspole, Saab V4

Högeffektspole, nödvändig vid montering av kondensatorzündsystem.

Det nr 14290



Tändfördelarsats, Saab V4

Förlängd fördelare, nödvändig vid montering av förgasarsats 13607.

Det nr 13623

Tändstift, Saab V4

Stift för trimmade motorer.

Det nr 10991 — Lång gänga (för s k blå och svarta motorer).

Det nr 11767 — Kort gänga (för s k grå motor).

Generator, Saab V4

Växelströmgenerator, 14 volt, 55 amp. Lämnar 770 W effekt.

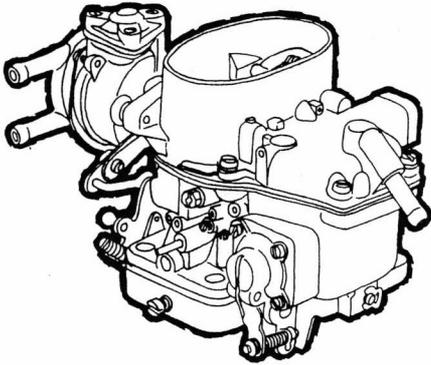
Det nr 11791 — Generator

Det nr 13102 — Remskiva.

Batterilåda, Saab V4

Det nr 11841 — Komplet sats för montering av batteri i bagagerum.

BRÄNSLE SYSTEM

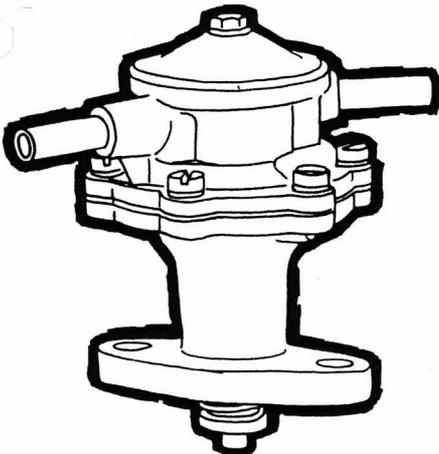


Förgasare, Saab V4

Det nr 11254 — Solex 32TDID; 2-ports stertyp (ingår i sportsats 11247).
Det nr 13524 — Weber 32—36 DFV; 2-ports registertyp (ingår i rallysats 14001).
Det nr 10199 — Weber DFI 40—2; 2-ports.
Insugningsrör, luftfilter, gasreglage och monteringsdetaljer tillkommer.

Förgasarsats, Saab V4

Komplett sats med 2 st Weber 45 DCOE-16S 2-ports horisontalförgasare inklusive monteringsdetaljer.
Det nr 13607
Insugningsrör, luftfilter, gasreglage, tändfördelarsats och monteringsdetaljer tillkommer.



Bensinpump, Saab V4

Av högkapacitetstyp. Används vid montering av förgasare på bilar av 1972-års modell och äldre.
Det nr (10)8860314

Bränsletank, Saab V4

Specialtank, 70 liter.
Det nr 10330 — Tank
Det nr 10355 — Käpa
Det nr 10348 — Monteringssats
Det nr 11593 — Tankinsats, bränsle-

AVGASSYSTEM

Sportsystem, Saab V4

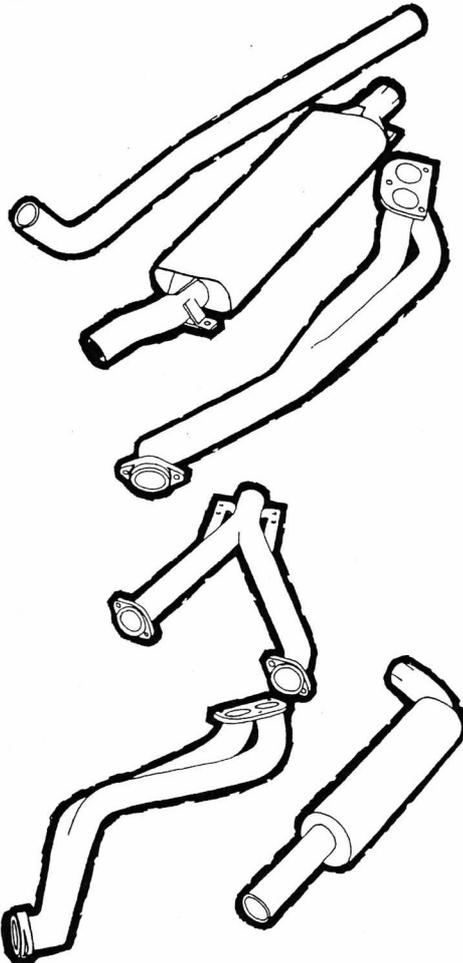
Avgassystem med lågt genomströmningmotstånd. Ger en effekttökning av 4—5 kW (5—6 hk DIN). Ingår i sportsats 11247.

Rallysystem, Saab V4

Förstärkt sportsystem. Klassat för standard B. Ger en effekttökning av 4—5 kW (5—6 hk DIN). Ingår i rallysats 14001.

Tävlingssystem, enkelport, Saab V4

Avgassystem anpassat för ren tävlingskörning. Ger maximal effekt och tål extrema yttre pårestningar. Godkänt i klass Special.



Tävlingssystem, dubbelport, Saab V4

54 mm system nödvändigt vid montering av topplock med dubbla portar. Godkänt i klass Special.

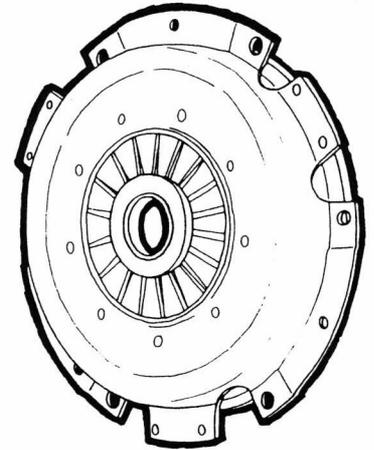
Sportsystem, Saab 99 2,0

Avgassystem med lågt genomströmningmotstånd. Ökar effekten på standardmotorn med 4—6 kW (6—8 hk DIN) (förgasarmotorn) och 6—7 kW (8—10 hk DIN) (insprutningsmotorn). Klassat för standard A.
Begär offert hos närmaste Saab-handlare och uppgift om i satserna

KRAFT ÖVERFÖRING

Koppling, Saab V4

Med förstärkta fjädrar i tryckplattan.
Det nr 10520



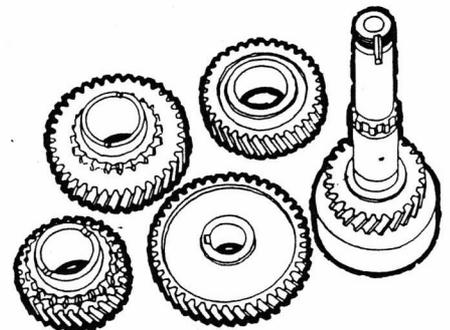
Solfjäderkoppling, Saab V4

Med tryckplatta av aluminium och stålhölje. Rekommenderas för högt trimmade motorer.
Det nr 13409

Lameller, Saab V4

Extra förstärkt lamell att användas vid montering av koppling 10520.
Det nr 11312

Lamell med hård beläggning och kraftigt lamellcentrum att användas vid montering av koppling 13409.
Det nr 13391



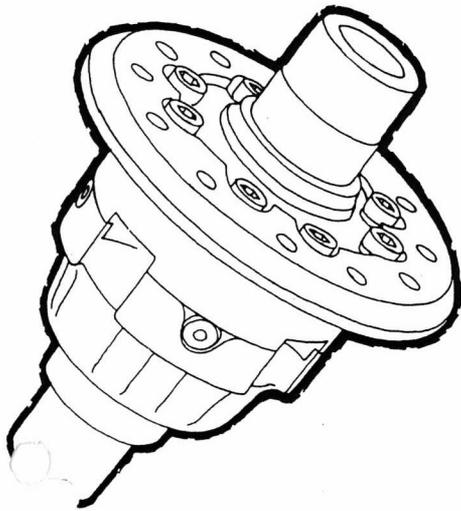
Drevsatser, Saab V4

Det nr 10850 — Special I
Det nr 10868 — Special II

Drevsats, Saab 99 2,0

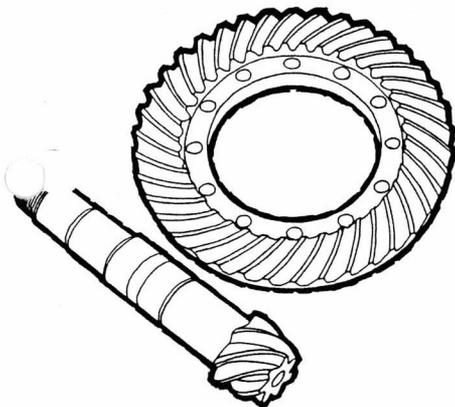
Det nr 15354
För att ändra stegningen i växellådan och utnyttja motorns effekt maximalt rekommenderas ovanstående drevsats-

KRAFT ÖVERFÖRING



Differentialbroms, Saab V4
Det nr 10504
Det nr 15875 — Lamellspärr.

Differentialbroms, Saab 99 2,0
Det nr 15552
Differentialbroms rekommenderas vid all tävlingskörning och vid körning på svårframkomliga vägar.

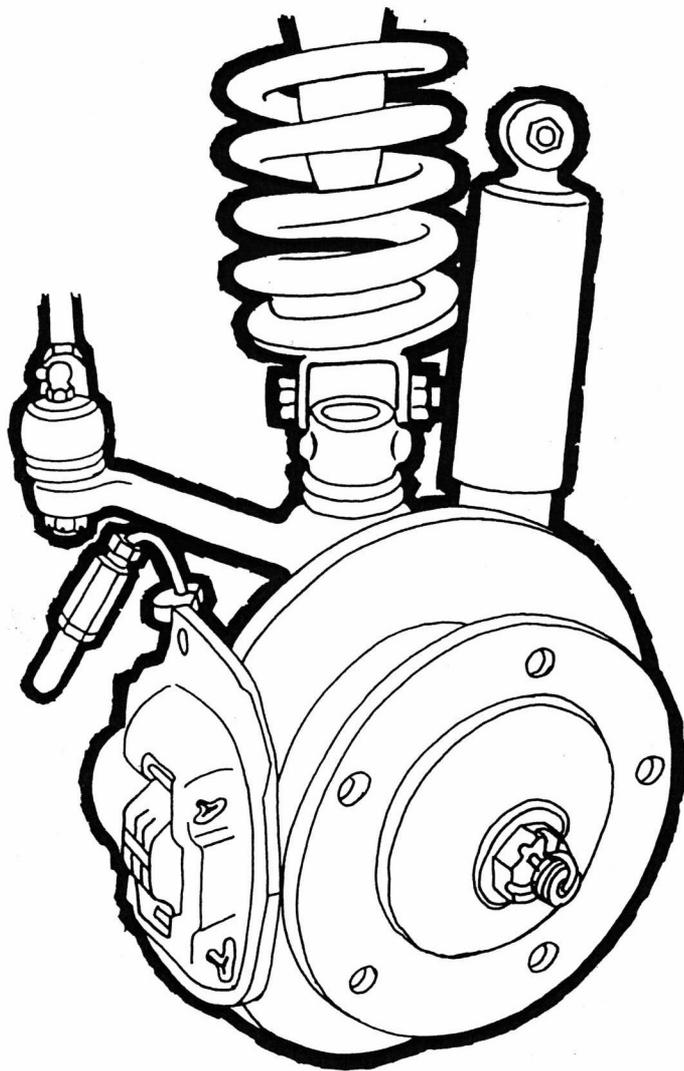


Slutväxel, Saab V4
Det nr 10488 — Daldi 6:35
Det nr 10496 — Daldi 7:38
Det nr (10)7819972 — Dana ENV 7:38
Det nr (10)7836299 — 7:36

Slutväxel, Saab 99 2,0
Det nr 15362 — Daldi 6:31
Genom att minska utväxlingsförhållandet i slutväxeln sänker man den totala utväxlingen på alla växlar, vilket är av stor betydelse i tävlingssammanhang. Samtliga slutväxlar är specielltillverkade av stållegering av högsta kvalitet.

Oljekylare, växellåda, Saab 99 2,0
Det nr 15917

FJÄDRING & HJULUPPHÄNGNING



Framfjäder, Saab V4
Det nr 10579

Fjäderstöd, Saab V4
Det nr 10884 — Nödvändigt vid monteringen av framfjäder 10579.

Framfjäder, Saab 99
Det nr 14639

Bakfjäder, Saab V4
Det nr 10587

Bakfjäder, Saab 99
Det nr 14647
Styvare fjädrar framtagna för tävlingskörning.

Svängarmar, Saab V4
Förstärkta.
Det nr 12120 — Nedre V
Det nr 12138 — Nedre H
Det nr 14662 — Övre.

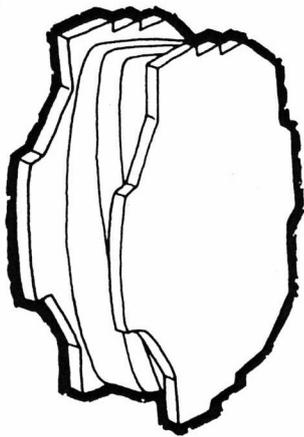
Länkkarm bakre, Saab V4
Förstärkt.
Det nr 10892

Bakaxel, Saab V4
Förstärkt.
Det nr 10611

Stötdämpare, Saab V4
Det nr 10595 — Främre
Det nr 10603 — Bakre.

Stötdämpare, Saab 99
Det nr 14530 — Främre
Det nr 14548 — Bakre
Samtliga ovanstående stötdämpare är av gastrycktyp och speciellt lämpliga för tävlingskörning.

BROMSAR



Bromsklossats, Saab V4

Det nr 10561

Bromsklossats, Saab 99

Det nr 14563 — Främre, t o m -74

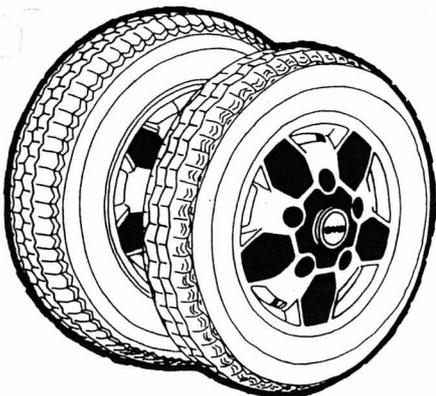
Det nr 14571 — Bakre, t o m -74

Det nr 15735 — Främre, fr o m -75

Det nr 15743 — Bakre, fr o m -75

Ovanstående belägg är av hårdare material och därför lämpade för extremt hård körning och tävlingskörning.

HJUL



Lättmetallfälg 4 1/2", Saab V4

Det nr 16667

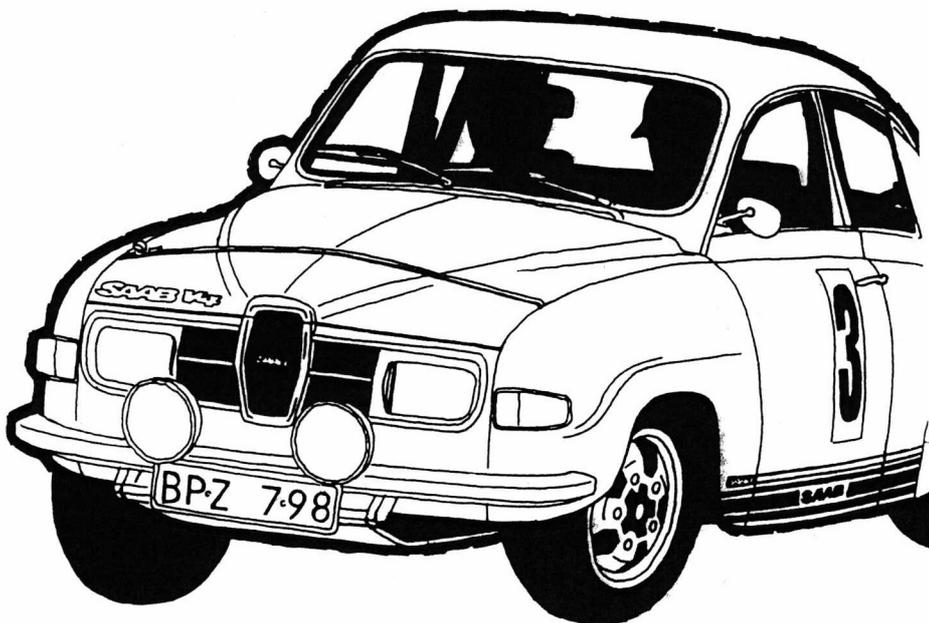
Lättmetallfälg 5", Saab 99

Det nr 16279

klusiva, helgjutna aluminiumfälgar av högsta kvalitet. Varje fälg är röntgenkontrollerad. Båda fälgtyperna är godkända av Svensk Bilprovning för montering på Saab V4 respektive Saab 99 och dessutom klassade för tävlingsbruk. Bultar, brickor och emb-

TILLBEHÖR

INSTRUMENT & ELUTRUSTNING



Kurv- & dimstrålkastare, Saab V4 och 99

Det nr 10819 — Bosch Rallye Knick 180 mm

Det nr 12419 — Hella 192 mm.



Fjällstrålkastare, Saab V4 och 99

Det nr 10827 — Bosch Rallye Knick 180 mm

Det nr 15883 — Bosch 190 mm

Det nr 12427 — Hella 192 mm

Det nr 20065 — Bosch 180 Körljus

Hållare för extraljus, Saab V4 och 99

Specialkonstruerade för tävlingskörning.

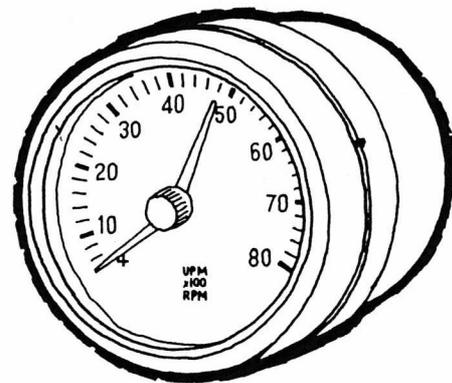
Det nr 10751 — Saab V4

Det nr (40)207922006 — Saab 99 fr o m -74.

Det nr 15503 Saab V4, Saab 99 mod 76 —

Stödstag för extraljus, Saab V4 och 99

Det nr (40)207626003 — Hella



Varvräknarsats, Saab V4

Heltransistoriserad varvräknare med kåpa, kabelhärva och hållarring. Justerbar visare för max varvtal. Det nr 14324

Varvräknarfäste, Saab V4

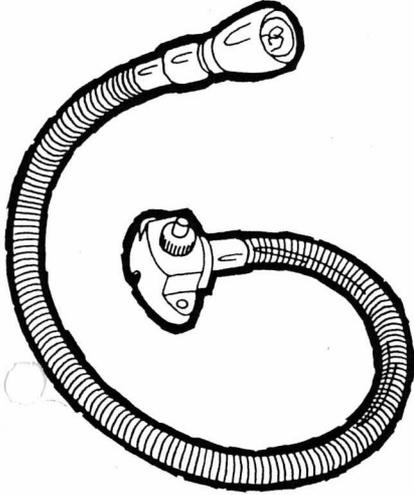
Det nr 12161

Varvräknare, Saab 99

Transistoriserad varvräknare i kombination med elektrisk klocka för montering i klockuttaget fr o m -71.

TILLBEHÖR

KARTLÄSNINGS- UTRUSTNING



Kartläsningslampa, Saab V4 och 99

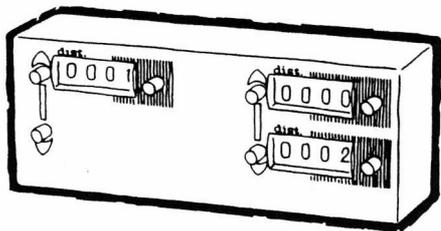
Rörlig, bländskyddad kartlampa med tryckknappskontakt.

Det nr 11197

Kartfack, Saab V4 och 99

Mycket användbart fack av mjukplast för montering under instrumentpanelen.

Det nr 10785



Trippmätare

Precisionsinstrument med lätt avläsbara siffror. Tre räkneverk, varav två visar 10-tal meter. Snabb nollställning och växel för addition, urkoppling och subtraktion. Kompletterat med drivkabel och T-växel.

De 10793

Trippmätarfäste, Saab V4

Möjliggör lätt montering i handskfacket.

Det nr 10801

SKYDDSPÅTAR & KAROSSERTILLBEHÖR

Skyddsplåt, motor, Saab V4

Det nr 13219 — Godkänd för standard B

Det nr 13227 — Godkänd för klass Special

Tillkommer sidostag och fästjärn.

Skyddsplåt, motor, Saab 99

Det nr 15040

Det nr 14985 — Fästjärn t o m -73

Det nr 14993 — Fästjärn fr o m -74

Skyddsplåtarna är tillverkade av 5 mm duraluminium med förstärkningsjärn av fjäderstål.

Skyddsplåt, bränsletank, Saab 99

Av profilerad plåt.

Det nr 15297 — T o m -74

Det nr 15792 — fr o m -75

Modifieringssats för hjulhus, Saab V4 och 99

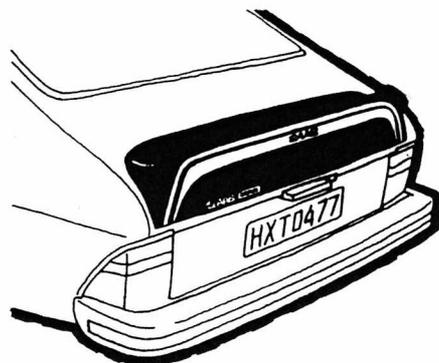
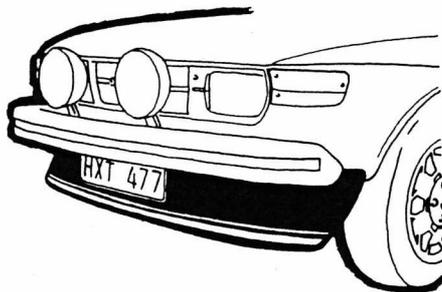
Det nr 11833 — Saab V4

Det nr 14621 — Saab 99

Skärmbreddningssats, Saab V4

Komplett.

Det nr 10702



Spoilers, Saab 99

Tillverkade i svart, färgbeständig norylplast. Ger lägre luftmotstånd och minskar bensinförbrukningen.

Det nr 16444 — Främre, samtliga modeller

Det nr 16451 — Bakre, Saab 99 Combi Coupé.

Störtbågar, Saab V4 och 99

Godkända. Av extra kraftig konstruktion. Obligatoriska vid internationella tävlingar.

Det nr 10694 — Saab V4

Det nr 15214 — Saab 99

Det nr 10900 — Klädsel för 10694 och 15214 av svart vadderat konstläder.

Huvrem, Saab V4

Av läder. Används som extra låsning av motorhuv i tävlingssammanhang.

Det nr 11809



Gummistropp, baklucka/huv, Saab V4 och 99

För extra låsning av baklucka/huv i tävlingssammanhang.

Det nr 11817



Dekortape, Saab V4 och 99

Ger bilen sportigare karaktär. Kompletta satser med utförliga monteringsanvisningar.

Det nr 14266 — Svart, Saab V4

Det nr 14274 — Vit, Saab V4

Det nr 11965 — Svart, Saab 99 2-d, rak

Det nr 15321 — Svart, Saab 99 2-d, böjd

Det nr 15347 — Silver, Saab 99 2-d, böjd

Det nr 15149 — Svart, Saab 99 Combi Coupé

Det nr 15156 — Guld, Saab 99 Combi Coupé

Det nr 15164 — Vit, Saab 99 Combi Coupé.

SAAB V4

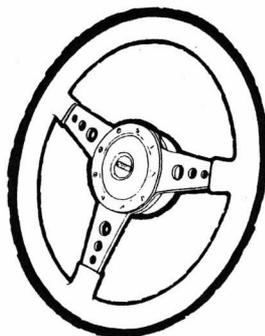
SAAB 99



Dekaler

Det nr 12229 — Vit, "Saab V4"
Det nr 12781 — Svart, "Saab V4"
Det nr 15768 — Vit, "Saab 99"
Det nr 15750 — Svart, "Saab 99"
Det nr 11866 — Vit, transparent,
"Saab Sport & Rally" 410 mm
Det nr 11882 — Vit, transparent,
"Saab Sport & Rally" 530 mm
Det nr 15487 — Svart, transparent,
"Saab Sport & Rally" 410 mm
Det nr 15495 — Svart, transparent,
"Saab Sport & Rally" 530 mm
Det nr 16030 — "Team Saab 96"

RATTAR & TÄVLINGSSTOLAR

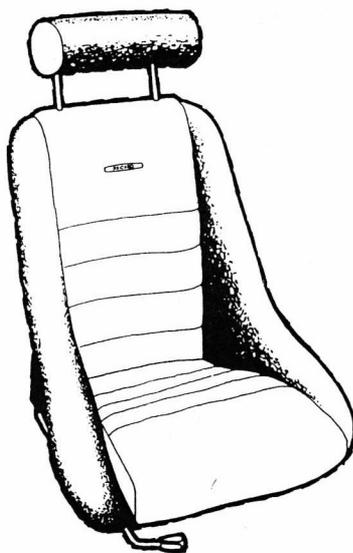


Lädderrattar, Saab V4 och 99

Elegant ratt med svarteloxerade ekrar och "tjockt grepp". Levereras komplett med nav och signalknapp. Godkända av Svensk Bilprovning.
Det nr 12401 — Saab V4
Det nr 15305 — Saab 99

Ratt, Saab 99

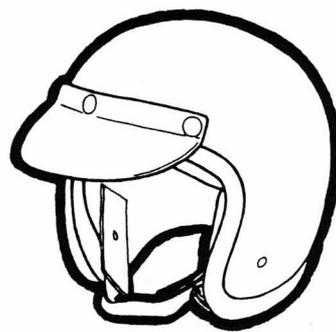
Läderklädd ratt av samma typ som i EMS-modellen t o m -73. Passar alla Saab 99.
Det nr 14522
Det nr (10)8432098 — Stötkudde för ratt 14522



Tävlingsstolar, Saab V4 och 99

Det nr 10710 — Förarstol, samtliga modeller
Det nr 14506 — Förarstol, samtliga modeller
Det nr 14779 — Kartläsarstol, samtliga modeller
Det nr 11551 — Nackstöd, passar stol 10710 och 14506
Det nr 15560 — Nackstöd, passar stol 14779
Det nr 10736 — Underrede V & H, Saab V4
Det nr 14654 — Underrede V, Saab 99
Det nr 15545 — Underrede H, Saab 99
Bekväma tävlingsstolar av mycket hög kvalitet. Stolarna är försedda med stålrörsram. Klädsel av svart manchester med konstläder i sidor och bakstycke. Kartläsarstolen har ryggstödet inställbart steglöst till horisontalläge. Stolarna är tillåtna i standard

SÄKERHETSUTRUSTNING



Hjälm

Det nr 20412—20487 — AGV x 72-GT; storlek sml, medium, large; färger: röd, blå.

Det nr 20503 — Skärm, svart, passar ovanstående hjälm.

Det nr 11957 — Hjälmhållare; praktisk — för montering på baksätets ryggstöd.

Hjälmarna är godkända för tävlingsbruk av SIS, Svemo och Svenska Bil-sportförbundet.

Säkerhetssele

Fyrpunkts tävlingsbälte med midjebälte och axelband av svart nylonväv. Justerbart. Snabblås. Kompletterat med infästningar.
Det nr 12286

Värmefilt

Självklar säkerhetsdetalj vintertid.
Det nr 10975



Eldsläckare

Pulversläckare (1 kg) av godkänd typ. Levereras komplett med fästkonsol för smidig montering.
Det nr (40)115110009

Förbandslåda

Alltid bra att ha till hands. Ovanligt väl sorterad för sitt lilla behändiga format.

Det nr (40)360101000

Dessutom lagerförs en mängd andra viktiga säkerhetsdetaljer som varningstrianglar, bogserlinor, fälgkors,

PERSONLIG UTRUSTNING



Sportjackor

Vår- och höstjacka av mycket hög kvalitet i elegant midjemodell. Sydd i Saab-blå nylon med gula stripes på axlar och ena ärmen. Finns i storlekarna 120, 140, 160, extra liten, liten, medium, stor och extra stor.

Det nr 14860—14936

Svensktillverkad midjelång vinterjacka i mycket exklusiv kvalitet. Tillverkad av 100 % polyurethanbelagd Saab-blå nylon med svart konstpälsfoder av högsta kvalitet. Stor utvikt pälskrage. Finns i storlekarna 120, 140, 160, extra liten, liten, medium, stor och extra stor.

Det nr 15685—15701; 15438—15479

Tröja

Snygg mörkblå långärmad tröja i behagligt, maskintvättbart, ull/akryl-material. Ribbstickad, rund hals. Svensktillverkad av hög kvalitet. Finns i storlekarna liten, medium och stor. Det nr 15644—15669

T-shirts

I hög bomullskvalitet. Vit med påtryck av Saabs populära "troll". Finns i storlekarna 120, 140, 160, liten, medium och stor.

Det nr 12328—12377

Saab Sport & Rally-hatt

Tuff sporthatt i blått och gult bomullstygg. Saab Sport & Rally logotypen i blått evighetsmönster på gul botten. Finns i storlekarna liten, medium och stor.

Det nr 15826—15842

Träningsoverall

Elegant overall i smidig, skrynkelhärdig crepenylon med skön bomullssida. Hög kvalitet. Gul jacka med blå revärer; blå byxor med gula revärer. Finns i storlekarna 120, 140, 160, small, medium, large och extra large. Det nr 15958 — 16014

Tävlingshandskar

Förstklassig handske av mycket hög kvalitet. Design: Pat Moss-Carlsson. Finns i medium och stor.

Det nr 12237—12245

Paraply

Tufft blå/gult paraply med handtag i trä och automatisk uppfällning.

Det nr 15727

Emblem

Jackemblem med Saab logotypen.

Det nr 14118 — 110 x 30 mm.

Vit text på blå botten.

Det nr 14977 — 75 x 25 mm.

Vit text på blå botten.

Det nr 12724 — 110 x 30 mm.

Blå text på vit botten.

Jackemblem med Saab Sport & Rally logotypen.

Det nr 16147 — 120 x 45 mm.

Vit text på blå botten.

NATIONELLA TEKNISKA BESTÄMMELSER FÖR KLASS STANDARD B

SAAB 96 V4 (grundhomologering nr 5125)

Omborring och balansering av motorn

Motorn får borras till första överdimension och standardkolvar 90,5 mm nr 8812844 får då användas.

Motorns originaldelar får balanseras och justeras enligt FIA:s toleransuppgifter, se Bilspportkalendern § 252 h, såvida icke högre toleranser har godkännts av FIA och angivits i grundhomologeringen.

Transmission

Specialdrevsats 1 nr 10850, och specialdrevsats 2 nr 10868, får monteras.

Slutväxel 6:35 nr 10488, 7:36 nr 10496, respektive 7:36 nr 7836299, får monteras.

Differentialbroms nr 10504 får monteras.

Observera att högsta tillåtna felvisning hos hastighetsmätaren är $\pm 10\%$, varför om slutväxeln utbytt även hastighetsmätaren måste utbytas eller justeras (OBS även beroende av däckdimension).

Oppling nr 10520 och lamell nr 10538 rekommenderas.

Fr o m 1974 års modell får endast växellådshus av lättmetall användas.

Kylsystem

Några ändringar av kylsystemet är icke nödvändiga. Oljekylare nr 12302 får monteras.

Stötdämpare och fjädrar

Standardstötdämpare, främre, får utbytas mot specialstötdämpare nr 10595. Standardstötdämpare, bakre, får utbytas mot specialstötdämpare nr 10603.

Standardfjädrar, främre, får utbytas mot specialfjädrar nr 10579.

Standardfjädrar, bakre, får utbytas mot specialfjädrar nr 10587.

Förstärkt fjäderfäste nr 10884 och förstärkningsbricka för fjäderfäste nr 7327364 får monteras.

Fr o m 1974 års modell får bakaxel nr 8813412 respektive nr 10611 användas.

Motorfästen, domkraftsfästen och hjulhus

Domkraftsfästen får flyttas och förstärkas och extra domkraftsfästen får anbringas.

Modifieringssats (förstärkning av stötdämparfästen, hjulhus m m) nr 11833 får monteras.

OBS! S k Mexicofäste nr 10181 får ej användas, däremot rekommenderas (om detta redan icke är monterat):

sidostötta	nr 7104698
sidostötta	nr 7176423
stödkudde	nr 7332398

Skyddsplåtar och motorhuv

Skyddsplåtar får monteras.

Grupp 1-skyddsplåt nr 13219 under motorn rekommenderas.

Extra låsanordning bör monteras på huvan framför vindrutan — huvrem nr 11809 — dock får original låsanordning icke flyttas eller borttas.

Ledningar

Alla ledningar får fritt dras även inne i bilen. El-ledningar får ej dras i anslutning till drivmedels- eller bromsledningar.

Alla ledningar ska vara klamrade.

Bromsrör och bromsslangar bör skyddas enligt TSV:s anvisningar.

Avgassystem

Avgassystem nr 14258 och nr 11478 får monteras och är de enda godkända jämte standardsystemet.

Om bilen modifieras från klass Special till klass Standard och man i samband härmed byter avgassystem behöver eventuella hål i motorrumsgolvet icke igenfyllas.

Bromssystem

Bromsbelägg nr 10561 och nr 7868284 får monteras.

Skivbromsskydd får utvikas.

Fälgar, däck och navkapslar

Fälg, 4,5 J x 15 nr 7412075 respektive nr 16667 och 1120/B får monteras.

Ratt, säten, instrument och skyddsbåge

Läderratt nr 12401 får monteras. Förarstol nr 10710 eller nr 14506, passagerarstol nr 10728 får monteras. Stolunderrede nr 10736 ska då användas.

Instrument, såsom varvräknare, tidtagarur, speedpilot och tripmätare får monteras i anslutning till instrumentpanelen eller infällas i hanskfacket (handskfacksluckan får borttas) under förutsättning att instrumenten placeras och monteras så att de ej onödigtvis ökar risken för skada i händelse av olycka.

Skyddsbåge nr 10694 och klädsel nr 10900 får monteras. Observera att denna skyddsbåge enbart får användas under tävling och vid färd till och från tävling.

Bilar som levererats utan synligt isoleringsmaterial behöver icke kompletteras med detta under förutsättning att bilen är av 1974 års modell eller tidigare.

Elektriska systemet

Batteriet får placeras på annan plats i motorrummet eller i bagageutrymmet och dess fästansordningar får förstärkas. Batterilåda nr 11841 ska då användas.

Relä och spole får utbytas.

Växelströmgenerator nr 11791 får monteras. Remskiva nr 13102 ska då användas.

Belysningsanordningar

Det är tillåtet att montera ytterligare strålkastare framåt på villkor att totala antalet strålkastare inte överstiger 6 st. Backlampa får fällas in i karossen. Observera att TSV:s och SBF:s bestämmelser för extraljus och backljus måste följas.

Övrigt

För eventuellt karossbyte gäller speciella regler och SBF:s rallyutskott måste godkänna sådant byte.

För övrigt hänvisas till specifikationer i grundhomologeringshandling nr 5125 och av Bilspportförbundet godkända tillägghomologeringar samt till det kompletta reglementet i Sveriges Bilspportförbunds stadgar.

NATIONELLA TEKNISKA BESTÄMMELSER FÖR KLASS STANDARD A

SAAB 99 (grundhomologering nr 5534)

Omborrning och balansering av motorn

Motorn får borras till första överdimension i max 2 st cylindrar och standardkolvar 90,5 mm, nr 8352536 fr o m 1974 års modell respektive 58368 fr o m 1975 års modell, får då användas.

Motorns originaldelar får balanseras och justeras enligt FIA:s toleransuppgifter, se Bilspportkalendern § 252 h, såvida icke högre toleranser har godkänts av FIA och angivits i grundhomologeringen.

Transmission

Tättningsplanet för motoroljeavtappningspluggen sänks och pluggen säkras.

Tätstegad, osynkroniserad drevsats nr 15354 får monteras inklusive växelförarfinger nr 15784 med spännstift nr 7956337.

Slutväxel 6:31 nr 15362, som sänker växlingen ca 25%, är tillåten.

Distansring nr 15537 är nödvändig till slutväxel 15362, såvida inte differentialbroms används.

Differentialbroms nr 15552 får monteras.

Montage av differentialbroms nr 15552 i bilar av 1974 års modell och äldre kräver även byte av drivaxlar. Drivaxel vänster 15891, höger 15909.

I alla bilar kräver montering av differentialbroms utbyte av differentialhuslock till lock nr 15800 (med uttag för oljekylning).

Oljekylarsats nr 15917 (utan lock) för växellåda får monteras.

Vid inbyggnad av differentialbroms rekommenderas följande ståldetaljer i utbyte mot standardplastdetaljer:

hastighetsmätardrev	nr 8710337
"	nr 8710345
tryckbricka	nr 8710451
	nr 8710469
förbindelserör	nr 8704249

Vidare rekommenderas distansring för pinjong nr 15925.

Låsringen på primärväxelaxeln bör utbytas mot en kraftigare t ex Seeger

S30×1,5. Detta kräver en fördjupning av låsringsspåret till en innerdiameter av 27 mm.

Kylsystem

Några ändringar av kylsystemet är inte nödvändiga. Kylfläkten kan kopplas på separat strömbrytare. Oljekylarsats nr 15933 får monteras.

Stötdämpare och fjädrar

Standardstötdämpare, främre, får utbytas mot specialstötdämpare nr 14530. Standardstötdämpare, bakre, får utbytas mot specialstötdämpare nr 14548. Standardfjäder, främre får utbytas mot specialfjäder nr 14639.

Standardfjäder, bakre, får utbytas mot specialfjäder nr 14647.

Motorfästen, domkraftsfästen och hjulhus

Hårdare gummikuddar till bakre motorfästen nr 15941 får monteras.

Domkraftsfästen får flyttas och förstärkas och extra domkraftsfästen får monteras.

Förstärkningssats nr 14621, (för stötdämparfästen, hjulhus m m) får monteras.

Skyddsplåtar och motorhuv

Skyddsplåtar får monteras.

Skyddsplåt motor nr 15297 rekommenderas.

För 1972 och 1973 års modeller krävs fästjärn nr 14985 samt för bilar fr o m 1974 års modell krävs fästjärn nr 14993 till denna skyddsplåt.

Skyddsplåt bränsletank nr 15297 passar t o m 1974 års modell.

För 1975 års modell passar skyddsplåt bränsletank nr 15792.

Extra fastsättningsanordning, gummi-stroppsats nr 11817, rekommenderas för motorhuv 2 st samt för bagagelucka 1 st.

OBS! Original låsanordning får icke

Avgassystem

Avgassystem nr 14357 får monteras och är det enda godkända jämte respektive standardavgassystem.

OBS! 14357 passar alla bilar fr o m 1972 års modell.

Bromssystem

T o m 1974:

Bromsklotssats främre nr 14563
" bakre nr 14571

rekommenderas.

Fr o m 1975:

Bromsklotssats främre nr 15735
" bakre nr 15743

rekommenderas.

Skivbromsskydd får utvikas.

Fälgar, däck och navkapslar

Fälg 4,5 J×15 nr 8910812 respektive nr 8918807 samt 5,0 J×15 lättmetallfälg nr 16279 får monteras.

Navkapslar får tas bort.

Ratt, säten, instrument och skydds-båge

Läderratt nr 15305 får monteras.

Förarstol nr 10710 eller nr 14506, passagerarstol nr 10728 får monteras.

Stolunderrede V, justerbart i längd- och höjdled nr 14654 respektive stol-

underrede H, justerbart i längdled nr 15545 passar till ovanstående stolar

och fästs i originalstolarnas bulthål. Skyddsåge nr 15214 med klädsel

nr 10900 rekommenderas.

OBS! Denna skyddsåge får enbart användas under tävling samt vid färd till och från tävling.

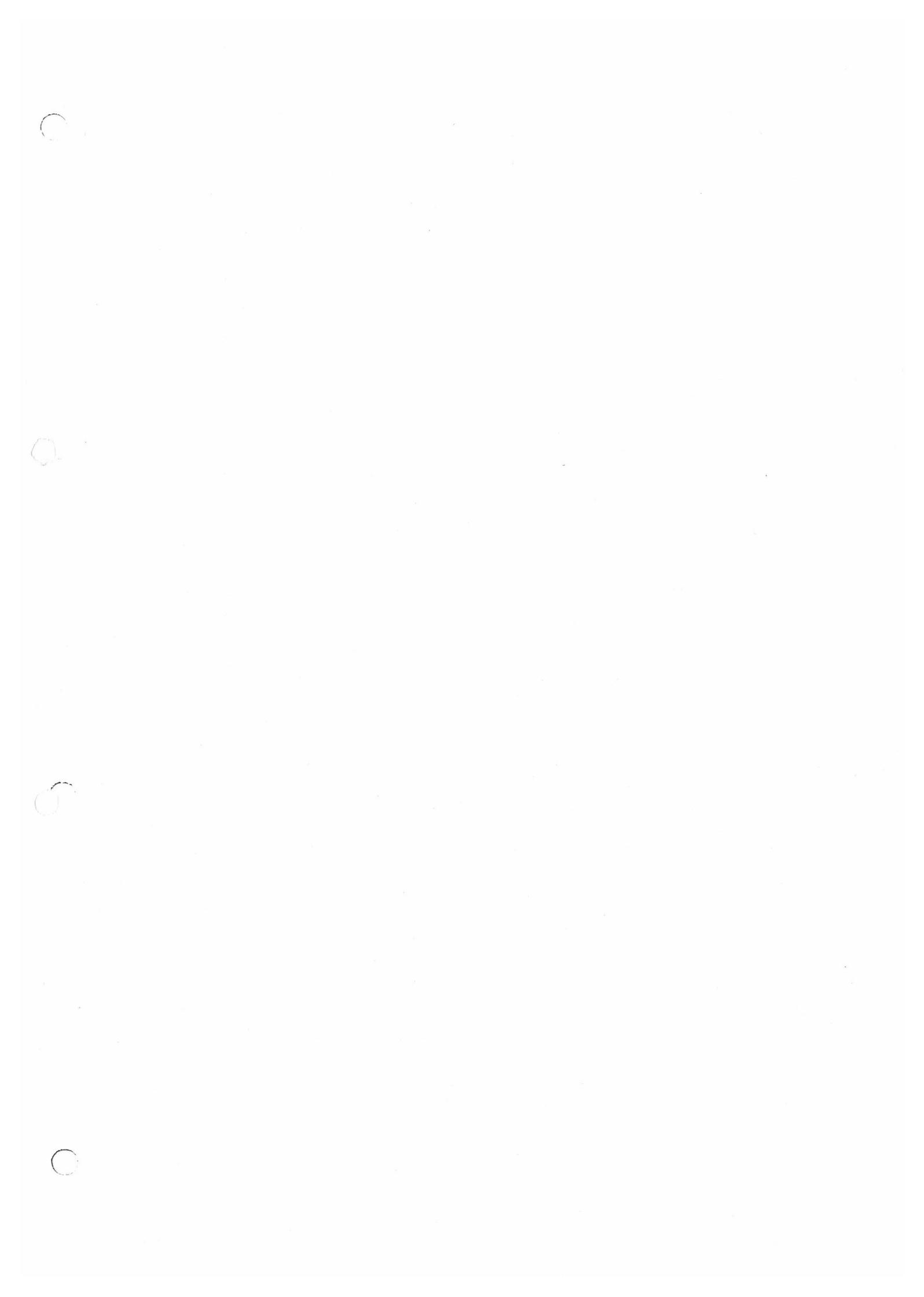
Elektriska systemet

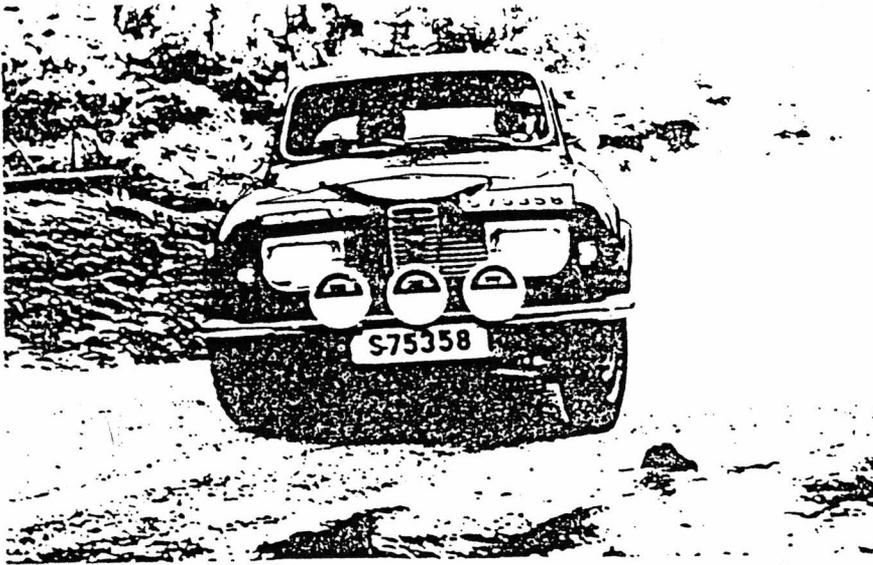
Batteriet får placeras på annan plats i motorrummet eller i bagageutrymmet

och dess fästianordningar får förstärkas. Batterilåda nr 11841 ska då användas.

Relä och spole får utbytas.

För övrigt hänvisas till specifikationer i grundhomologeringshandling 5534 med tillägg och till det kompletta reglementet i Sveriges Bilspportkalen-





COMPETE WITH SAAB

Starting this month, and to be continued over the next few months, is a series of articles about the preparation of Saabs for competition. The articles are written by Paul Darlington, and were first published in *Cars and Car Conversions* earlier this year. It is with their kind permission that I can produce them in our Journal.

The aims of the following series are two-fold. Firstly, to help those Saabsters in the audience modify their cars for road and rally use; information on tuning 96V4's has remained elusive for long enough, so here the truth is revealed; and secondly, to inspire those readers who are not rallying Sunbeams, Alfas, TRs or Chevettas to have a go in something *really* different. The 96, even in works rally trim, was nearer standard specification than any other top level competition car. Introduced to the UK in 1966, the 96 used the 1498cc Ford Taunus V4 and sold here for 10 years. Early cars are distinguished by their round headlights and narrow screens. Post '69 models had rectangular lights and deeper screens. Also fitted at the same time were brake servos and a far stronger gearbox. If purchasing a used 96 for road or rally use, look for the post '71 variety - they don't rot like the older vehicles. Pay from £350 for a '71 (J-reg) machine, to £1500 for a 1976 example. Irrespective of year, all Saabs have brake and fuel lines inside the shell, bolt-on wings and a free-wheel device in the strongest, most roll-resistant bodyshell around, which is an ideal base for a first-class rally car.

Unfortunately, they also boast lousy gear ratios, understeer and a feeble 65bhp... faults which can be easily remedied if you'd care to read on...

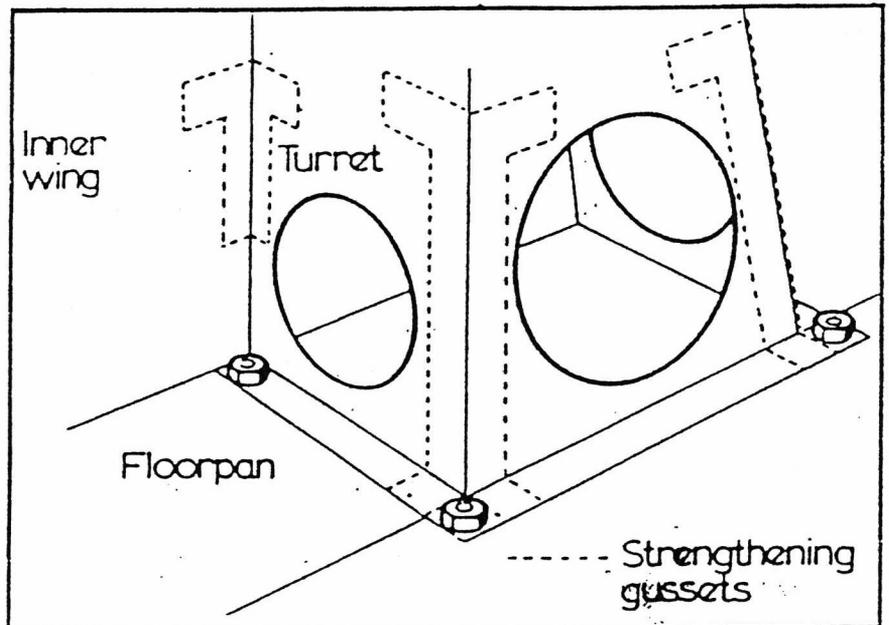
Bodyshell Modification

For rally use, the shell needs some basic attention. If you have a car to straighten, please work according to a Saab manual - a screen pillar cut too low will jeopardise the great inherent strength. Should a complete road car be the victim, deal with the strengthening during the inevitable engine-out period. Remember to save weight where possible - all the fancy trim doesn't help, and it also burns.

A kit of plates is available (11833) to weld on in the appropriate places. This includes a length of channel section to brace the upper edge of the inner wing, a piece of angle iron

to weld across the upper damper mount and assorted parts for the suspension turret. This requires bracing inside the engine bay where it meets the floorpan. The diagram below is more explicit.

Also, plate the inner wing around the hole through which the steering arm operates. Unbolting the outer wing will make access easier. At the rear, plate the mounting point for the trailing arm on the inside of the shell. The upper damper mounting can be dealt with in similar fashion from inside the boot. And that, friends, is that.



Safety Equipment

Fireproofing is dealt with by a skin around the tank. Use the existing plywood cover as a template to cut out 20 gauge sheet. Seal the edges with glass fibre matting. Fix a further panel behind the tank to isolate it from the

spare wheel well. Also, don't forget the hole through which the petrol pipe runs. This is far simpler than a full bulkhead job. Please carry out fire-proofing to your own satisfaction - don't just hope to kid the scrutineer.

A full Safety Devices cage is a good idea. O.K., so the screen pillars will take a roll, but not a hard end-over-end. I've seen them bent completely flat on occasions. A front cage will help to keep the screen in, too. Talking of screens, some models had the laminated variety as standard. If yours hasn't, look around the breakers for a '69 'deluxe'. Of course, they're also available from your friendly Saab dealer.

When access to the engine bay is unimpaired, cut two holes in the floor for a competition exhaust to pass through. This is an absolute *must* for any rally Saab. Dimensions and location are found on the diagram. Bend the petrol pipe away from the right hand hole so that it runs around the edge.

Mechanical Protection

Sumpguards are available from Saab Sport and Rally, part No. 10652. If you don't have the necessary £100 or so, construct one yourself from dural sheet, braced longitudinally with old leaf springs. Quarter inch metal is ideal. Cut a piece 2ft by 2ft 10ins. Bend the leading edge so it is 4in higher at the front. Curvature should start 1ft 9in from the rear. Mount the front of the guard to a substantial bracket welded between the bumper supports outside the front valence. Fix the rear to the floorpan with two Saab front engine mounts. The resulting guard will protect the entire underbody as far back as the start of the exhaust system.

Inside the car now; the standard dash lacks available space for extra instruments. Mount a tachometer on bracket 12161, using the hole on the right of the steering column. The dash from the old Saab Sport is a direct substitution, and has provision for speedo,

tacho, and two smaller gauges in between. Another trip to a breaker's, maybe? Incidentally, D. & J. Cargreaves, Goosnargh, Preston (Goosnargh 679) break Saab exclusively, and have many obscure parts for all models.

Suspension and Running Gear

Works parts are the best for road or rally work. This involves fitting front competition springs (10579) plus supports (10884). Progressive rear springs (10587) should support the rear, but are not absolutely vital if on a tight budget. Bilsteins are the most efficient dampers at around £25 each, and are fitted all round. At the other end of the price range, Armstrong Red Max have worked well, and have a four-point adjustment. The anti-roll bar is a matter of personal preference. Without a torque biasing differential, the inside wheel has a tendency to lift and spin if the bar is connected. Better to remove it altogether for stages. Strengthened wishbones are available under part Nos. 12120 (lower left) and 12138 (lower right). The standard item can be beefed up by a simple plating operation. Don't pay for Swedish labour unless you have to - it costs. At the rear, the trailing arm must be boxed-in along the upper edge, or is available ready done as part No. 10892. The factory fitted a 95' rear axle which has stronger stub axles, but the standard unit will take a lot of abuse. Tighten the drop straps under the axle so that the springs can't fall out on a yump. Rubber bushes must be replaced if suspect. Play in these areas is often overlooked so it's a good idea to use the new parts as a matter of course.

Brakes

The standard driveshafts are more than strong enough for the task in hand. Check all the rubber gaiters for tears, and keep the joints well packed with grease. The braking system has its work cut out to retard the little beast at time. The freewheel means that there is no engine braking effect, so it pays to give particular attention to all the rubber seals. Fit Ferodo DS11 pads, but leave the rear shoes - standard to give more 'bite'. Remove or bend outwards the splash shields behind the discs to improve cooling. If more rear bias is required, fit 1/4 in bore slave cylinders from the pre-'70 95 estate (Lockheed part No. 4241-396) and convert the hand brake to 'fly off' operation, either by drilling the button and inserting a pin, or by removing and reversing pawl - simple to do, impossible to plain.

Most competing Saabs are driven using the technique of left foot braking. As this involves using the brakes while the throttle is wide open, the vacuum in the servo may eventually become exhausted, thus leading to increased pedal pressures. To reduce the chances of this happening, the factory used to install a vacuum tank with a one-way valve between it and the manifold. Of course, it depends on each individual driving style.

Tyres

The standard steering rack has 2 1/4 turns lock-to-lock. A quicker item was fitted prior to 1969 which only had 2 1/4 turns. The most obvious characteristic of the 96's steering is the amount of vibration fed back to the wheel. To reduce this to a minimum, ensure that all the suspension ball joints are in perfect condition and well lubricated. As specifications have altered so little over the years, all running gear is completely interchangeable. Standard wheel width is four inches. Saabs have never benefitted from very wide rims; even the 280bhp turbo only uses 165/70 x 15 sizes on the loose. On the 96, the factory fitted 4 1/2 in alloys (11205) at around £140 each. The same width in steel (7412075)

retails at around £15. Any of these are suitable for competition. Saab used to offer a 4 1/2 in wheel with an offset rim to widen the track; these wheels helped tarmac performance, but can only be found secondhand; well worth acquiring if they crop up. For loose stages use 155 or 165 Avon Arctic Steels; Pirelli MS35 or Dunlop MS Mk 2. On tarmac, Kleber or Uniroyal Rallye 180's perform well.

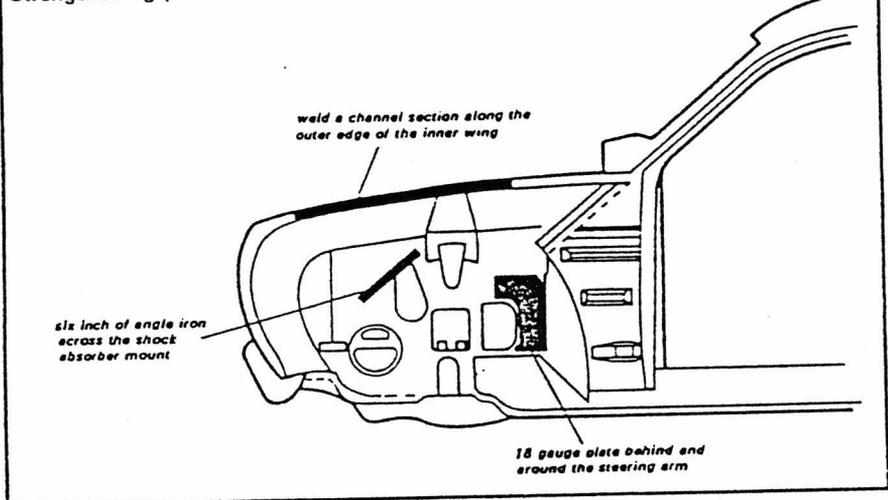
Ancillaries

The radiator fitted to post '70 models is generally satisfactory, even for 1815cc engines. If more cooling is required, then a larger radiator is available in a Sport and Rally Kit, (11668). A new expansion tank (11643) sits on the left inner wing connected to the radiator with hose, part No. 11650. A Saab 99 radiator might be persuaded to fit but would need a new outlet pipe to be inserted at the base. The actual core is the same as the Rally item. If a wider radiator is used, then the squared headlight front panel must be replaced with either the old two-stroke type or the grille fitted to American specification cars, which featured round headlights in the usual chromes surrounds.

standard, Spec One has a higher first and second with a lower top gear. Third remains unchanged. Spec Two uses the same top gear, but first, second and third are all higher. Three final drives are catalogued. The lowest at 5.83:1 (10488) is fitted to the works' cars, while a 5.15:1 is homologated in Group One (7836299).

A 5.43:1 is also available (10496). A Spec One gearset with the Group One differential gives the road speed per 1000rpm of: first 4.3; second 7.3; third 11.6; fourth 14.8. A Spec Two gearset in conjunction with the 5.83:1 final drive will work as follows: first 4.5; second 7.6; third 10.2; fourth 13.2. (On 155 x 15 tyres). If over 130 bhp is expected, use the cast iron gearbox and casing (10512); below this output the ribbed alloy box will suffice. A novel alternative is the four-speed casing from the old bullnose two-stroke (1962-1965). This was of cast steel and is well worth picking up secondhand. Saab list a number of slip differential (10504), but it's priced around £400. I'm sure you can manage without - go on, force yourself! For outputs exceeding 90bhp a competition clutch is needed. Two are available - pressure plate (10520) and disc (11312) fit the standard

Strengthening plates on inner wings



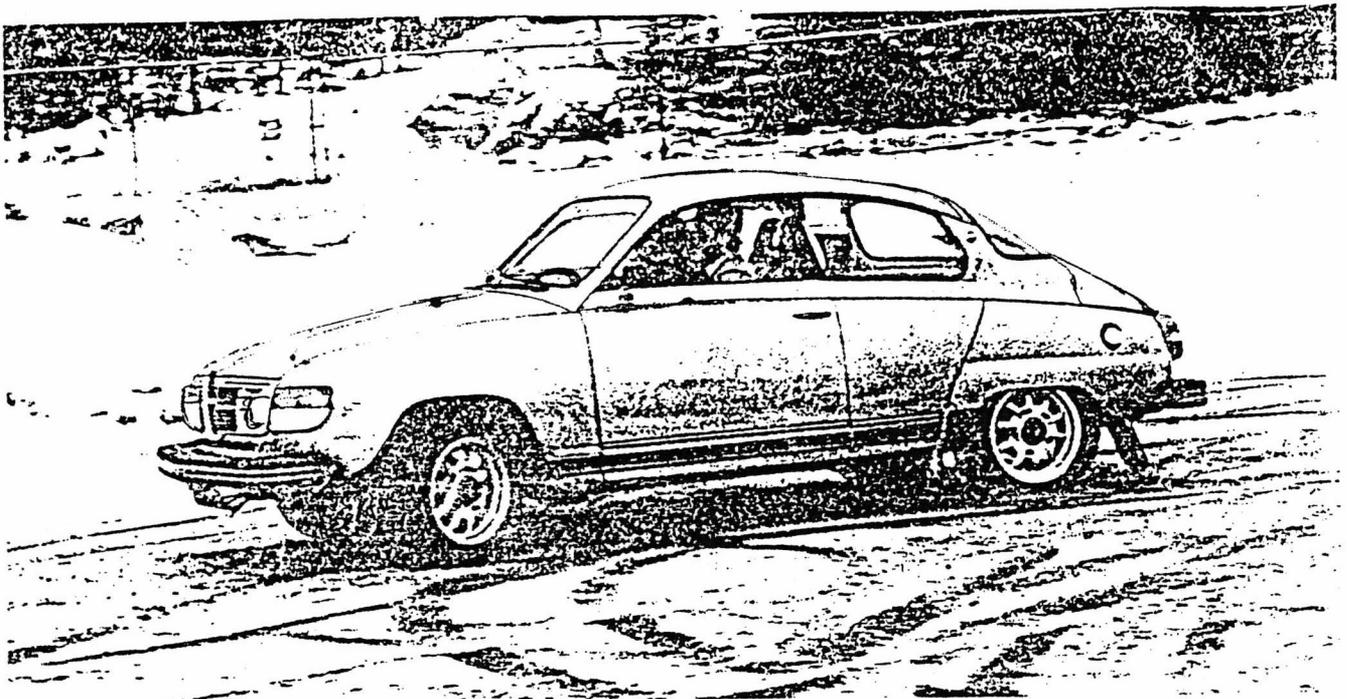
An oil cooler is a necessity for any competition V4. Always fit an oil thermostat and mount the cooler vertically between the left inner wing and the radiator. The Sport and Rally kit part No. is 12302, but a British set-up is cheaper. Uprate the oil pump by substituting a revised spring (1014) for the standard item. Pressure should be 85lb/sq in when warm. Petrol vaporisation can be a problem. A Bendix fuel pump is a simple solution, mounted on the left inner wing. Blank off the mechanical pump, mount with a suitable plate. There will be more working space under the bonnet if the battery and its tray are moved to the boot. Either weld in the existing tray, or use a proprietary glassfibre box from Talbot Competitions or Chris Slater Automotive.

Gearbox and Final Drive

The standard gear ratios are crying out for replacement, for competition purposes at least. Two alternatives are available - the Special One set (10850) at around £90, and the Special Two (10868) at £180. Compared with

flywheel; while if the diaphragm type (13409 & 13391) is chosen, then Saab recommend fitting a forged flywheel (13656). The first type can be fitted to all but the most powerful (160bhp) motors. If rough stages are anticipated, fit extra engine and gearbox mounts. Use them anyway with more than 90bhp. Secure the gearbox with a stabiliser similar to that already fitted on the left (7332398 & 7176423). This is fixed on the right of the box. Extra engine mounts are available in kit 10181, and support the rear of the block.

PRACTICAL NOSTALGIA



Let's point out straight away that an easy 15 bhp is available simply by fitting a 28/36 Weber on an adaptor plate and replacing the contorted exhaust with a freeflow system. A mild cam such as an SAM item would also doubtless help. But for really worthwhile gains, a complete build using more specialised parts is called for.

Saab have used four sizes of V4 in competition - 1500, 1700, 1815 and since 1975, a 1993cc unit. The first three concern us here: the two-litre being a specialised motor for which parts are not available. Before delving into the build-up note that three types of V4 have been fitted since 1966. They are readily identifiable by their colour. Early engines were grey (up to chassis number 487639) and differed substantially from later blue and black units, which are very similar in respect of tuning. As the later engines are more numerous, I'll assume we are dealing with a blue engine and point out where the grey type differs at the relevant points.

Decide which capacity best suits your needs. The usual class limit is 1600cc, which benefits the standard UK capacity. Both the larger units have to mix it with BDA's. For road use, a mild 1700cc engine could prove ideal. Obviously it is cheapest to retain the standard capacity, which is a product of a 90mm bore and a 58.8mm stroke. The American specification 1698cc lump has the same bore but possesses a stroke of 66.8mm. To achieve 1815cc, use the longer-stroke crankshaft with a bore of 93mm.

The standard rods and crank are strong enough for tuning purposes. If your staying below 1600cc, then a 91mm piston will give you 1531cc. Saab offer such a part (884836) in cast flat-top form, and in forged alloy as well (1003). These latter items are domed, thus raising compression pressures, but they cost over £80 each. Hepolite offer a flat top piston in 91mm for around £15.

The larger engines start with a long-throw crank (10629) and rods (13144). Pistons differ from those used in the smaller units in that they are shorter from the crown to the centre of the gudgeon pin. Again Saab offer the cast unit at 1001 (90mm and 1698cc) and 1002 (91mm and 1740cc) or forged in 91mm

size as part number 1004. Hepolite also manufacture cast pistons in both sizes. Remember that these are Ford Taunus parts too, so they may be listed under that heading. All bearings can be obtained as Ford Parts at a fraction of the cost of the Saab ones. A complete Taunus 17M motor might solve a few problems, too. Finally, 1815cc comes from the long throw crank in conjunction with 93mm pistons which are only available in forged alloy under Part No. 12732 at around £400 per set.

Before leaving the bottom end, the fibre balance shaft gear should be replaced with a steel one (881027) if you expect to exceed 6,300 rpm. Have pistons, rods, clutch and flywheel balanced. Crack-testing the rods and crank is recommended, while the crank can be usefully tuft-ridged.

Forget Twin Carbs

Having determined your capacity, decide on carburation. It's pointless spending a fortune on the rest of the unit if you can't afford the induction to match. The choice is between a single 40DFI Weber on Sport and Rally manifold (11320) and twin 45mm Dellortos or Webers on a cross-over manifold. The Saab manifold (13599) for twin carbs requires a modified distributor (13623). Altogether, this set up would cost over £400. An alternative is the *Conversion & Tuning Centre* manifold which manages with the standard distributor body and retails at around £70. The single Weber 40DFI should be used on its S and R manifold (£80) with flange (11437). All capacities work best on twin sidedraughts. Only use the downdraught on 1500/1531 and 1698/1740 units - it's pointless spending £600 on an 1815cc bottom end and sticking a 40DFI on top.

Better to part with £400 on a 1740 lump with twin 45's.

For road use only, forget twin carbs on these engines unless you're an Arab; and don't discount the single carb for competition: it can produce 110bhp from 1531cc, and 125bhp from 1740cc. Twin sidedraughts can produce 130 bhp and 145 bhp respectively.

Headaches

This leaves cylinder heads and valve gear. Again, consider the engine in its entirety and don't run a wild cam if the induction isn't up to it. Camshafts available (see chart) include three from Saab, three Piper and two Newman. The Saab parts are identified by their lift - 7.2mm (10074); 7.6mm (10082) and 8.3 (12765). Standard lift is 6.4mm. They cost from around £70.00.

The 7.2 is a good road cam, giving maximum power 500rpm below the 7.6, which is recommended for rallies; by contrast the 8.3 is almost a racing profile, developing its power between 5,000 and 7,500rpm. Newman and Piper cams are available at around £30 exchange. The chart gives specifications. The Piper II or Newman 161 have enough 'top end' to make life interesting in competition, yet are manageable on the road and suit both 1500 and 1700 units. The Piper III and Newman 160 are, however, fairly wild affairs with little below 4,000 rpm and a lumpy tickover. Check valve to piston clearance if using either of these, particularly if the heads have been skimmed. Use lightened cam-followers (10132) and check the pushrods for straightness.

The basic rocker gear is safe to 7,000 rpm. If sustained high engine speeds are contemplated, an alloy rocker support is available as part 1171. It's not really necessary unless building a 'no expense spared' works replica.

The standard rocker arms need attention, however. Grind the pad that operates on the valve to an 8mm diameter half-circle positioned directly over the valve stem. This reduces the risk of the collet being released and thus precipitating valve contact with the piston. Use competition valve springs (10116).

The standard head gasket must be replaced for competition use. There are two alternatives: a competition gasket with reinforced steel linings, or seal rings in grooves around each bore. If the first method is preferred, use part 11734 on grey engines and 10157 on blue/black motors. If seal rings are chosen, machine grooves at the top of each bore. They must be one millimetre deep and have an outside diameter of 97mm. Replace the rings every time the heads are removed. Use part 10165 on 91mm bores and 12740 on 93mm bores. A simple gasket is fitted over the water ways, etc; 10157 for 91mm, 12757 for 93mm sizes.

Larger valves are available from Saab. The standard sizes are 37mm inlet and 32mm exhaust. S and R offer inlets in 42mm (10090) and 44mm (11684) sizes, and exhaust in 37mm (10108) and 38mm (11676). Power outputs are similar with both sizes. The smaller size should be used first, the larger as the seats enlarge with use. Note that the stems of the 44/38mm valves are one millimetre thinner than the 42/37 sizes. This means that special retainers and collets are needed, as well as guides. For 42/37mm valves, use collets (8833956) and retainers (10876). If the standard guides need replacing, use guides (13664) and seals (13664). The 44/38 valves use retainers (10124) and guides (15057). Seals and collets are as the smaller sizes.

This leaves the actual machining of the cylinder heads. The intake ports should be opened up to a width of 25mm and a height of 46mm. Leave a minimum surrounding face

of 3.5mm for the gasket to seat upon. The exhaust port can be opened up to a diameter of 44mm at the outlet. Grind the valve guide so that it does not intrude into the port. Use gasket 1145 and seal ring 10280.

The blue engine possesses between 38 and 40 sq cm volume in the combustion chamber. The compression ratio is lower on a 1698cc unit owing to the shorter pistons that are fitted to the smaller motor. In order to achieve a compression ratio of 10.5:1 or 11:1 with the 1500cc unit, fit flat top pistons and skim 1.75mm from the heads. The chamber volume should then be 32 sq cm. If forged (i.e. domed) pistons are fitted, the unmodified chamber will give a C/R of 11.9:1. The same amount skimmed from the heads on a 1698cc motor fitted with flat-top pistons gives a C/R of 10.25:1. Forged pistons bring the C/R up to 12:1, thus necessitating the opening-up of the chambers to 44 sq cm.

For competition, the exhaust must be routed through the floor behind the driveshafts. Both Saab and Janspeed offer very sturdy systems. The Swedish version will probably withstand more abuse in the long run, but is £40 dearer than the home grown item. If the vehicle is solely for road use, fit a system that uses the existing holes at the front of the floorpan, such as the Sport and Rally street kit or the Janspeed equivalent. There are so many variations to the Swedish kits that it is impossible to list all the numbers, so trot around to the local dealer and ferret through his Sport and Rally Manual.

The electrics fitted to the 96 comprise of a Bosch alternator and a regulator box with the circuits protected by a bank of 12 fuses. Extra lights, etc., can be fed from the accessory terminals. The forward hinging bonnet precludes the fitting of Cibie Ovals or suchlike for everyday use. If the car is intended to be used in competition, remove the hinging mechanism so that the bonnet lifts straight off. Secure it with Magard locking pins and a strap (11809), a full complement of lights can then be fitted on brackets (10759). If it is necessary to retrofit the tipping bonnet, fit a slim-line lamp such as the Cibie 45.

Finishing Touches

A good bucket seat is invaluable on stages. Saab offer a subframe as Part 10736, while Corbeau do a similar one for their GT range of seats. Alternatively, a Billover Escort frame adapts easily by welding feet onto the supporting legs. Whichever arrangement you choose, mount the seat to the frame as securely as possible. The alloy rivets usually employed are totally useless in a shunt. Drill them out and replace with bolts which should pass through the runner itself.

While inside the car, mention must be made of the steering wheel. The standard part has a diameter of around three feet and wouldn't look out of place on the QE2. Replace it, preferably with a flat or semi-dished wheel of 14in diameter. The Australi Regent is available with a suitable boss, as are various Motolita types. Rather than disconnect the washer pipe every time the bonnet is removed, fit jets to the air intake below the windscreen. The inner shaft that drives the wipers has a habit of seizing in its tube where it passes through the bulkhead, so regular lubrication is essential.

I've emphasised throughout the considerable difference between Saab parts and British substitutes. It must, however, be pointed out that the Sport and Rally equipment is of the highest quality and should always be fitted if funds allow. Saab have done more research with these engines than anyone (even Ford Cologne) so there is no doubt that their parts are the most effective from the tuning point of view. It is regrettable that until recently, Saab (Great Britain) Ltd., did not see fit to increase the availability of the range that the competition department have on offer.

If you're seriously considering building a competition motor, the pukka Saab workshop manual is invaluable, as is the Sport and Rally book. The special tools listed are not generally vital, with the exception of the coil spring compressor. Changing front springs without this tool is a nerve racking business akin to defusing a time bomb. You have been warned.

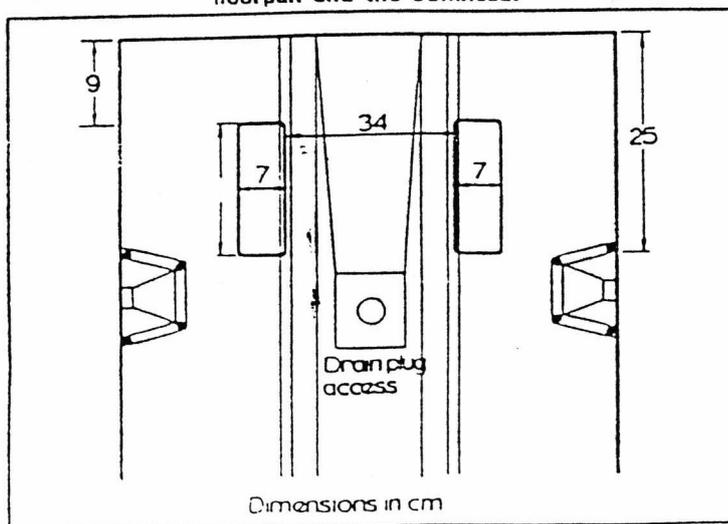
Don't be discouraged by the inherent differences of the 96. The simplicity of the preparation makes it an absolute boon to those with limited resources of time and/or money. It has its idiosyncracies in handling and driving style, but these are amply compensated for by mechanical reliability - the cheapest car is the one you don't have to keep mending.



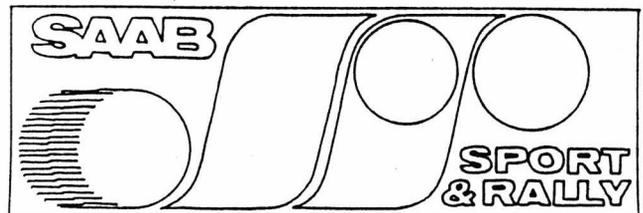
	LIFT in exh	TIMING	
		INLET	EXHAUST
Standard	.256"	21/82	83/40
Piper I	.395"	27/61	81/27
Piper II	.382/.380"	34/74	74/34
Newman 161	.395"	35/75	75/35
Newman 160	.440/.398"	40/80	80/40
Piper III	.430/.428"	45/85	85/48
Saab 7.6	.425"	37/70	78/32

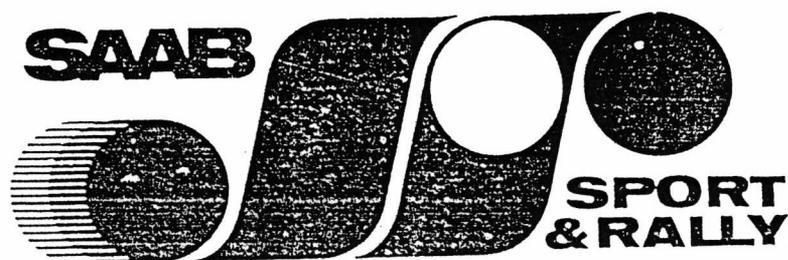
NB: When lift caused through wear has decreased by 0.074" (0.2mm), power losses become significant, so tappets etc must be replaced.

The diagram below indicates the positions for holes in the floorpan necessary to accept the SAAB Sport and Rally competition exhaust. Janspeed and SAH systems may differ slightly. The top line of the diagram represents the joint of the floorpan and the bulkhead.



SAAB V4





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 skötts 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 noga testat och kontrollerat av Saab:s 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 & Rally:s sortiment säljs till såväl tävlingsförare som vardagsbilister genom samtliga Saab:s 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.

SAAB-SCANIA
Bildivisionen
Sweden

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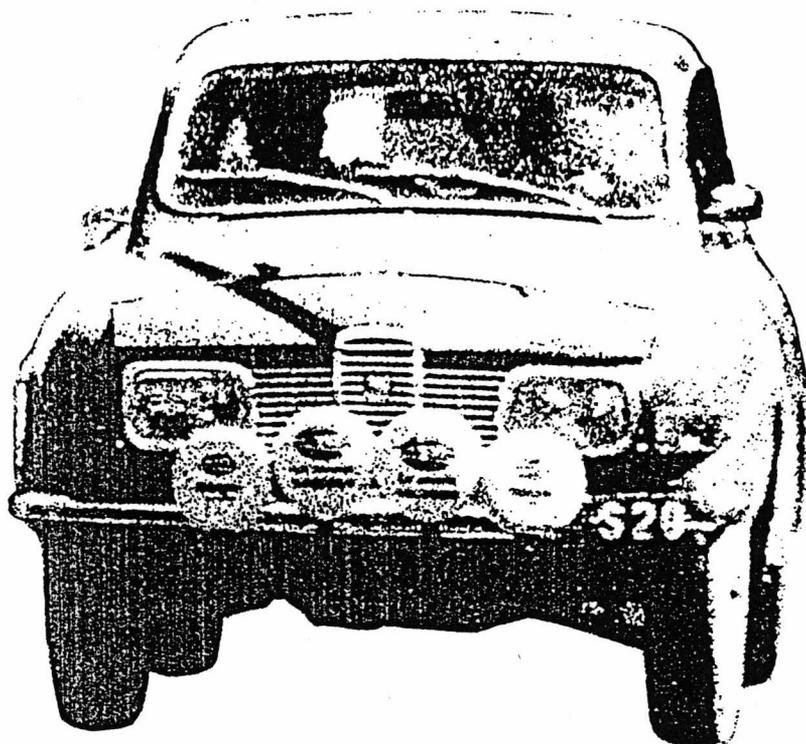
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Grupp	Nr No	Group
Tävlingar med Saab	1	Competions with Saab
Saab:s tävlingsavdelning	2	Saab competitions department



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.

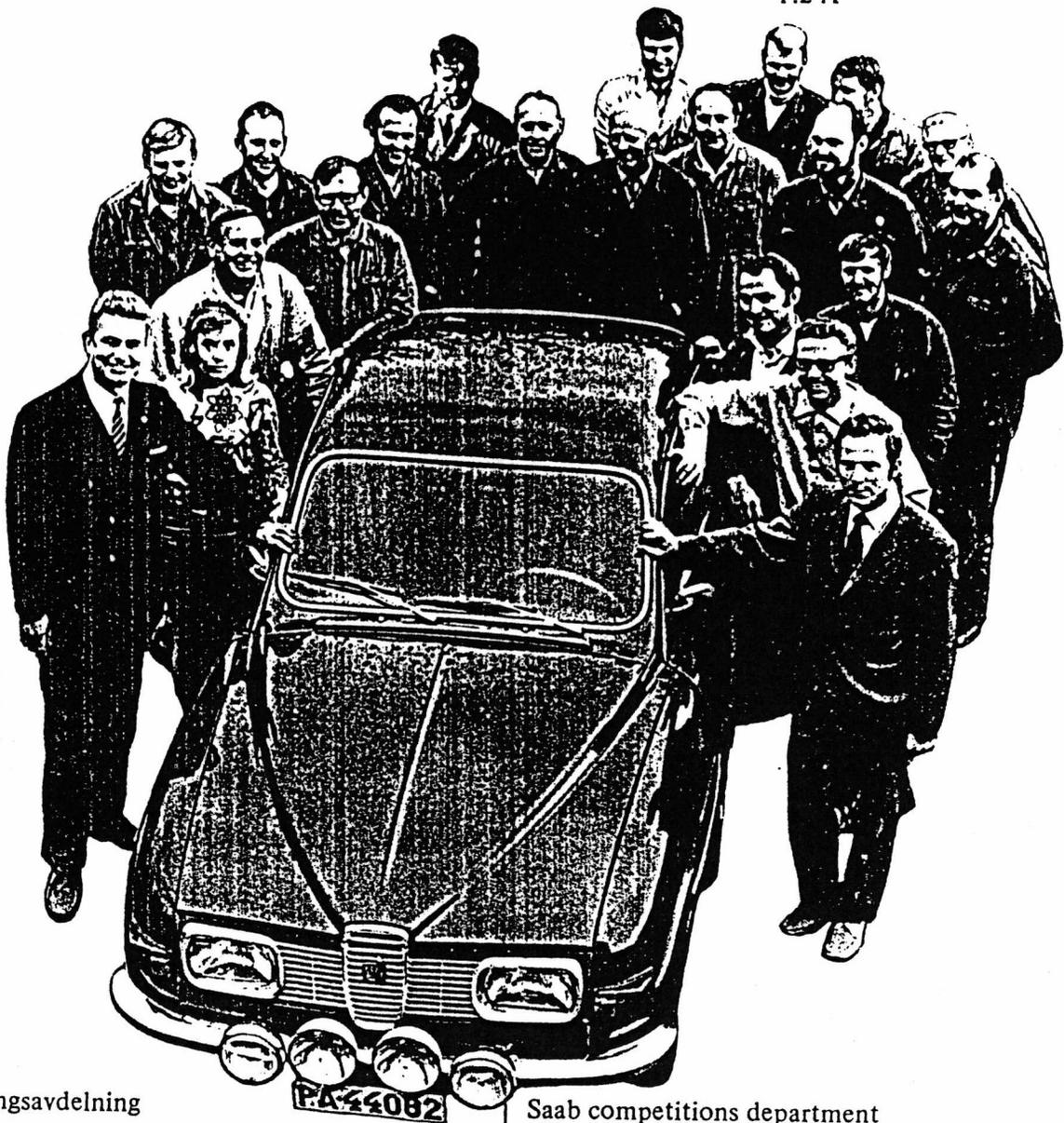
It often results in improvements of standard cars such as brakes, cooling, transmission, steering etc.

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 stands 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.



Saab:s tävlingsavdelning

Saab competitions department

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

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

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

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

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.

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.

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

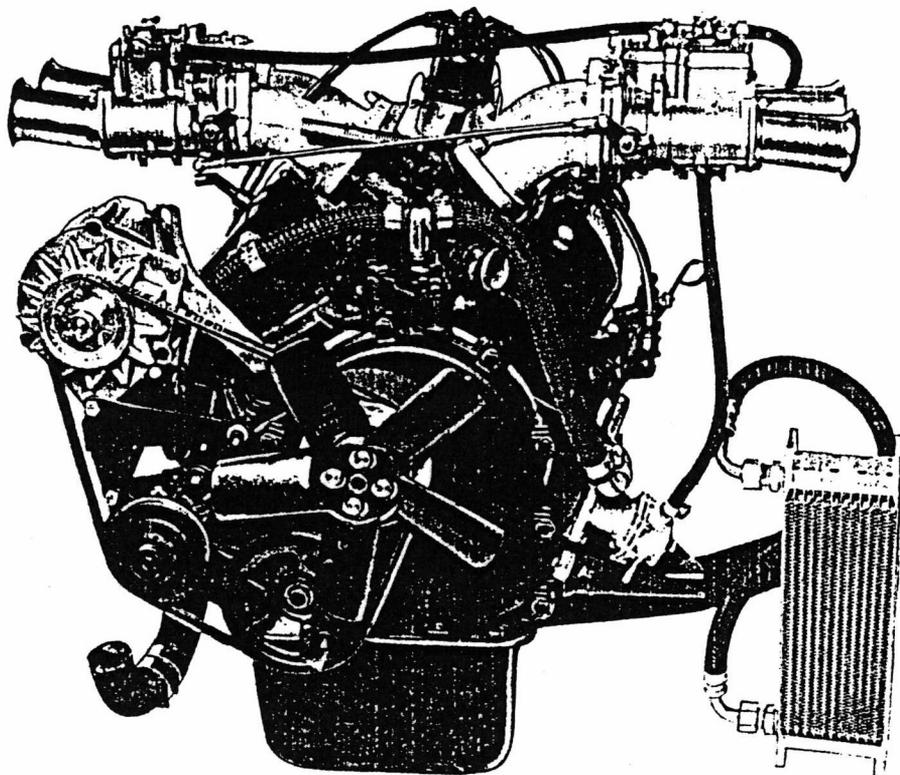
Another of the competitions department's most important tasks is the developing and testing of all parts which are marketed by Saab Sport & Rally.



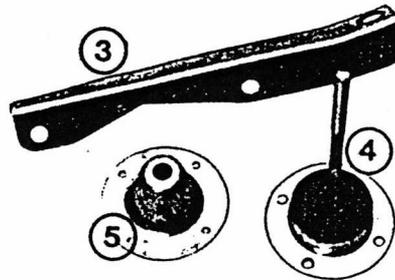
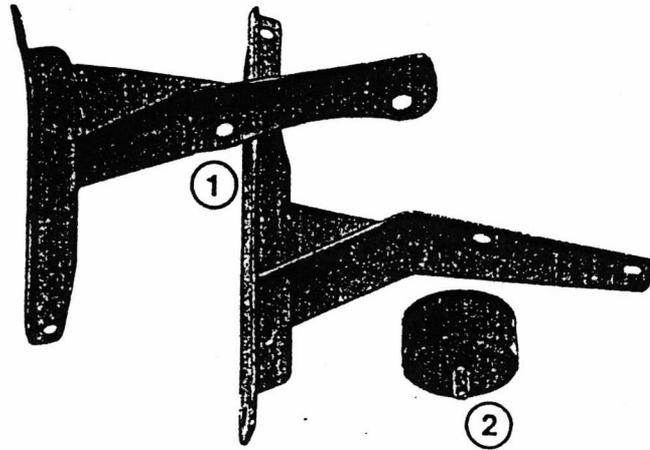


Tävlingsdetaljer
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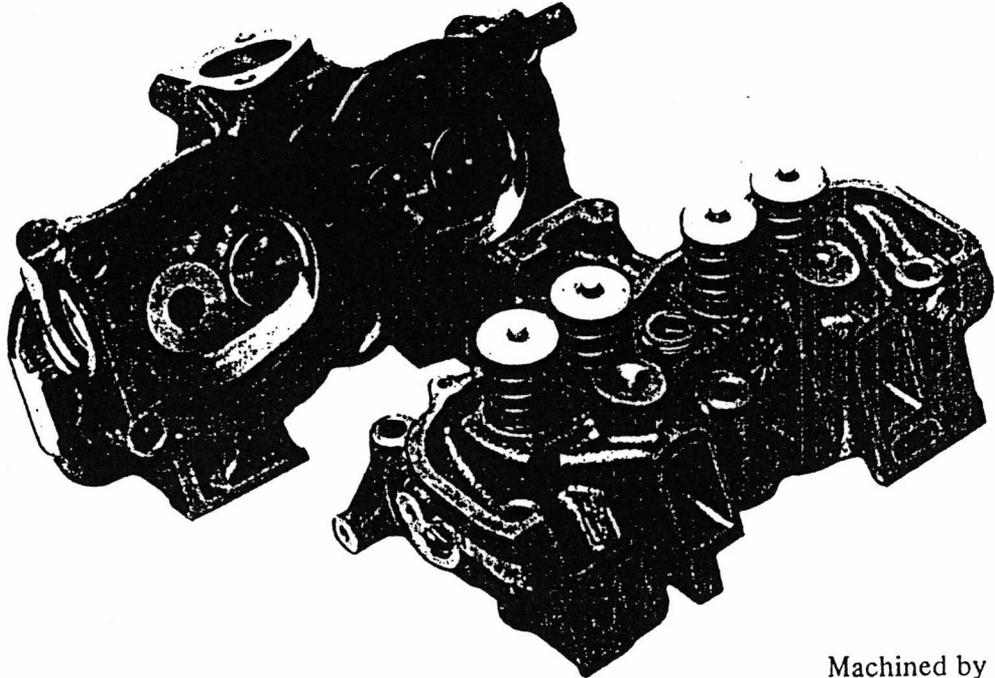
Grupp	Nr No	Group
Motorer	1	Engines
Motorkropp	2	Engine body
Vevaxel och kolvar	3	Crankshaft and pistons
Ventilsystem	4	Valve system
Motorpackningar	5	Engine gaskets
Smörjsystem	6	Lubrication system
Tändsystem	7	Ignition system
Bränslesystem	8	Fuel system
Avgassystem	9	Exhaust system
Kylsystem	10	Cooling system
Kraftöverföring	11	Transmission
Fjädring, hjul, bromsar	12	Suspension, wheels, brakes



Benämning	Ant Qty	Pos	Det nr Part no	Anmärkning Remarks	Description
Motor grp 2	1	1	10009		Engine grp 2



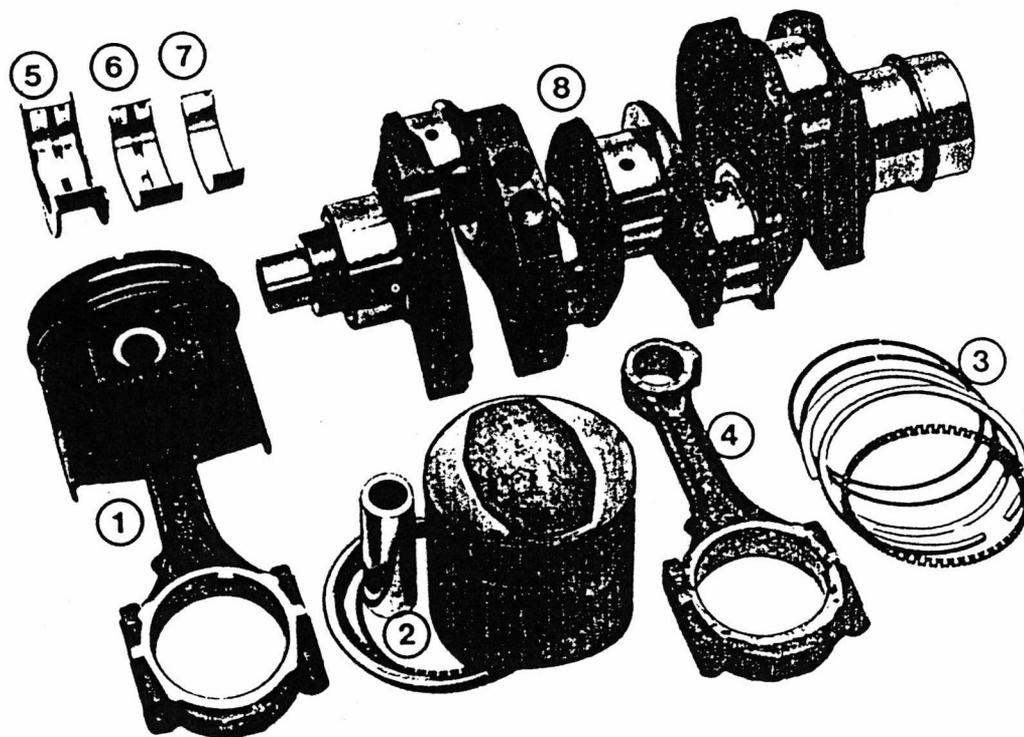
Benämning	Ant Qty	Pos	Det nr Part no	Anmärkning Remarks	Description
Järn (motorfäste)	1	1	10181		Bracket (engine support)
Gummikudde (motorfäste)	2	2	(10)8801706		Engine cushion
Fäste (växellåda)	1	3	(10)7104698		Bracket (gear box)
Stödkudde (växellåda)	1	4	(10)7332398		Support cushion (gear box)
Fäste (växellåda)	1	5	(10)7176423		Bracket (gear box)



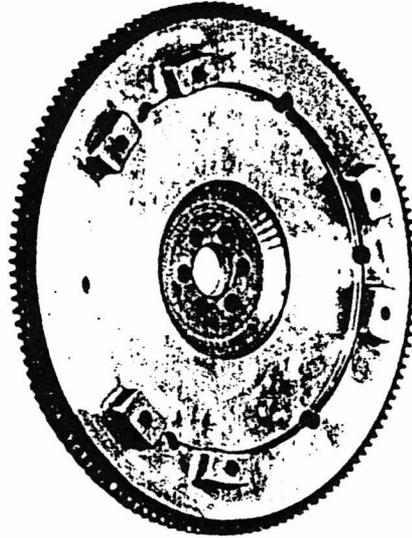
Bearbetat enl. ritning
 92.8-2804, 92.8-2971,
 92.8-2960.

Machined by
 drawing
 92.8-2804, 92.8-2971
 92.8-2960.

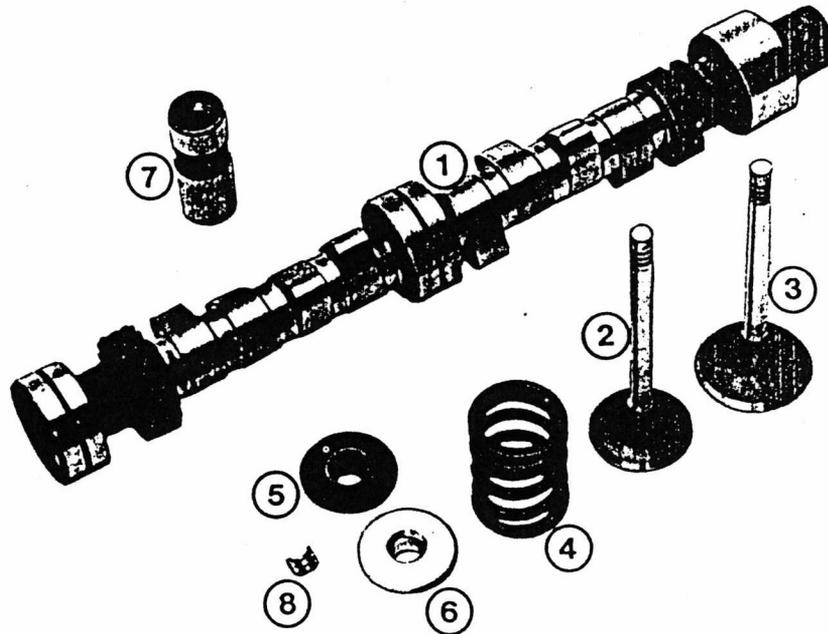
Benämning	Ant Qty	Pos	Det nr Part no	Anmärkning Remarks	Description
Topplöckssats			12849		Cylinder head set



Benämning	Ant	Det nr	Anmärkning	Description
	Qty	Part no	Remarks	
Kolv kpl m vevstake, gjuten, 90 mm	4 1	10017	1700 cc	Piston assy with connecting rod, cast, 90 mm
Kolv kpl m vevstake, gjuten, 91 mm	4 1	10025	1700 cc	Piston assy with connecting rod, cast, 91 mm
Kolv kpl, smidd, 91 mm	4 2	10033	1500 cc	Piston assy, forged, 91 mm
Kolv kpl, smidd, 91 mm	4 2	10041	1700 cc	Piston assy, forged, 91 mm
Kolv kpl, smidd, 93 mm	4 2	12732	1815 cc	Piston assy, forged, 93 mm
Kolvringar, sats	4 3	10066	10033, 10041	Piston ring, set
Kolvringar, sats	4 3	13128	12732	Piston ring, set
Vevstake	4 4	13144	10033, 10041	Connecting rod
Ramlager, mittre, blå	2 5	(10)8812414		Bearing, centre, blue
Ramlager, mittre, röda	2 5	(10)8812406		Bearing, centre, red
Ramlager, yttre, blå	4 6	(10)8812398		Bearing, outer, blue
Ramlager, yttre, röda	4 6	(10)8812380		Bearing, outer, red
Vevstakslager, blå	8 7	(10)8811226		Bearing, con.rod, blue
Vevstakslager, röda	8 7	(10)8811218		Bearing, con.rod, red
Vevaxel (modifierad)	1 8	10629	1700 cc	Crankshaft (modified)



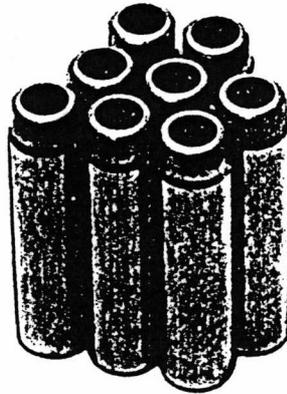
Benämning	Det nr Part no	Anmärkning Remarks	Description
Svänghjul kpl, gjutet	11692	Lättat Lightned	Flywheel assy, cast
Svänghjul kpl, smitt	13656		Flywheel assy, forged



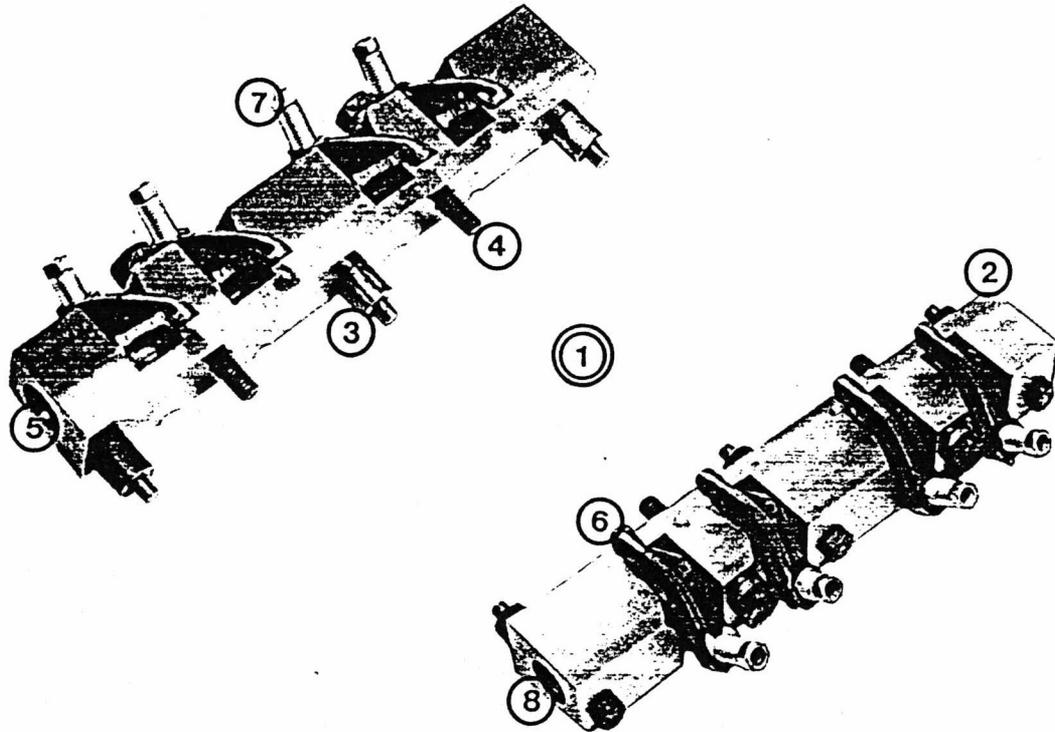
Benämning	Ant Qty	Pos	Det nr Part no	Anmärkning Remarks	Description
Kamaxel 7,2	1	1	10074		Camshaft 7,2
Kamaxel 7,6	1	1	10088		Camshaft 7,6
Kamaxel 8,3	1	1	12765		Camshaft 8,3
Avgasventil, 37 mm	4	2	10108		Valve, exhaust, 37 mm
Avgasventil, 38 mm	4	2	11676		Valve, exhaust, 38 mm
Insugningsventil, 42 mm	4	3	10090		Valve, inlet, 42 mm
Insugningsventil, 44 mm	4	3	11684		Valve, inlet, 44 mm
Ventilfjäder	8	4	10116		Valve spring
Ventilfjäderbricka	8	5	10876	Första montering 1:st assembly	Valve spring retainer
Ventilfjäderbricka	8	6	10124	Andra montering 2:nd assembly	Valve spring retainer
Ventillyftare	8	7	10132		Tappet
Knaster	16	8	(10)8833956		Lock



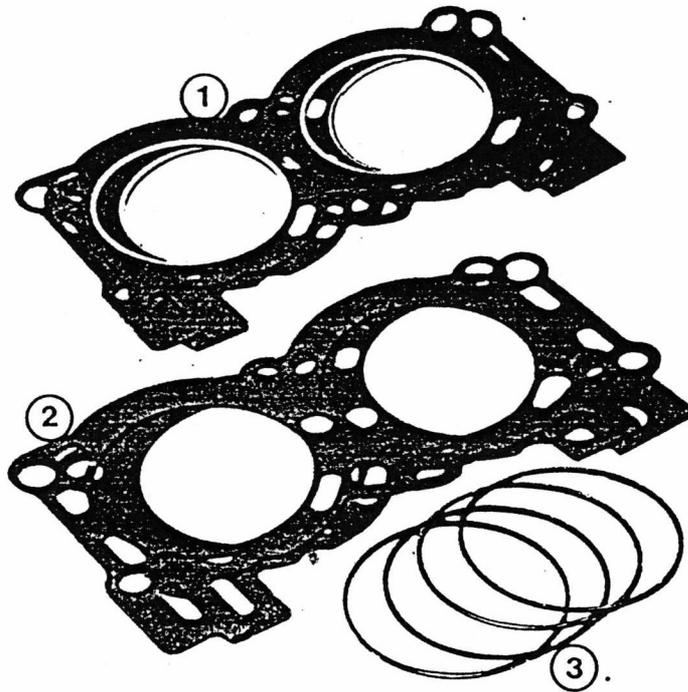
Tävlingsdetaljer
Competition parts
Ventilsystem
Valve system
2:4 B



Benämning	Det nr Part no	Anmärkning Remarks	Description
Ventilstyrningar	11726		Valve guides



Benämning	Ant Qty	Pos	Det nr Part no	Anmärkning Remarks	Description
Vipparmsbryggor kpl	1	1	11718		Supports, rocker arms assy
.Lagerbock	2	2	13045		.Support
.Distanshylsa	6	3	13052		.Spacer tube
.Skruv	6	4	13060		.Screw
.Axel	2	5	(10)8814295		.Shaft
.Vipparm	8	6	(10)8810871		.Rocker arm
.Ställskruv	8	7	(10)8812208		Adjustment screw
.Spännstift	4	8	(10)8810384		.Roll pin

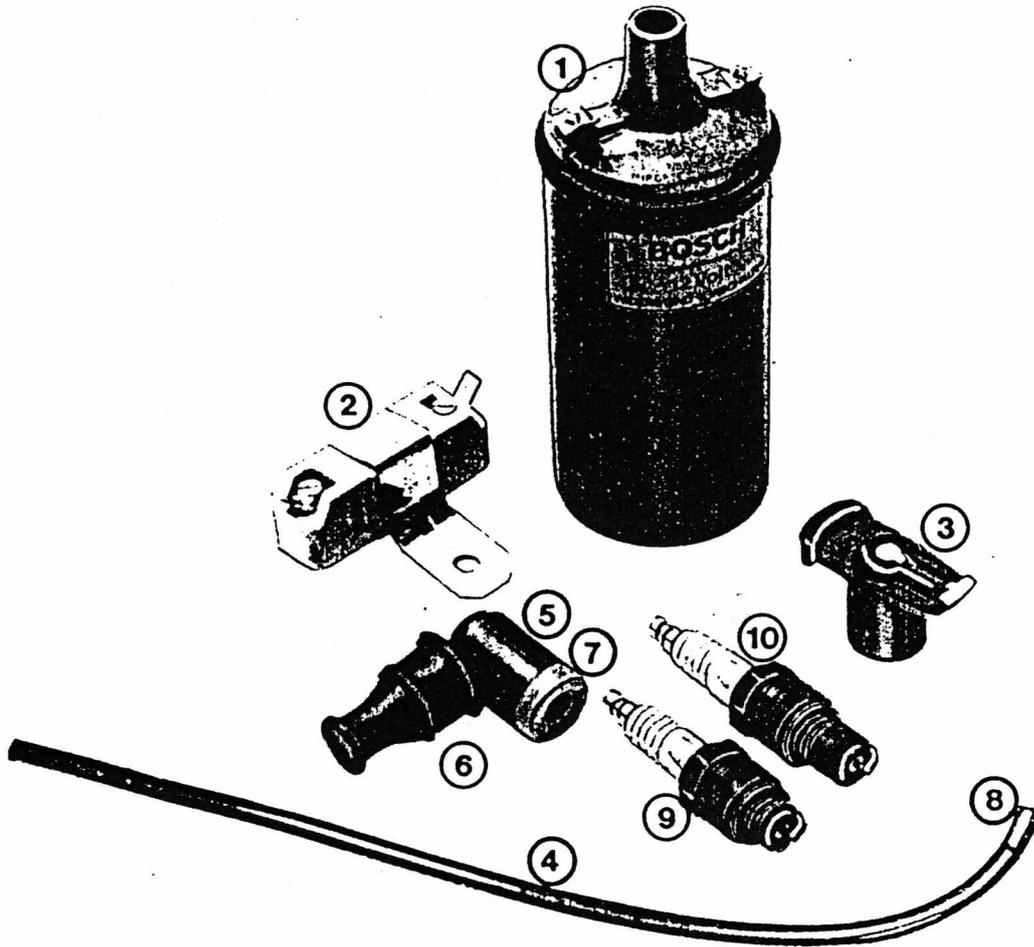


Benämning	Pos	Det nr Part no	Anmärkning Remarks	Description
Topplockspackningar	1	11734	Grå motor Grey engine	Head gaskets
Topplockspackningar	1	10173		Head gaskets
Topplockspackningar	2	10157	Utan skoning (91 mm) Without lining	Head gaskets
Topplockspackningar	2	12757	Utan skoning (93 mm) Without lining	Head gaskets
Tätningssringar	3	10165	10157	Seal reings
Tätningssringar	3	12740	12757	Seal rings

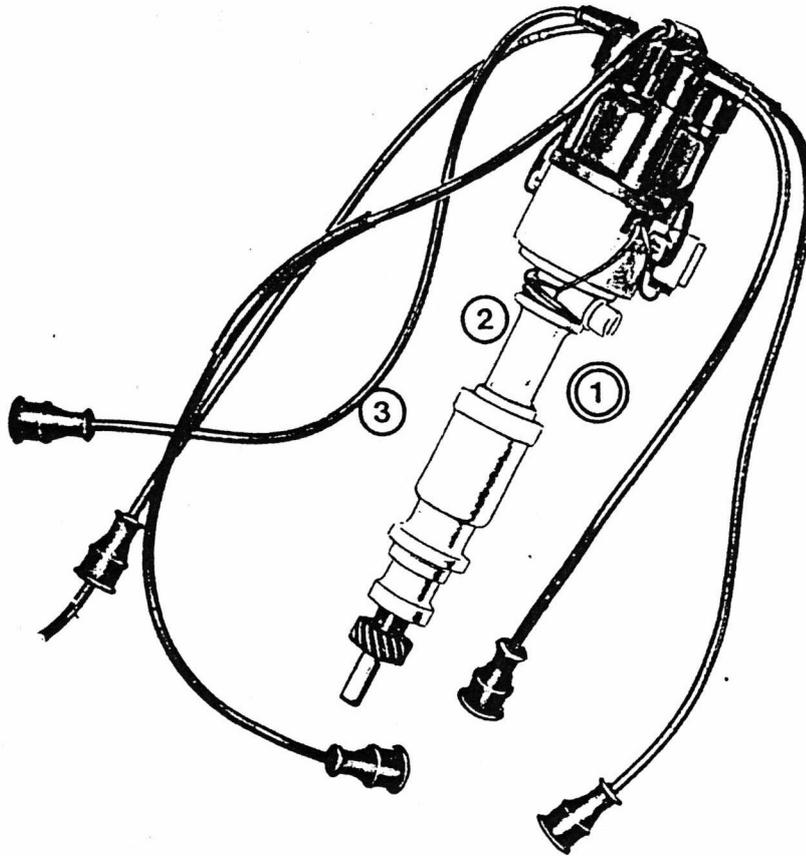


Benämning	Ant Qty	Pos	Det nr Part no	Anmärkning Remarks	Description
Fjäder, oljepump	1	1	10140		Spring, oil pump

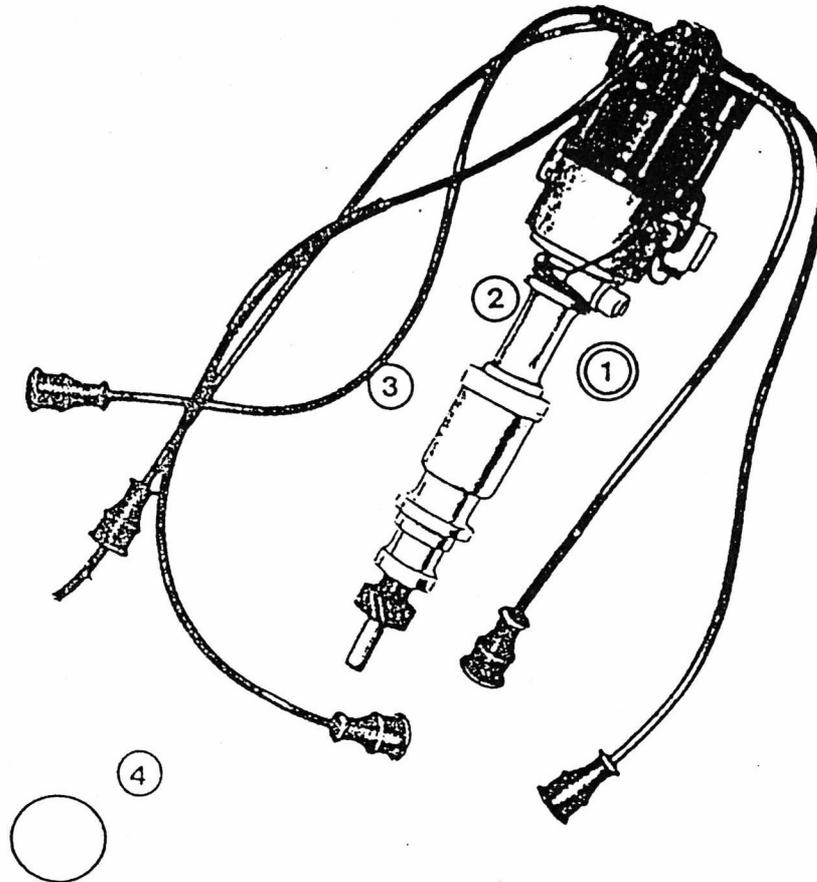
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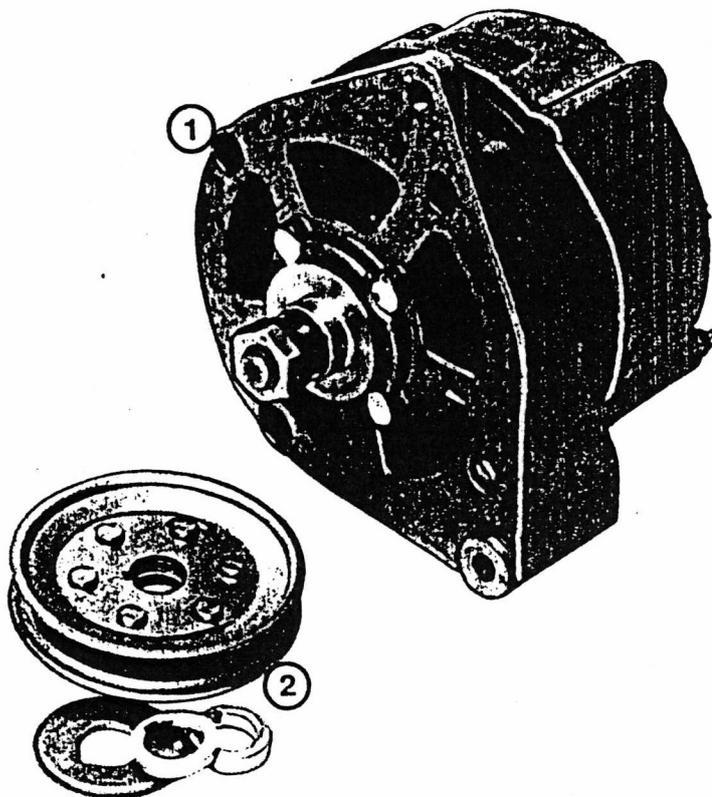
Benämning	Ant Qty	Pos	Det nr Part no	Anmärkning Remarks	Description
Tändspole	1		(10)8506636		Ignition coil
Förkopplingsmotstånd	2		(10)8300592		Serial resistance
Fördelararm	3		11775		Distributor arm
Tändkabel	4		(10)8830408		Ignition cable
Tändkabelhatt	5		(10)7125701		Spark plug connection
Gummihatt	6		(10)7189657		Rubber sleeve
Gumming	7		(10)7125743		Rubber ring
Kabelsko	8		(10)7809932		Cable terminal
Tändstift AE 901	9		11767	Grå motor Grey engine	Spark plug AE 901
Tändstift AG 901	10		10991		Spark plug AG 901
Tändstift WG 215 T30	10	(40)	234110005		Spark plug WG 215 T30



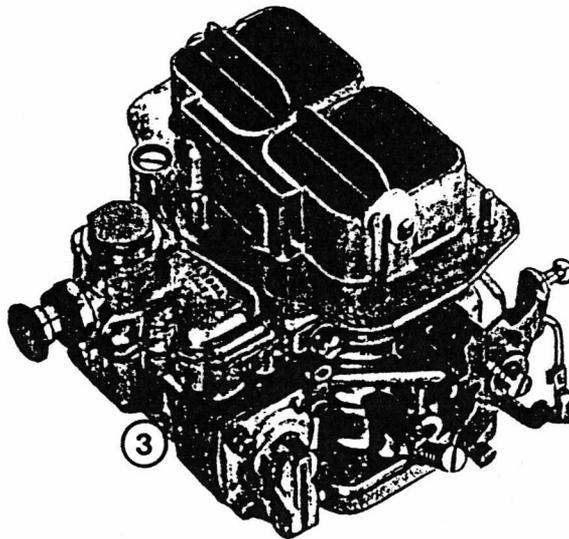
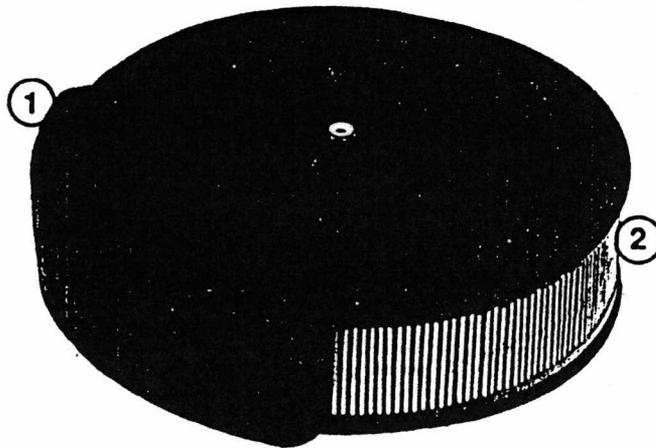
Benämning	Ant Qty	Pos	Det nr Part no	Anmärkning Remarks	Description
Tändfördelare, sats	1	1	13623	13599, 13607	Distributor, set
.Tändfördelare	1	2	12591		.Distributor
.Tändkabel	1	3	13573	Cyl. 1	.Ignition cable
.Tändkabel	1		13540	Cyl. 2	.Ignition cable
.Tändkabel	1		13557	Cyl. 3	.Ignition cable
.Tändkabel	1		13565	Cyl. 4	.Ignition cable
.Tändkabel	1		13581	Spole-förd. Coil-distr.	.Ignition cable



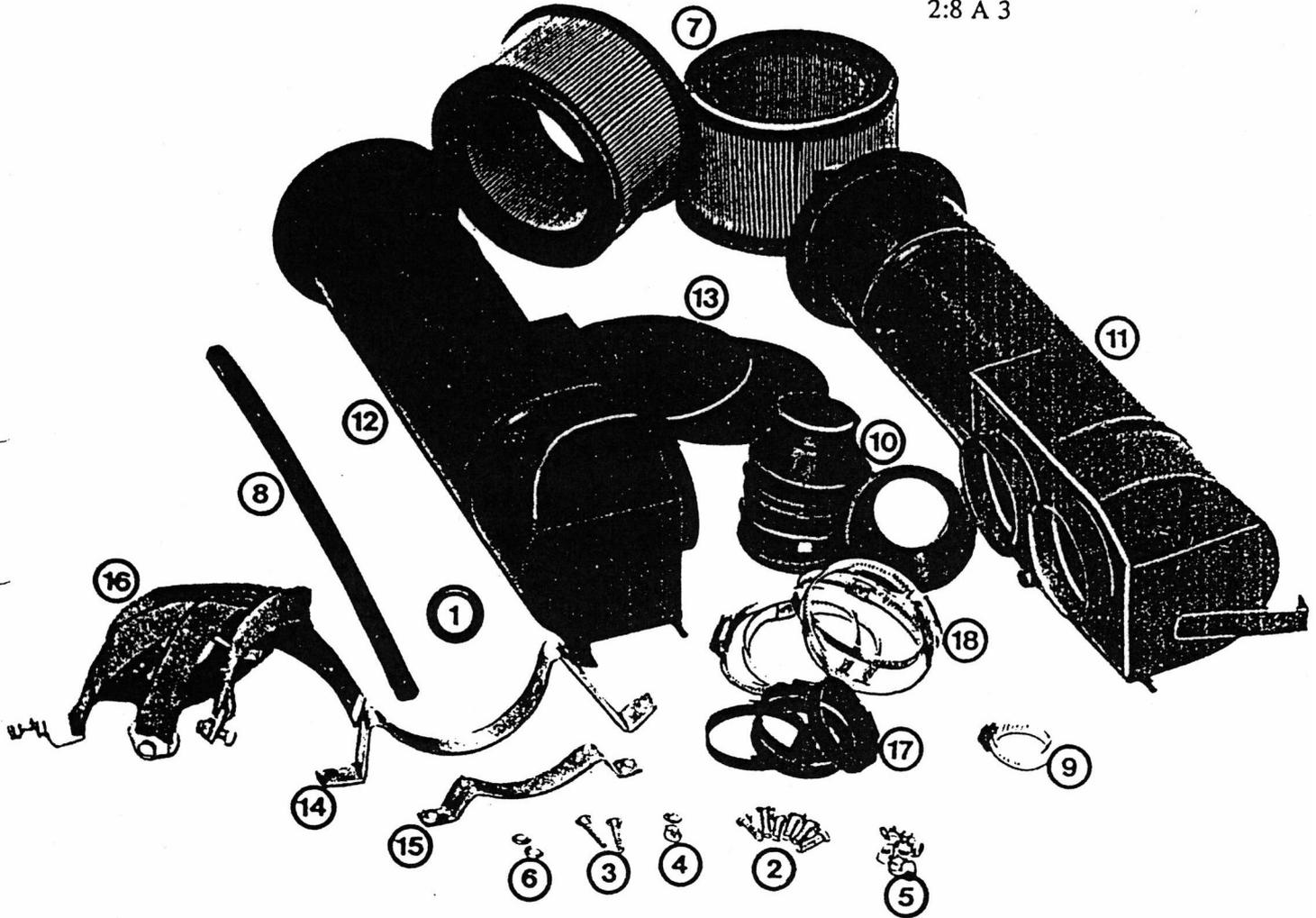
Benämning	Ant Qty	Pos	Det nr Part no	Anmärkning Remarks	Description
Tändfördelare, sats	1	1	13623	13599, 13607	Distributor, set
.Tändfördelare	1	2	12591		.Distributor
.Tändkabel	1	3	13573	Cyl. 1	.Ignition cable
.Tändkabel	1		13540	Cyl. 2	.Ignition cable
.Tändkabel	1		13557	Cyl. 3	.Ignition cable
.Tändkabel	1		13565	Cyl. 4	.Ignition cable
.Tändkabel	1		13581	Spole-förd. Coil-distr,	.Ignition cable
.O-ring	1	4	13268		. Oil-seal



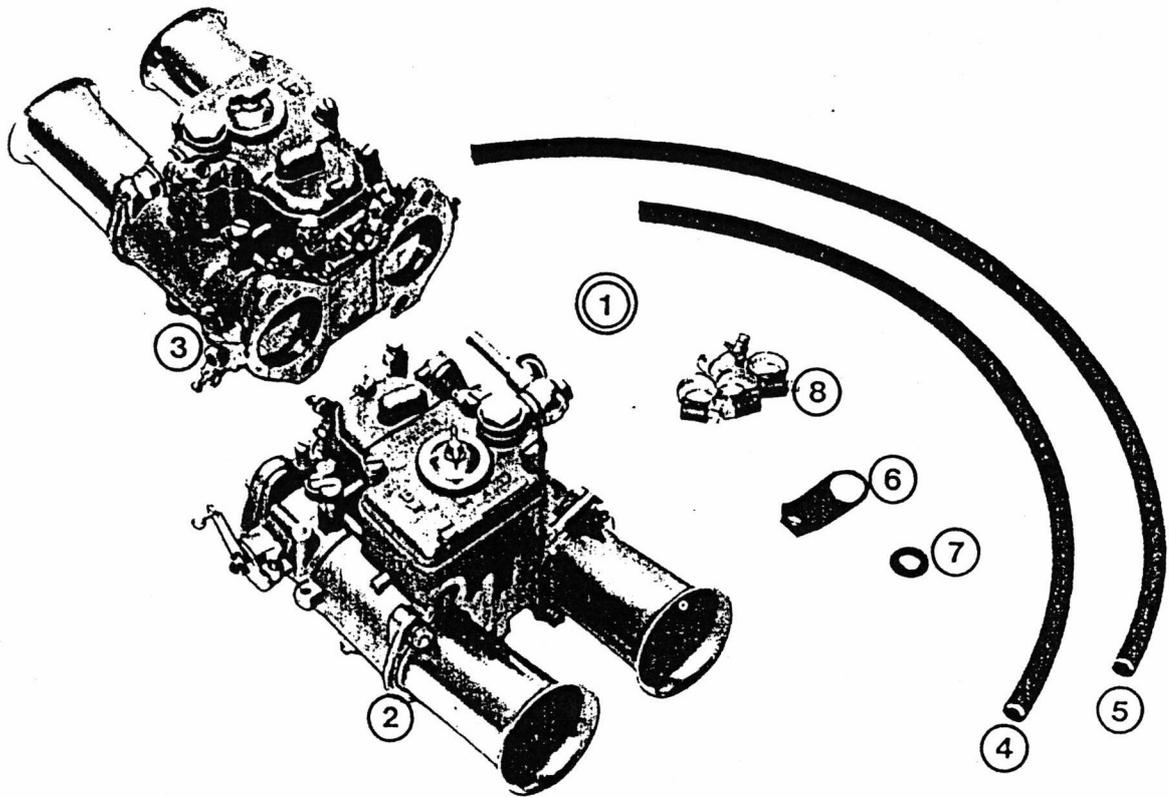
Benämning	Ant Qty	Pos	Det nr Part no	Anmärkning Remarks	Description
Generator	1	1	11791	55 amp	Alternator
Remskiva	1	2	13102		Pulley



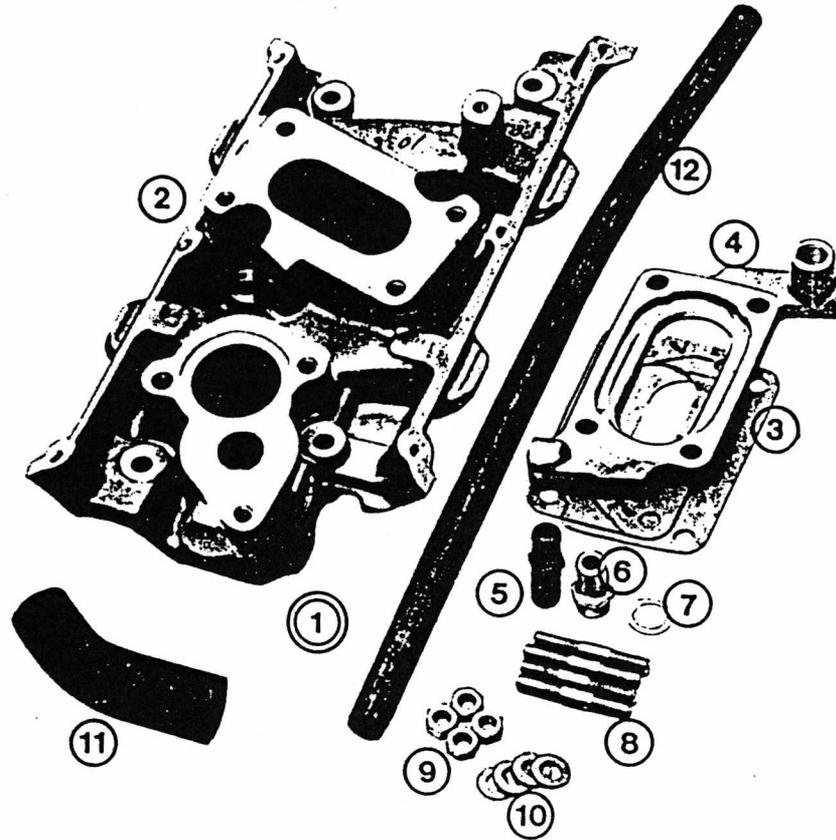
Benämning	Pos	Det nr Part no	Anmärkning Remarks	Description
Luftfilter exkl. insats	1	10215		Air cleaner
Insats	2	(10)8860439		Insert
Packning		11569		Gasket
Förgasare	3	10199	Weber DFI 40/2	Carburettor
Tomgångmunstycke 65		10363		Idle jet 65
Huvudmunstycke 190		10371		Main jet 190
Huvudmunstycke 200		10389		Main jet 200
Huvudmunstycke 210		10397		Main jet 210
Huvudmunstycke 230		10405		Main jet 230



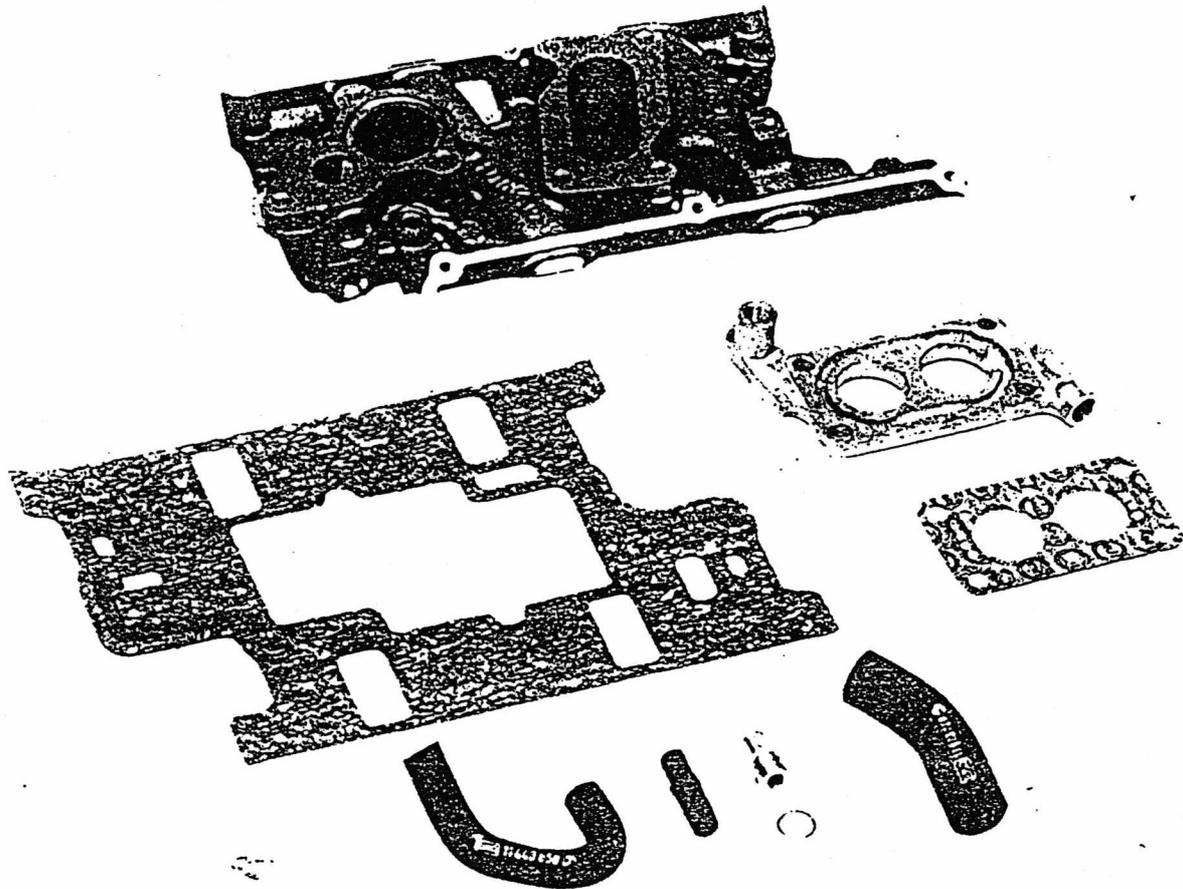
Benämning	Ant Oty	Pos	Det nr Part no	Anmärkning Remarks	Description
Luftfiltersats	1	1	13631		Air cleaner set
.Skruv	6	2	(10)7903016		.Screw
.Skruv	2	3	(10)7903024		.Screw
.Mutter	2	4	(10)7914690		.Nut
.Mutter	8	5	(10)7940406		.Nut
.Bricka	2	6	(10)8029969		.Washer
.Filterinsats	2	7	(10)8384737		.Insert
.Slang	1	8	(10)8834863		.Hose
.Klammer	4	9	(10)7355233		.Clamp
.Gummibälg	4	10	12641		.Rubber bellows
.Filterhus, vänster	1	11	12658		.House, left
.Filterhus, höger	1	12	12666		.House, right
.Lock	2	13	13185		.Cap
.Filterfäste, vänster	1	14	13193		.Bracket, left
.Filterfäste, höger	1	15	13201		.Bracket, right
.Lasband	2	16	13250		.Lock strap
..Band			(10)8436552		..Strap
..Skruv			(10)7903016		..Screw
..Mutter			(10)7940422		..Nut
.Klammer	2	17	14068		.Clamp
.Klammer	2	18	14076		.Clamp



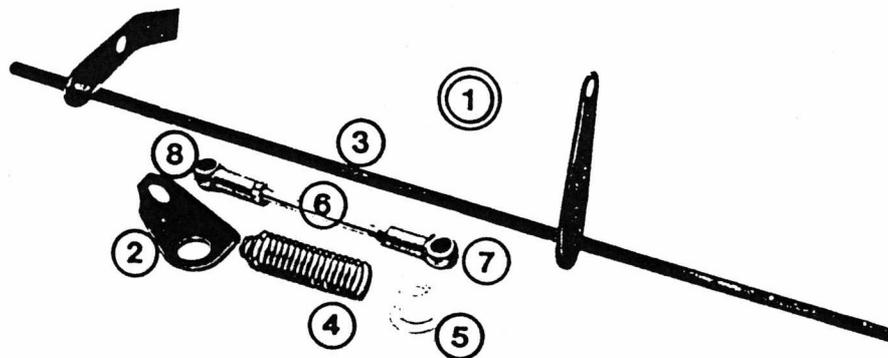
Benämning	Ant Qty	Pos	Det nr Part no	Anmärkning Remarks	Description
Förgasare, sats	1	1	13607		Carburettor, set
.Förgasare, vänster	1	2	12385		.Carburettor, left
.Förgasare, höger	1	3	12393		.Carburettor, right
.Bränsleslang	1	4	12559	480 mm	.Fuel hose
.Bränsleslang	1	5	12567	640 mm	.Fuel hose
.Fäste	1	6	13672		.Bracket
.Gummigenomföring	1	7	13680		.Grommet
.Slangklamma	4	8	(40)517500005		.Hose clamp



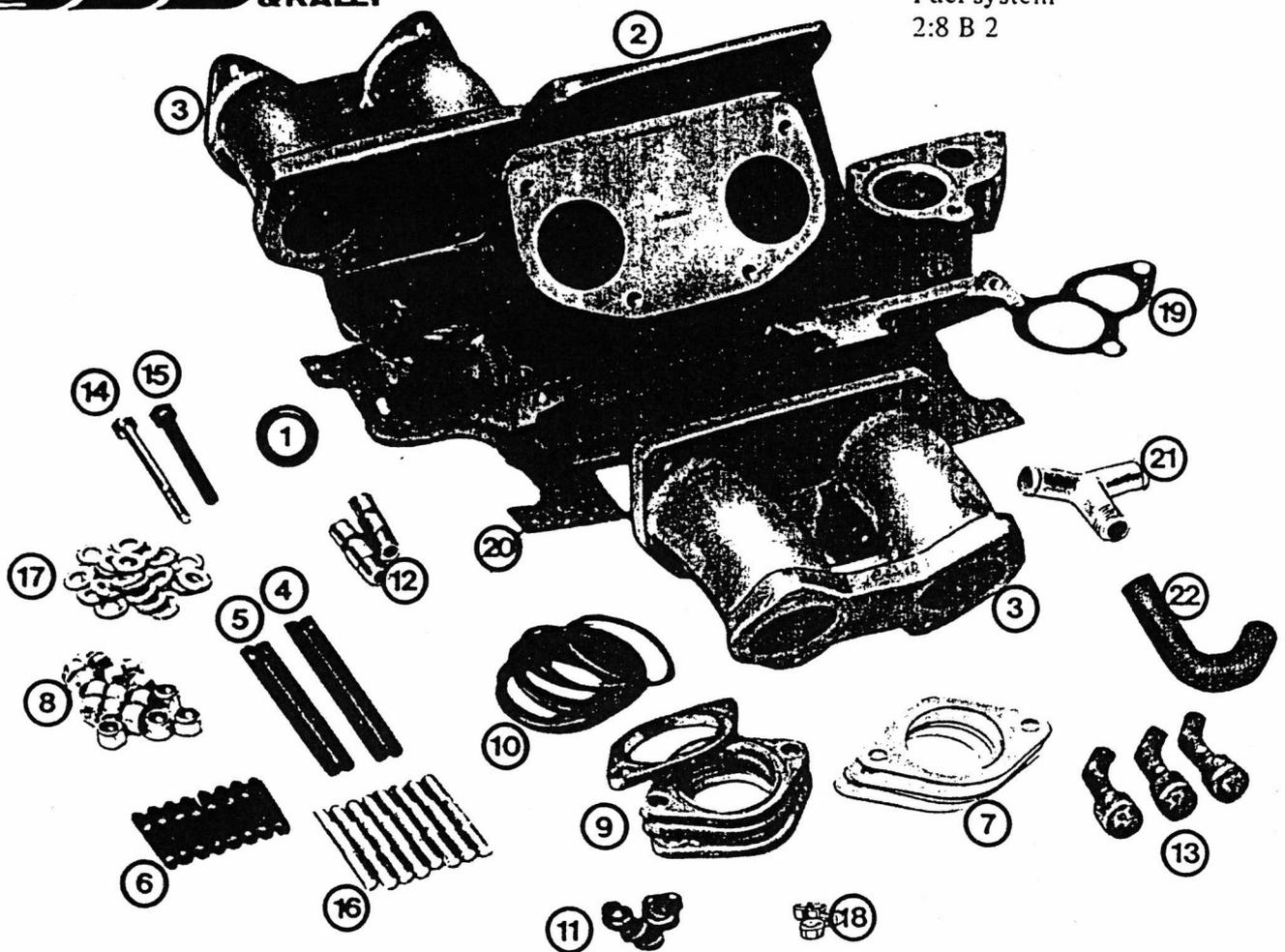
Benämning	Ant Qty	Pos	Det nr Part no	Anmärkning Remarks	Description
Insugningsrör kpl	1	1	10223	10199	Inlet manifold assy
.Insugningsrör	1	2	11320		.Inlet manifold
.Packning	2	3	11429		.Gasket
.Mellanfläns	1	4	11437		.Intermediate flange
.Nippel	1	5	(10)8812141		.Nipple
.Nippel	1	6	(10)8807547		.Nipple
.Packning	1	7	(10)8814105		.Gasket
.Pinnskruv	4	8	(10)8810582		.Stud
.Mutter	4	9	(10)8810228		.Nut
.Planbricka	4	10	(10)8810236		.Washer
.Slang	1	11	(10)8803488		.Hose
.Slang	1	12	(10)8834863		.Hose
.Nippel	1		11445		.Nipple



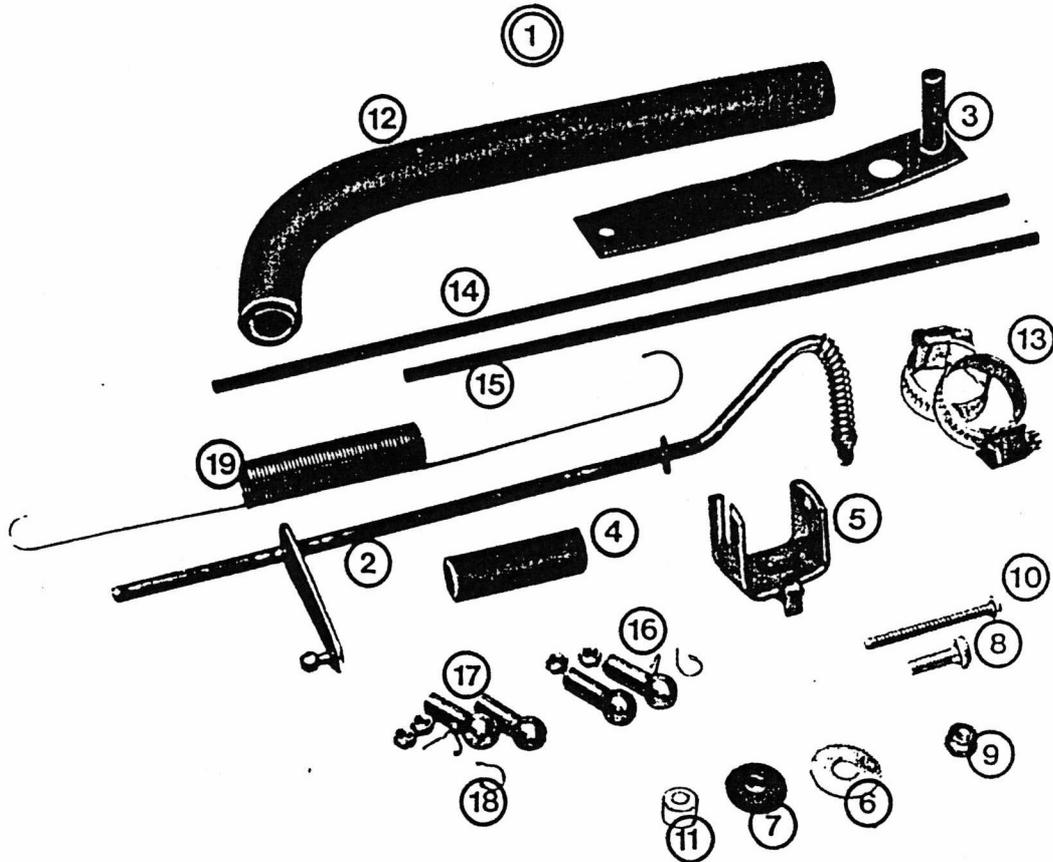
Benämning	Ant Qty	Det.nr Pos Part no	Anmärkning Remark	Description
Insugningsrör	1	11320	Ingår i 11254 Included in 11254	Inlet manifold
Packning do	1	(10)8831034		Gasket do
Mellanfläns	1	11270		Intermediate flange
Packning do	2	11288		Gasket do
Nippel för vevhusventil	1	(10)8812141		Nipple Crank case ventilation
Nippel för servo	1	(10)8807547		Nipple booster
Packning do	1	(10)8814105		Gasket do
Slang vänster kåpa	1	11411		Hose left valve cover
Slang höger kåpa till filter	1	(10)8803488		Hose right valve cover to air cleaner



Benämning	Ant Qty	Pos	Det nr Part no	Anmärkning Remarks	Description
Gasreglage kpl	1	1	10207	10199	Carburettor control assy
.Konsol	1	2	11338		.Bracket
.Reglageaxel	1	3	11825		.Control shaft
.Fjäder	1	4	(10)7348121		.Spring
.Plastbussning	1	5	(10)7079247		.Bushing
.Saxpinne	1		11387		.Cotter pin
.Tryckstång	1	6	11353		.Push rod
.Kulskål, vänstergängad	1	7	12500		.Ball seat, left handed
.Mutter, vänstergängad	1		12518		.Nut, left handed
.Kulskål, hörgängad	1	8	12526		.Ball seat, right handed
.Mutter, hörgängad	1		12534		.Nut, right handed
.Bygel	2		12542		.Clamp

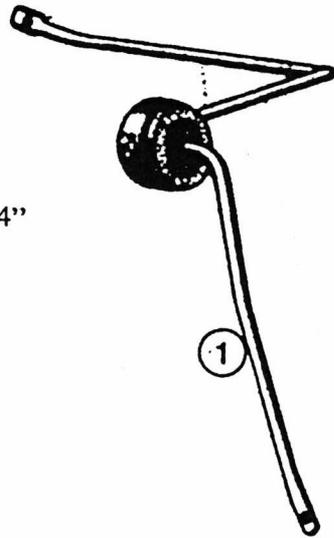


Benämning	Ant	Pos	Det nr	Anmärkning	Description
	Qty		Part no	Remarks	
Insugningsrör, sats	1	1	13599	13607	Inlet manifold, set
.Insugningsrör	1	2	12690		.Inlet manifold
.Skarvrör	2	3	12708		.Extension tube
.Fästbult	2	4	12435	110 mm	.Bolt
.Fästbult	2	5	12716	100 mm	.Bolt
.Pinnskruv	8	6	12674	M8x40	.Stud
.Packning	4	7	12443		.Gasket
.Mutter	16	8	12682	M8	.Nut
.Mellanfläns	4	9	12450		.Intermediate flange
.O-ring	8	10	12468	50x4	.O-ring
.Dubbel fjäderbricka	8	11	13078		.Double spring washer
.Nippel	2	12	12476		.Nipple
.Flamskydd	3	13	12575		.Flame guard
.Fästbult	1	14	(10)8810616	85 mm	.Bolt
.Fästbult	1	15	(10)8810459		.Bolt
.Pinnskruv	8	16	(10)8810590	M8x60	.Stud
.Planbricka	22	17	(10)8810236		.Washer
.Mutter	4	18	(10)8831281		.Nut
.Packning, termostat	1	19	(10)8811895		.Gasket, thermostat
.Packning	1	20	(10)8831034		.Gasket
.T-rör	1	21	(10)880747		.T-tube
.Slang	1	22	(10)8812331		.Hose

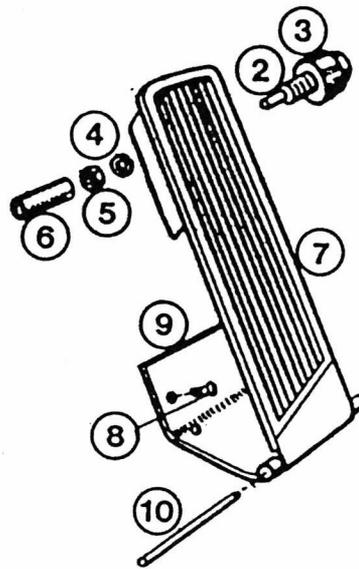


Benämning	Ant Qty	Pos	Det nr Part no	Anmärkning Remarks	Description
Reglagesats	1	1	13615	13607	Throttle lever kit
.Reglageaxel	1	2	12617		.Throttle lever
.Reglagekonsol	1	3	12625		.Throttle bracket
.Skarvrör	1	4	12633		.Extension tube
.Hävarm	1	5	12484		.Lever
.Bricka	1	6	(10)7311772		.Washer
.Gummigenomföring	1	7	(10)7933518		.Grommet
.Bult	1	8	(10)7903016		.Bolt
.Mutter	1	9	(10)7940422		.Nut
.Skruv	1	10	(10)7946783		.Screw
.Bussning	1	11	(10)8800567		.Bushing
.Slang	1	12	(10)8803934		.Hose
.Slangklamma	2	13	(40)517503009		.Hose clamp
.Tryckstång	1	14	12492	335 mm	.Push rod
.Tryckstång	1	15	12583	265 mm	.Push rod
.Kulskål, högergängad	3	16	12526		.Ball seat, right handed
.Mutter, högergängad	3		12534		.Nut, right handed
.Kulskål, vänstergängad	1	17	12500		.Ball seat, left handed
.Mutter, vänstergängad	1		12518		.Nut, left handed
.Låsbygel	4	18	12542		.Lock clamp
.Returfjäder	1	19	(10)7352917		.Return spring

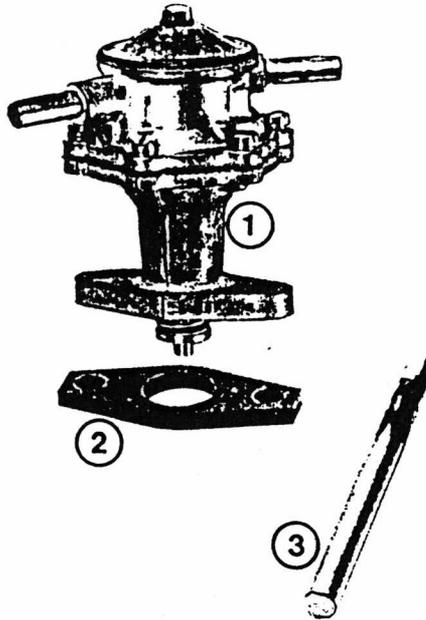
Gaspedal "Special 64"



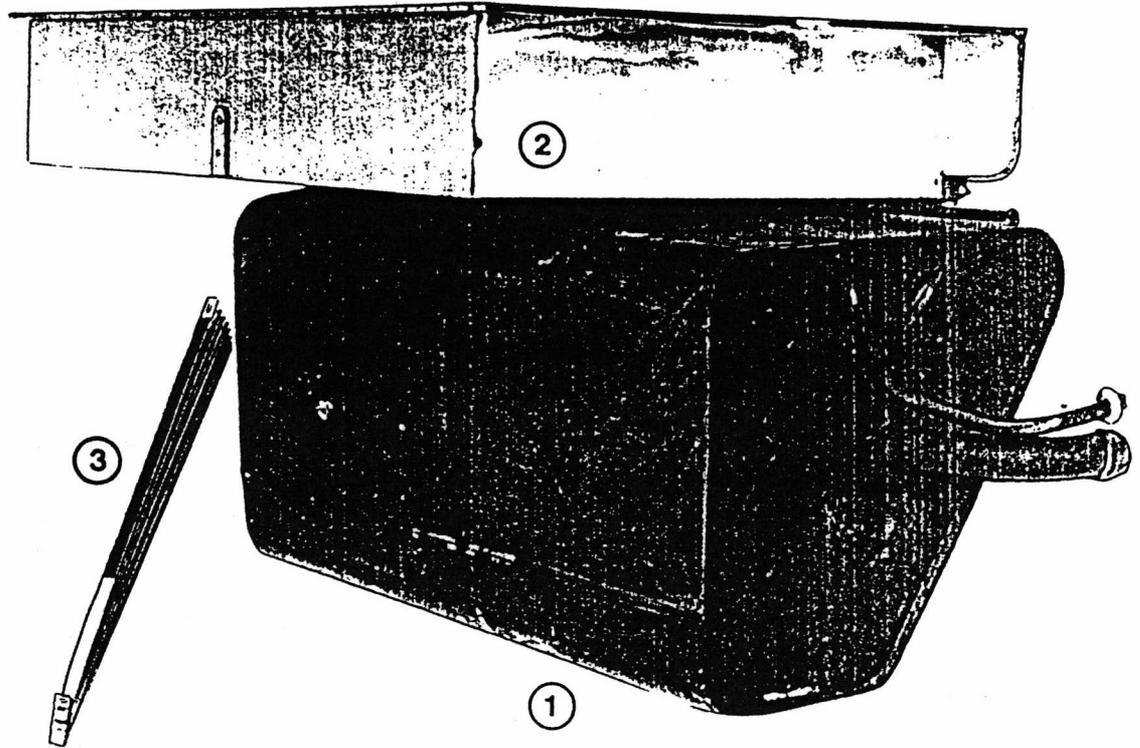
Foot throttle "Special 64"



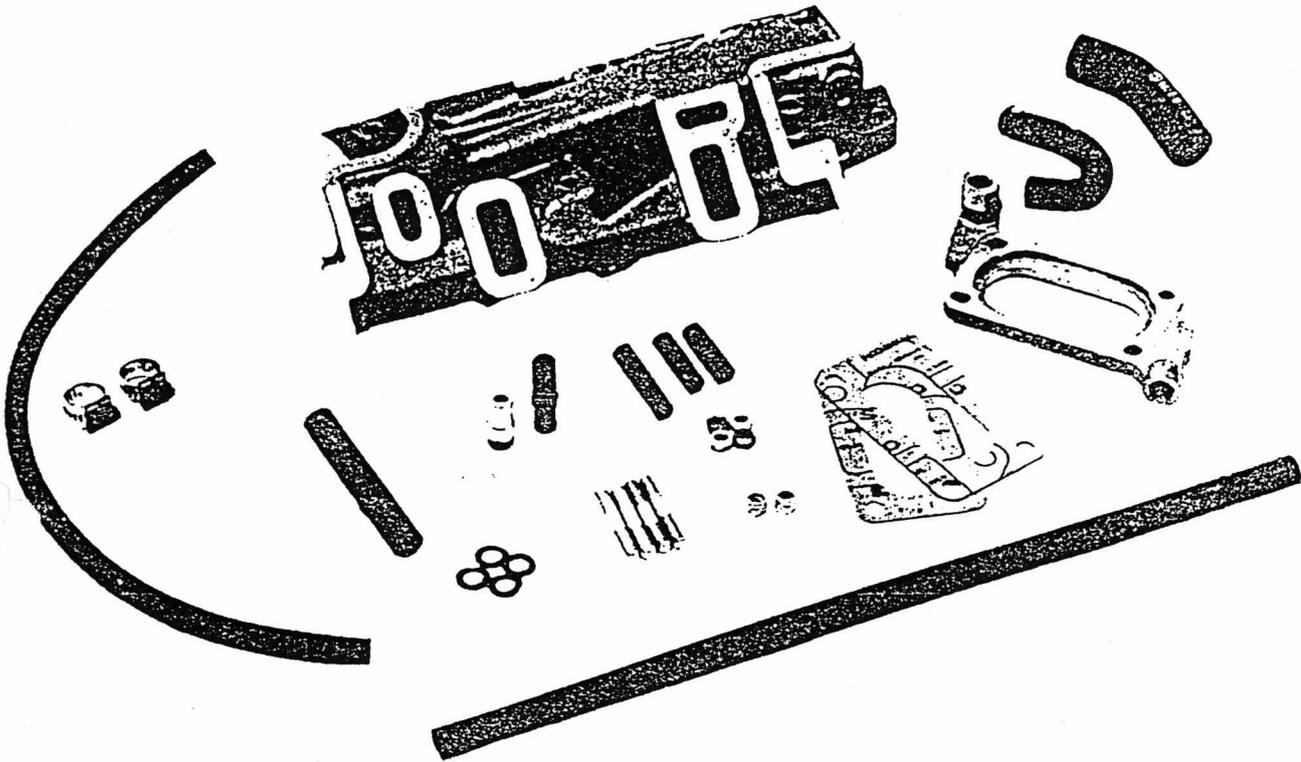
Benämning	Ant Qty	Pos	Det nr Part no	Anmärkning Remarks	Description
Pedalarm	1	1	(10)7082514		Accelerator pedal
Skruv	1	2	(10)7099864		Screw
Rulle	1	3	(10)7099849		Roller
Fjäderbricka	1	4	(10)7910540		Spring washer
Mutter	1	5	(10)7914690		Nut
Gummihylsa	1	6	(10)7109390		Rubber sleeve
Gaspedalplatta	1	7	(10)7192370		Accelerator pedal plate
Plåtskruv	2	8	(10)7922818		Self-tapping screw
Gångjärnshalva	1	9	(10)7192362		Hinge half
Pinne	1	10	(10)7192388		Pin



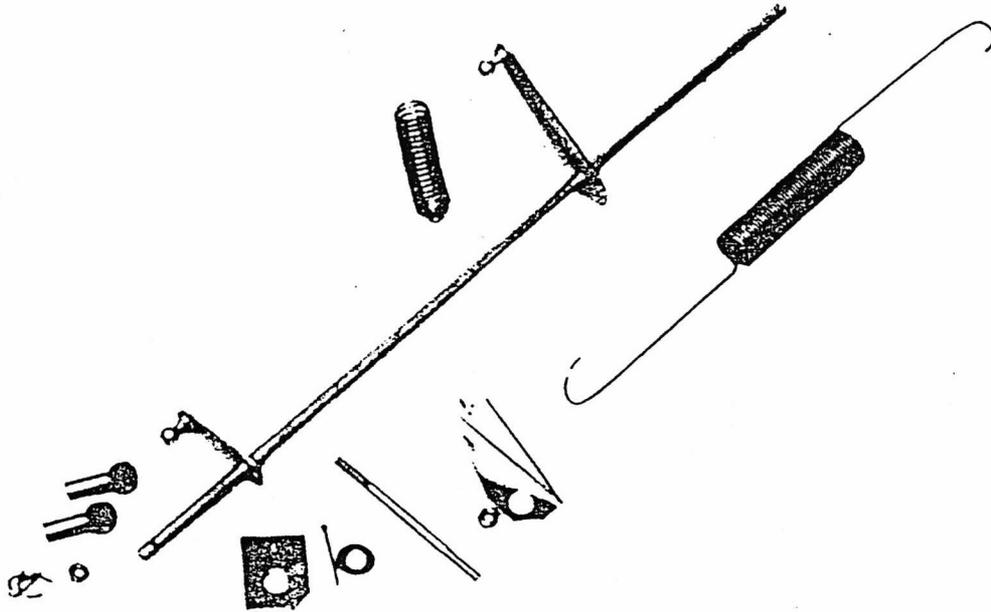
Benämning	Ant Qty	Pos	Det nr Part no	Anmärkning Remarks	Description
Bränslepump	1	1	(10)8860314		Fuel pump
Isoleringsbricka	1	2	11742		Isolating washer
Förlängd tryckstång	1	3	11759		Push rod (extended)



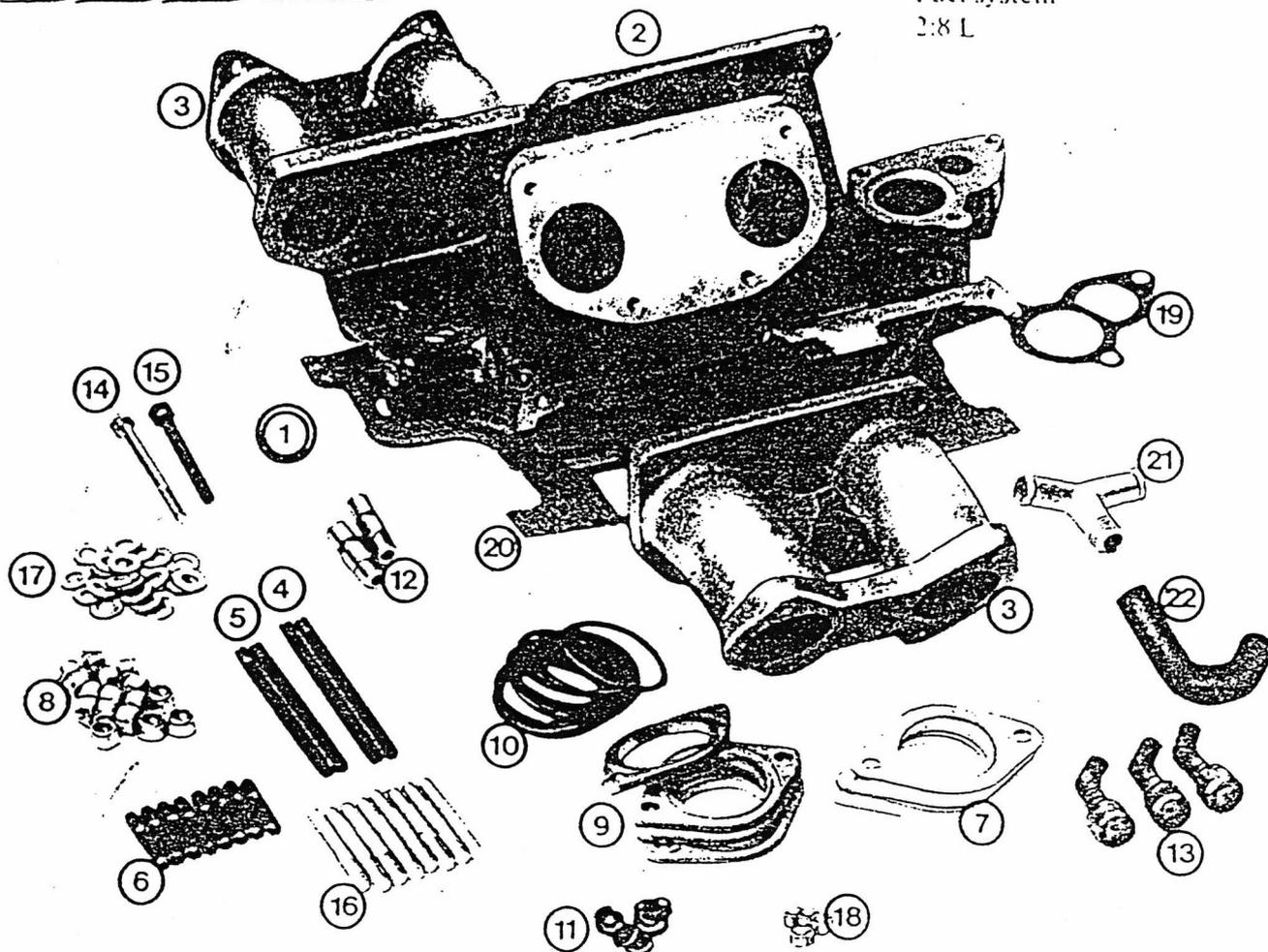
Benämning	Ant Qty	Pos	Det nr Part no	Anmärkning Remarks	Description
Bränsletank, 70 l	1	1	10330		Fuel tank, 70 l
Tankinsats, bränslemätare	1		11593		Fuel gauge transmitter
Skyddskåpa	1	2	10355		Protection cover
Monteringssats	1	3	10348		Mounting kit



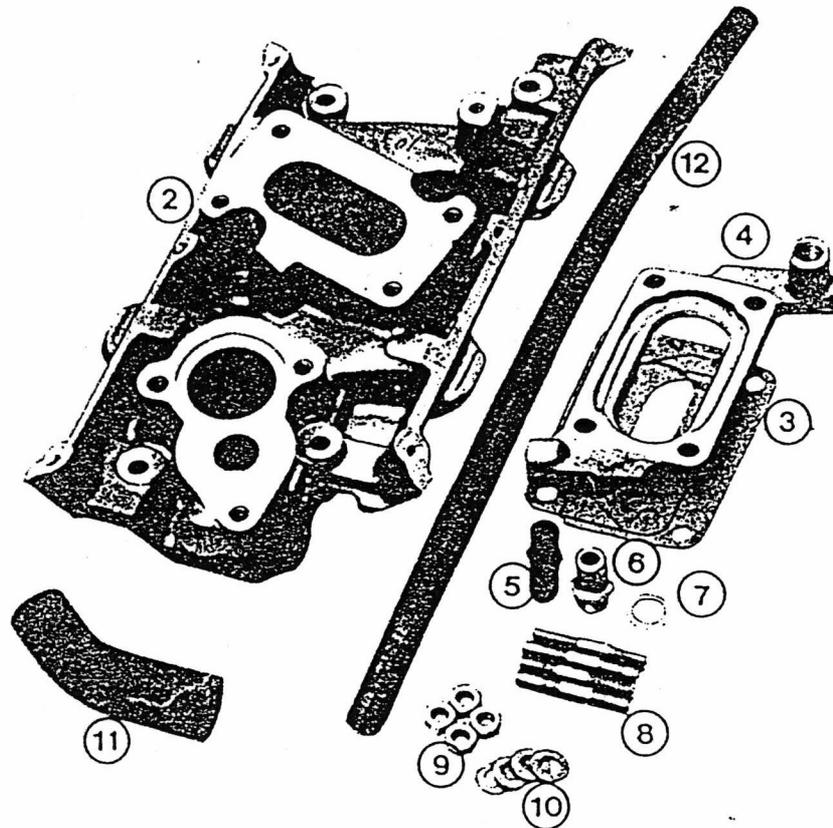
Benämning	Ant Qty	Det.nr Pos	Part no	Anmärkning Remark	Description
Ingår i rallysats 14001					Included in rally kit 14001
Insugningsrör	1		11320	13524	Inlet manifold
Mellanfläns	1		11437		Flange
Slang, ventilkåpa-filter	1		(10)8803488		Hose, valve cover-aircleaner
Distanshylsa	2		13748		Spacer
Mutter	2		(10)7940422	1/4" UNC	Nut
Nippel	1		(10)8812141		Nipple
Nippel	1		(10)8807547		Nipple
Bricka	1		(10)8814105		Washer
Packning	2		11429		Gasket
Pinnskruv	4		(10)8810582		Stud
Bricka	4		(10)8810269		Washer
Mutter	4		11502		Nut
Slang	1		(10)8812331		Hose
Slang	1		(10)8833154		Hose
Skarvrör	1		13763		Jointing pipe
Slang	1		(10)8834863		Hose
Bränsleslang	1		12559		Fuel line
Klamma	2		(40)517500005 Ø 12 mm		Clamp



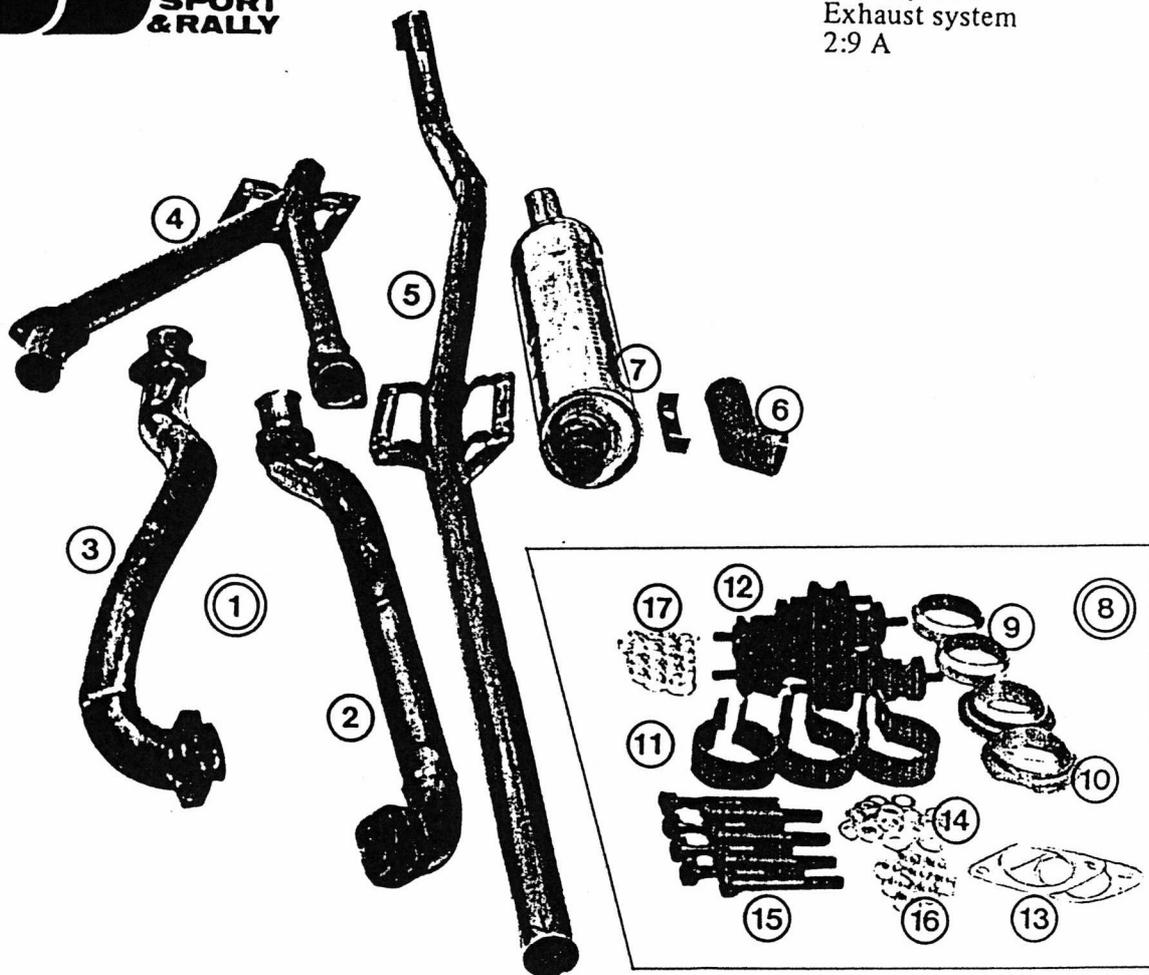
Benämning	Ant Qty	Det.nr Pos Part no	Anmärkning Remark	Description
Ingår i rallysats 14001				Included in rally kit 14001
Reglageaxel	1	13904	13524	Throttle control shaft
Tryckstång, förg	1	13755		Throttle push rod
Kulskål HG	1	12526		Ball seat right hand thread
Kulskål VG	1	12500		Ball seat left hand thread
Låsclips	2	12542		Locating clips
Mutter VG	1	12518		Nut, left hand thread
Mutter HG	1	12534		Nut, right hand thread
Saxpinne	1	11387		Cotter pin
Plastbussning	1	(10)7079247		Bushing
Fjäder	1	(10)7348121		Spring
Planbricka	1	11510		Flat washer
Konsol	1	11338		Bracket, throttle control
Returfjäder	1	(10)7352917		Return spring, throttle control
Fäste, returfjäder	1	13888		Bracket, throttle spring



Benämning	Ant	Pos	Det nr	Anmärkning	Description
	Qty		Part no	Remarks	
Insugningsrör, sats	1	1	13599	13607	Inlet manifold, set
Insugningsrör	1	2	12690		Inlet manifold
Skarvrör	2	3	12708		Extension tube
Fästbult	2	4	12435	110 mm	Bolt
Fästbult	2	5	12716	100 mm	Bolt
Pinnskruv	8	6	12674	M8x40	Stud
Packning	4	7	12443		Gasket
Mutter	16	8	12682	M8	Nut
Mellanfläns	4	9	12450		Intermediate flange
O-ring	8	10	12468	50x4	O-ring
Dubbel fjäderbricka	8	11	13078		Double spring washer
Nippel	2	12	12476		Nipple
Flamskydd	3	13	12575		Flame guard
Fästbult	1	14	(10)8810616	85 mm	Bolt
Fästbult	1	15	(10)8810459		Bolt
Pinnskruv	8	16	(10)8810590	M8x60	Stud
Planbricka	22	17	(10)8810236		Washer
Mutter	4	18	(10)8831281		Nut
Packning, termostat	1	19	(10)8811895		Gasket, thermostat
Packning	1	20	(10)8831034		Gasket
T-rör	1	21	(10)880747		T-tube
Slang	1	22	(10)8812331		Hose



Benämning	Ant Qty	Pos	Det nr Part no	Anmärkning Remarks	Description
Insugningsrör	1	2	11320	10199	Inlet manifold
Packning	2	3	11429		Gasket
Mellanfläns	1	4	11437		Intermediate flange
Nippel	1	5	(10)8812141		Nipple
Nippel	1	6	(10)8807547		Nipple
Packning	1	7	(10)8814105		Gasket
Pinnskruv	4	8	(10)8810582		Stud
Mutter	4	9	(10)8810228		Nut
Planbricka	4	10	(10)8810236		Washer
Slang	1	11	(10)8803488		Hose
Slang	1	12	(10)8834863		Hose
Nippel	1		11445		Nipple



Benämning	Ant Qty	Pos	Det nr Part no	Anmärkning Remarks	Description
Avgassystem kpl	1	1	10918	Grp 2	Exhaust system assy
.Främre rör, vänster	1	2	10256		.Front pipe, left
.Främre rör, höger	1	3	10264		.Front pipe, right
.Y-rör	1	4	10272		. "Y" section
.Bakre rör	1	5	10298		.Rear pipe
.Skarvrör	1	6	10306		.Connecting pipe
.Ljuddämpare	1	7	13136		.Muffler
Monteringssats	1	8	10926		Mounting kit
.Tätningring	2	9	10280		.Seal ring
.Fläns	2	10	10314		.Flange
.Klamma	3	11	10637		.Clamp
.Gummikudde	10	12	11304		.Rubber cushion
.Packning	2	13	11452		.Gasket
.Bricka	20	14	11460		.Washer
.Skruv	4	15	11486	M 10x50	.Screw
.Skruv	4	15	11536	M 10x70	.Screw
.Mutter	8	16	11544	M 10	.Nut
.Mutter	20	17	(10)8810228		.Nut



Benämning	Ant Qty	Det nr Pos	Part no	Anmärkning Remark	Description
Främre rör, vänster	1		10256	1	Front pipe, left
Främre rör, vänster	1		15578	2	Front pipe, left
Främre rör, vänster	1		15388	3	Front pipe, left
Främre rör, höger	1		10264	1	Front pipe, right
Främre rör, höger	1		15586	2	Front pipe, right
Främre rör, höger	1		15370	3	Front pipe, right
Förgreningsrör	1		10272	1	"Y" section
Förgreningsrör	1		15396	2, 3	"Y" section
Främre ljuddämpare	1		15404	2, 3	Front muffler
Bakre rör	1		10298	1	Rear pipe
Bakre rör	1		15412	2, 3	Rear pipe
Bakre ljuddämpare	1		13136	1	Rear muffler
Bakre ljuddämpare	1		15420	2, 3	Rear muffler
Monteringssats	1		10926	1	Mounting kit
Se sid 2:9 C					See page 2:9 C
Packning	2		11452	2	Gasket
Packning	2		14555	3	Gasket
Fläns	2		14951	2	Flange
Fläns	2		14944	3	Flange
Gummikudde	10		11304	2,3	Rubber cushion
Klamma	3		(40)520108002	2,3	Clamp
Bult	4		11536	2,3	Bolt
Mutter	4		11544	2,3	Nut

1. Reservdelar till avgas-system i tidigare utförande (10918)

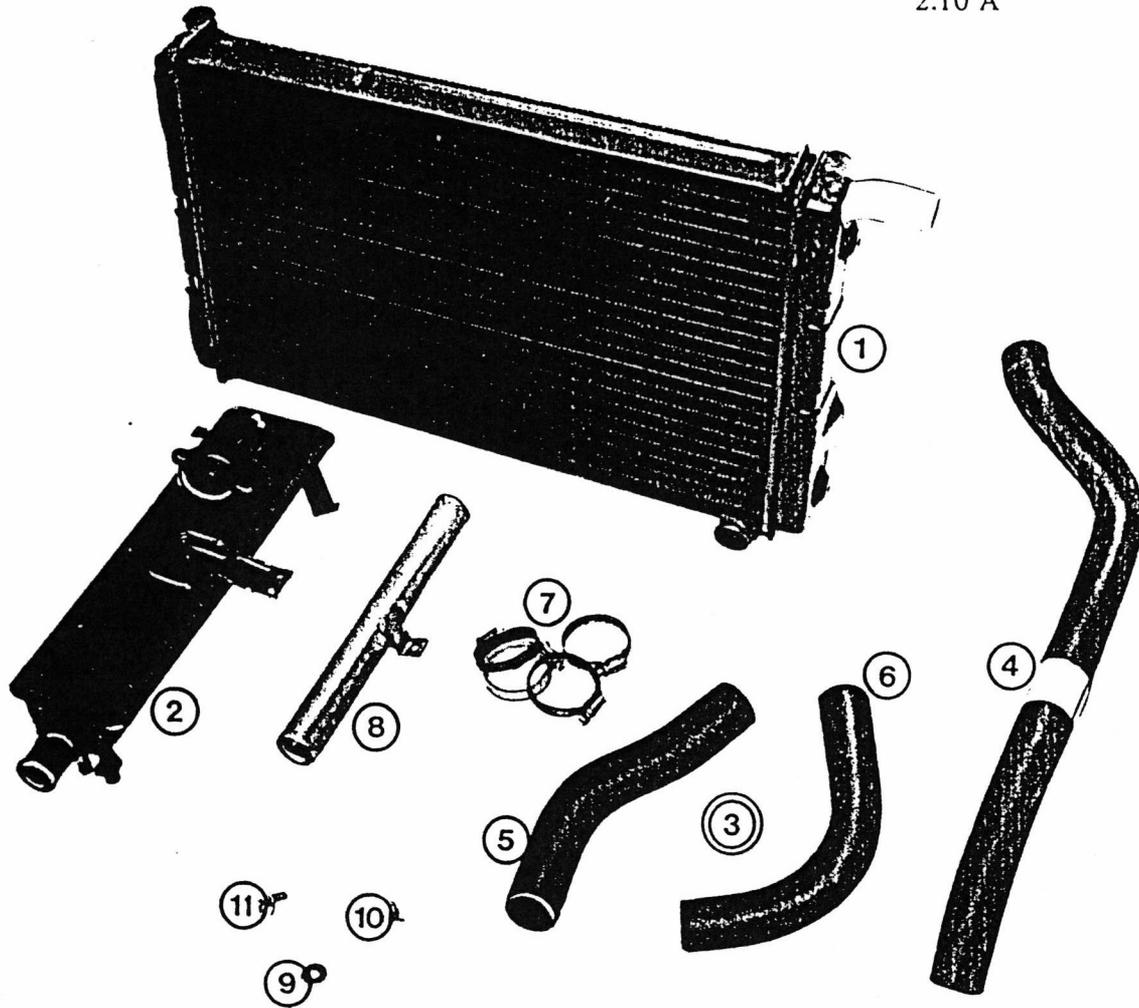
2. För topplock med enkla avgasportar

3. För topplock med dubbla

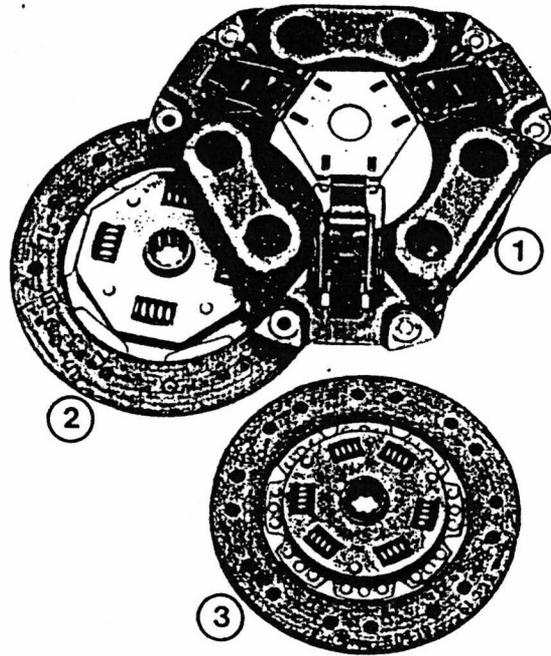
1. Spare parts for exhaust system, earlier type (10918)

2. For cylinder heads with single exhaust ports

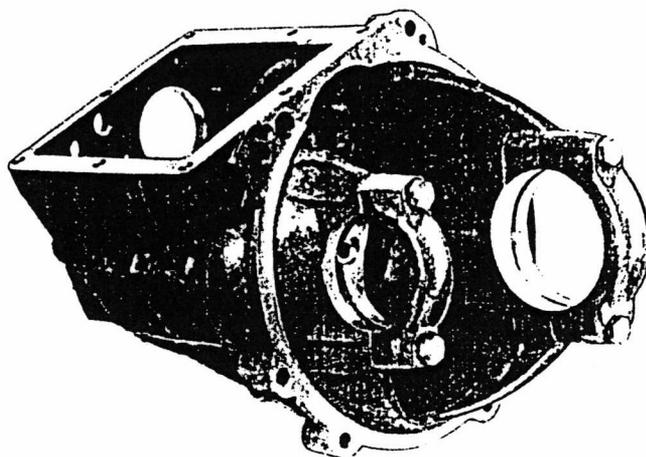
3. For cylinder heads with dual exhaust ports



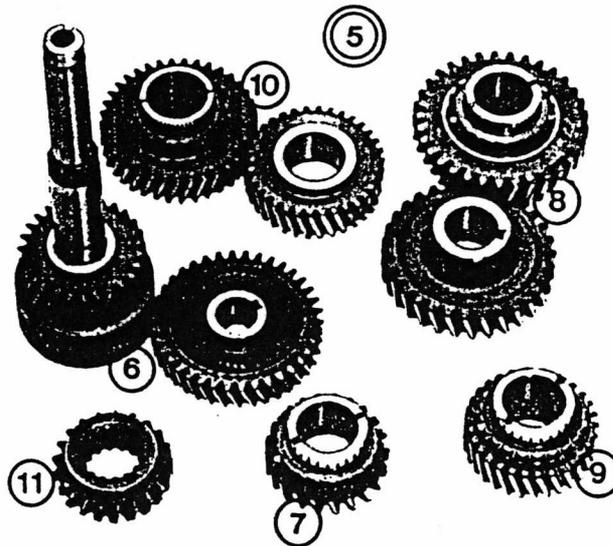
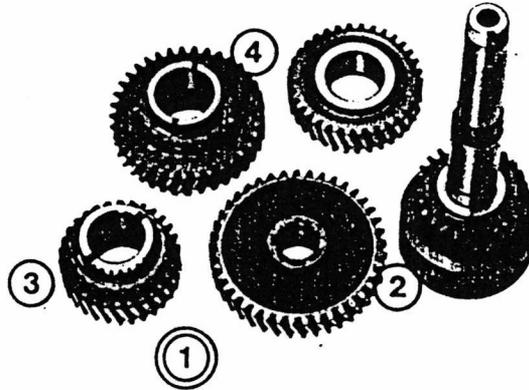
Benämning	Ant Qty	Pos	Det nr Part no	Anmärkning Remarks	Description
Kylare	1	1	11668		Radiator
Expansionskärl	1	2	11643		Expansion vessel
Slangsats	1	3	11650		Hose kit
.Slang	1	4	(10)8372286		.Hose
.Slang	1	5	(10)8382871		.Hose
.Slang	1	6	(10)8382889		.Hose
.Slangklamma	4	7	(10)7963564		.Hose slamp
.Vattenrör	1	8	12252		.Water tube
.Bricka	2	9	(10)7119845		.Washer
.Skruv	2	10	(10)7922818		.Screw
.Skruv	2	11	(10)8019895		.Screw
.Mutter	2		13649		.Nut



Benämning	Ant Qty	Pos	Det n. Part no	Anmärkning Remarks	Description
Koppling	1	1	10520		Clutch
Lamell	1	2	10538		Clutch disc
Lamell	1	3	11312	Extra förstärkt Extra reinforced	Clutch disc

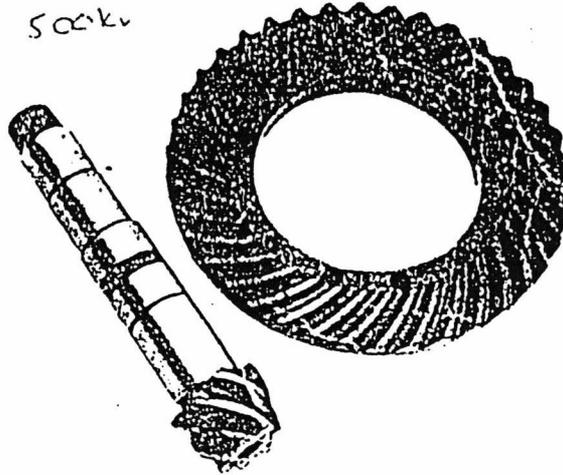


Benämning	Ant Qty	Pos	Det nr Part no	Anmärkning Remarks	Description
Växellådsååpa (gjutjårn)	1	1	10512		Gear box cover (cast iron)



Benämning	Ant Qty	Pos	Det nr Part no	Anmärkning Remarks	Description
Drevsats	1	1	10850	Special 1	Gear set
.Mellanväxel kpl	1	2	10413		.Intermediate gear assy
.Kuggdrev, 2:an	1	3	10421		.Gear, 2nd
.Drevsats 4:an	1	4	10439		.Gear set, 4th
Drevsats	1	5	10868	Special 2	Gear set
.Mellanväxel kpl	1	6	10447		.Intermediate gear assy
.Kuggdrev, 1:an	1	7	10454		.Gear, 1st
.Drevsats, 3:an	1	8	10462		.Gear set, 3rd
.Kuggdrev, 2:an	1	9	10421		.Gear, 2nd
.Drevsats, 4:an	1	10	10439		.Gear set, 4th
.Backdrev	1	11	10470		.Reverse gear

50 + 9
 socku



Benämning	Ant Qty	Det.nr Pos	Part no	Anmärkning Remark	Description
<u>Slutväxlar Saab 96</u>					<u>Final gears Saab 96</u>
Slutväxel 6:35	1	1	10488	Daldi	Final gear 6:35 7/5:
Slutväxel 7:38	1	1	10496	Daldi	* Final gear 7:38 8/5:-
Slutväxel 7:38	1	1	(10)7819974	Dana ENV	Final gear 7:38
Slutväxel 7:36 grp 1	1	1	(10)7836299		not Final gear 7:36 grp 1

Betr montering av slutväxlar:

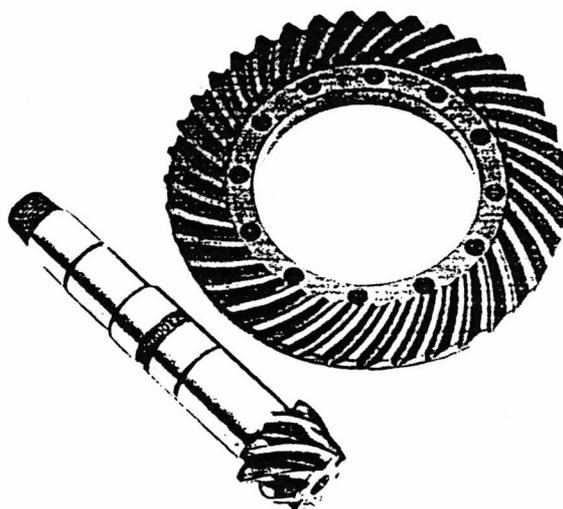
I tävlingsväxellådor för Saab V4 ska kronhjulsbultarna låsas med Locktite och låsbleck. Följande detaljer ska därvid användas:

Bult	10	(10)7900178
Bult	2	(10)7125156
Låsbleck	6	14084
Locktite		(10)7860513

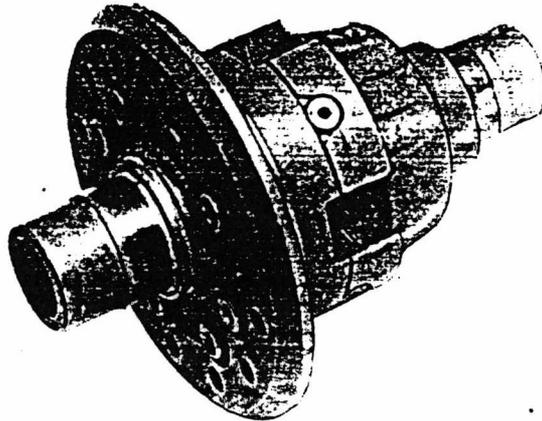
Regarding installation of final gears:

When Saab 96 transmission is modified for competition drive it is necessary that the crown-wheel bolts are locked with Locktite and lock-plates. The following parts should be used:

Bolt
Bolt
Lock-plates
Locktite

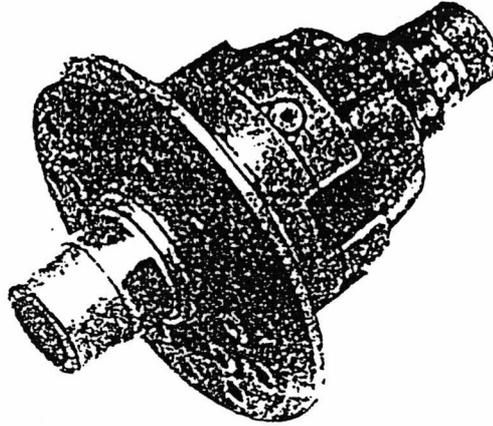


Benämning	Ant Qty	Pos	Det nr Part no	Anmärkning Remarks	Description
Slutväxel 6:35	1	1	10488	Daldi	Final gear 6:35
Slutväxel 7:38	1	1	10496	Daldi	Final gear 7:38
Slutväxel 7:38	1	1	(10)7819974	Dana ENV	Final gear 7:38
Slutväxel 7:36 grp 1	1	1	(10)7836299		Final gear 7:36 grp 1



Benämning	Ant Qty	Pos	Det nr Part no	Anmärkning Remarks	Description
Differentialspär kpl	1	1	10504		Differential lock assy

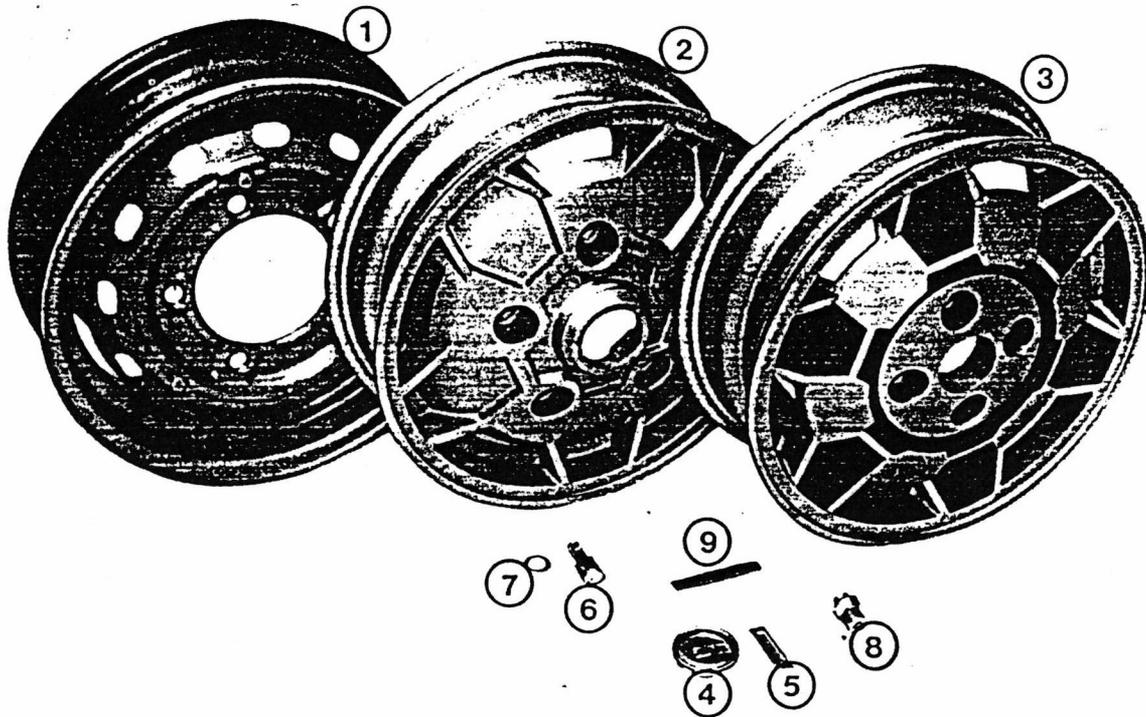
f lockar - 1500
lock - 1500
nut cover
preferably new - 200
+ 1000



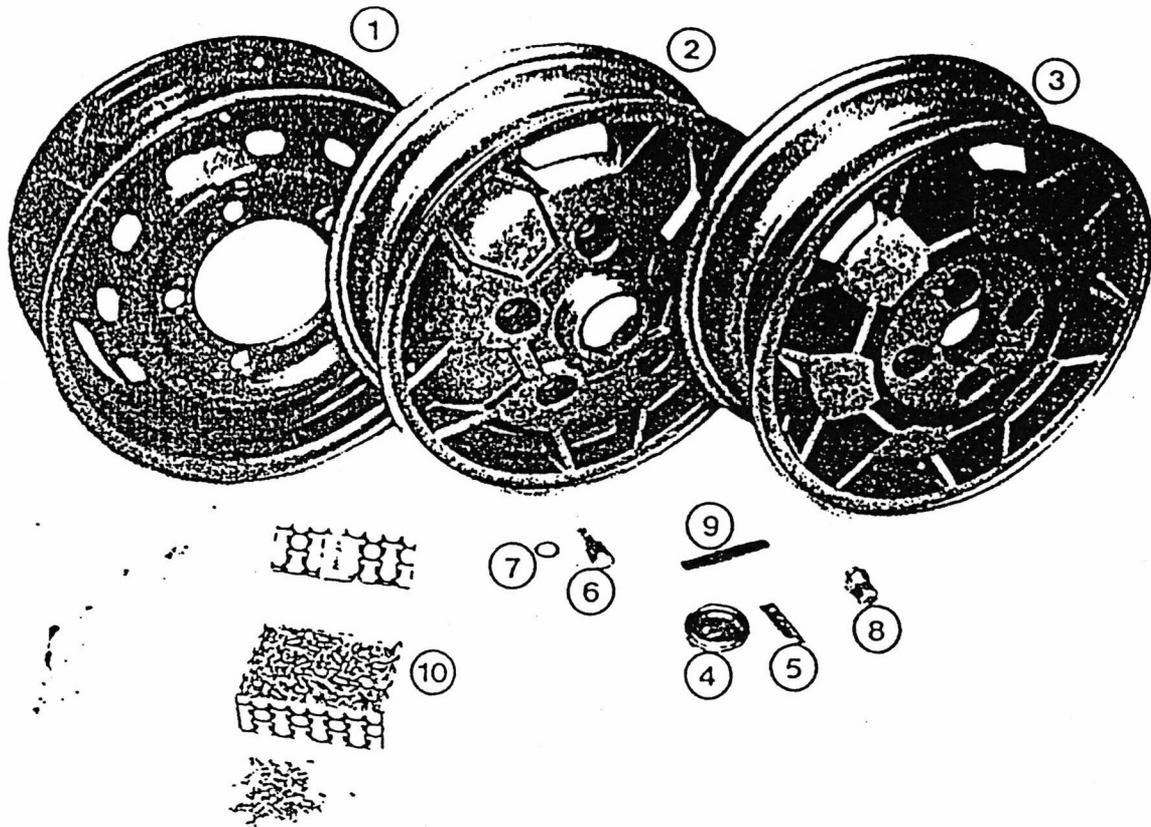
Benämning	Ant Qty	Dét.nr Pos	Dét.nr Part no	Anmärkning Remark	Description
Saab 96					Saab 96
Differentialbroms kpl.	1		10504	(Borg-Warner)	Differentialbrake assy
Differentialbroms kpl.	1		15875	Lamell, Disc or Salskany	Differentialbrake assy
Saab 99					Saab 99
Differentialbroms kpl.	1		15552	ZF-lamell, Zf-disc	Differential brake assy
Diff.hus lock	1		15800	15552	Differential case cover
Drivaxel V	1		15891	15552 1)	Drive shaft left
Drivaxel H	1		15909	15552 1)	Drive shaft right

1) Bilar av 1974 års modell
och äldre

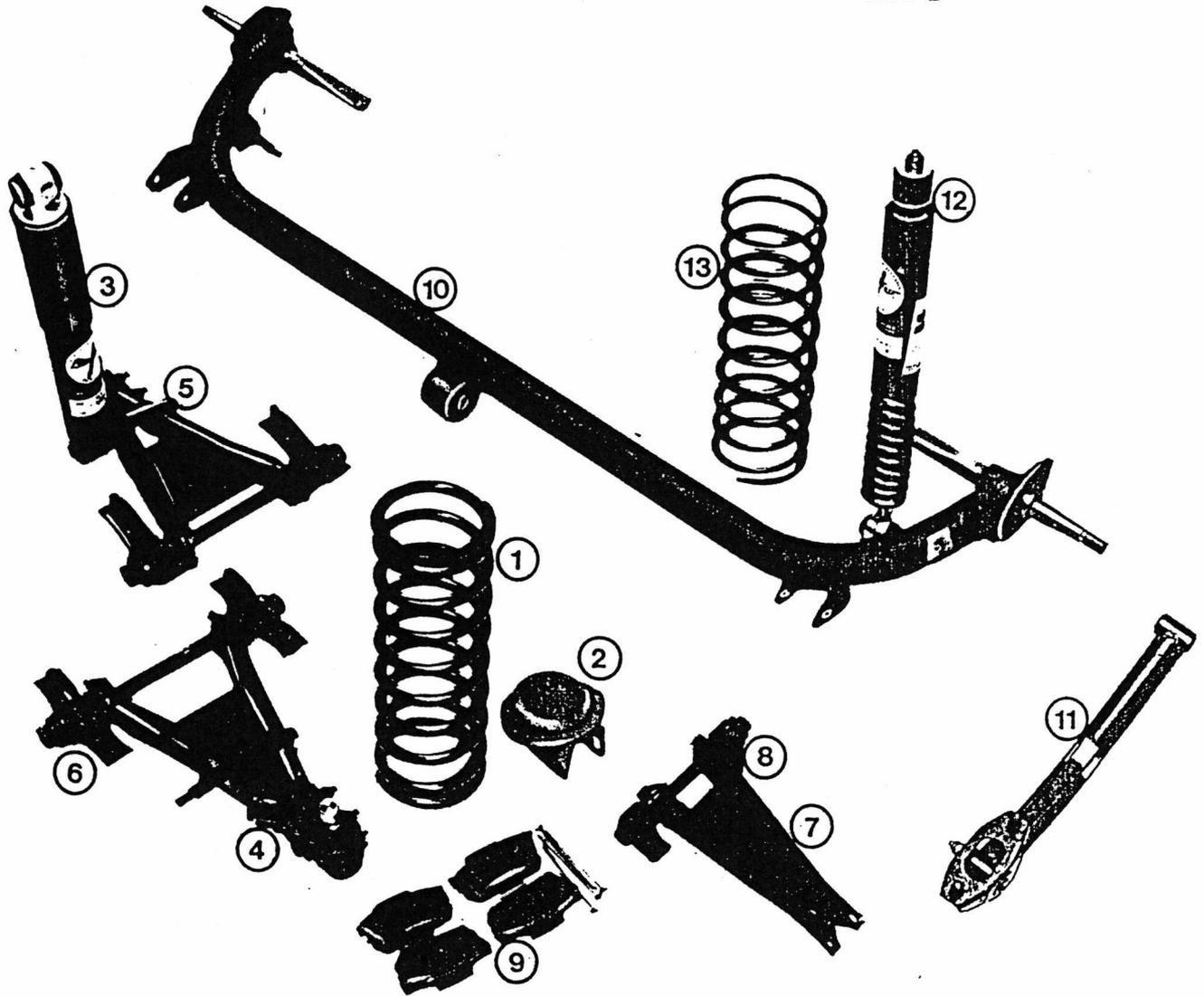
1) 1974 model and older



Benämning	Ant Qty	Pos	Det nr Part no	Anmärkning Remarks	Description
Hjul	5	1	(10)7412075	Saab V4	Wheel
Hjul, aluminium	5	2	11205	Saab V4	Wheel, aluminium
Hjul, aluminium	5	3	11940	Saab 99	Wheel, aluminium
Emblem	5	4	11239	11205, 11940	Emblem
Clip	5	5	11981	11940	Clip
Skruv	20	6	11213	11205	Screw
Bricka	20	7	11221	11205	Washer
Mutter	16	8	11973	11940	Nut
Balanseringsvikt 15 g		9	12187	11205, 11940	Counter weight 15 g
Balanseringsvikt 30 g			12195	11205, 11940	Counter weight 30 g
Balanseringsvikt 45 g			12203	11205, 11940	Counter weight 45 g
Balanseringsvikt 60 g			12211	11205, 11940	Counter weight 60 g



Benämning	Ant Qty	Pos	Det nr Part no	Anmärkning Remarks	Description
Hjul	5	1	(10)7412075	Saab V4	Wheel
Hjul, aluminium	5	2	11205	Saab V4	Wheel, aluminium
Hjul, aluminium	5	3	11940	Saab 99	Wheel, aluminium
Emblem	5	4	15511	11205, 11940	Emblem
Clip	5	5	11981	11940	Clip
Skruv	20	6	11213	11205	Screw
Bricka	20	7	11221	11205	Washer
Mutter	16	8	11973	11940	Nut
Balanseringsvikt 15 g		9	12187	11205, 11940	Counter weight 15 g
Balanseringsvikt 30 g			12195	11205, 11940	Counter weight 30 g
Balanseringsvikt 45 g			12203	11205, 11940	Counter weight 45 g
Balanseringsvikt 60 g			12211	11205, 11940	Counter weight 60 g
Rallydubb		10	15776	1000 st/kartong	Rally spike

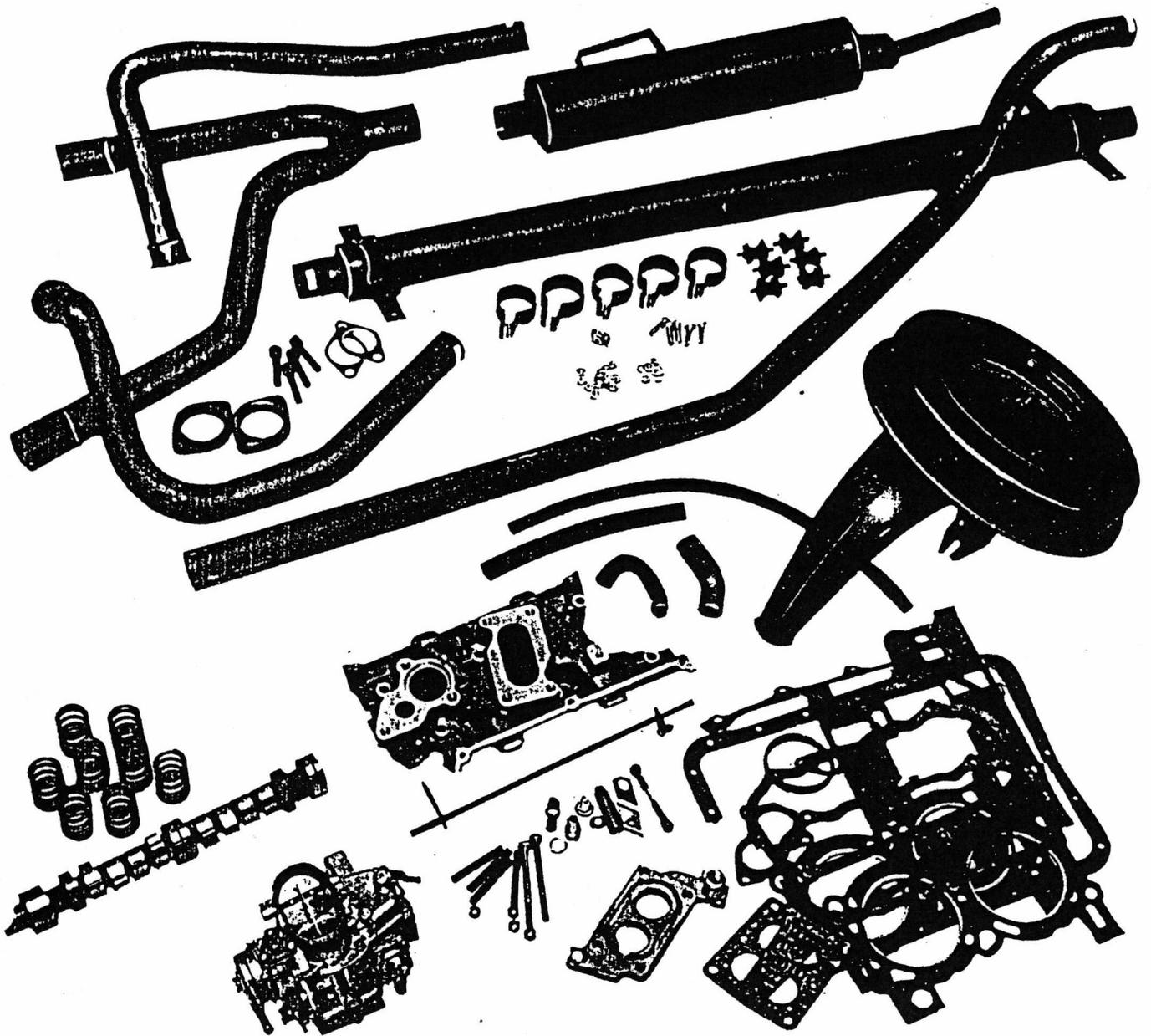


Benämning	Ant	Pos	Det nr	Anmärkning	Description
	Qty		Part no	Remarks	
Fiäder, fram	2	1	10579	Rally special	Spring, front
Fjäderstöd, fram	2	2	10884		Spring support
Stötdämpare, fram	2	3	10595		Shock absorber, front
Svängarm, nedre, vänster	1	4	12120		Swinging arm, lower, left
Svängarm, nedre, höger	1	5	12138		Swinging arm, lower, right
.Bussning	4	6	13433		.Bushing
Svängarm, övre	2	7	13146		Swinging arm, upper
.Bussing	4	8	13425		.Bushing
Bromsklotssats	1	9	10561	Ferodo DS 11	Brake pads
Bromsklotssats	1	9	(10)7868284	Ferodo 2430	Brake pads
Bakaxel	1	10	10611		Rear axle
Länkarm, bakre	2	11	10892		Link arm, rear
Stötdämpare, bakre	2	12	10603		Shock absorber, rear
Fjäder, bakre	2	13	10587	Progressiv	Spring, rear



Sportsatser
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Sektion 3

Grupp	Nr No	Group
Saab V4	1	Saab 4



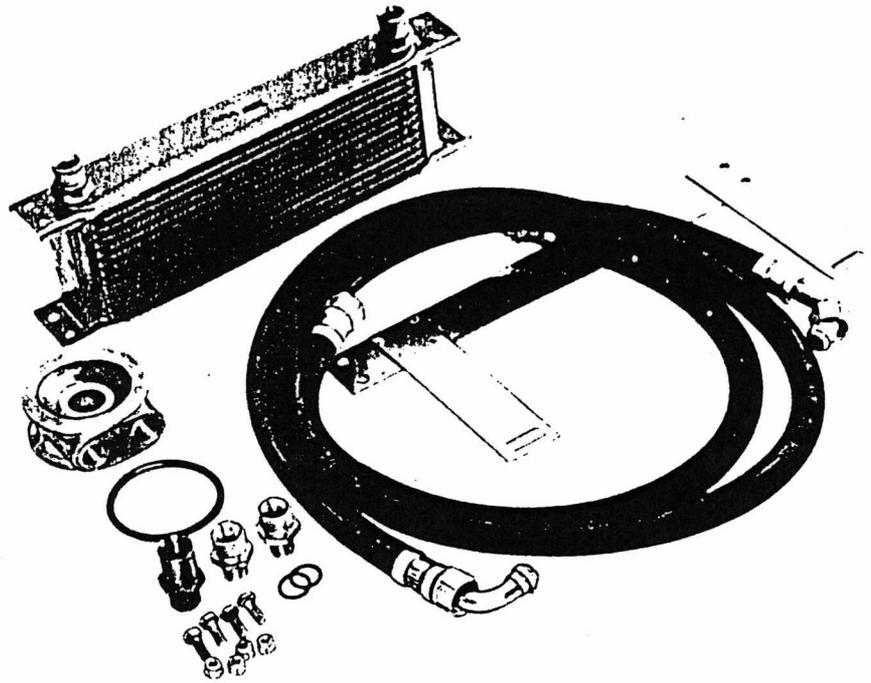
Benämning	Ant Qty	Pos	Det nr Part no	Anmärkning Remarks	Description
Sportsats			11247		Tuning kit
.Avgassystem kpl			11478		.Exhaust system assy



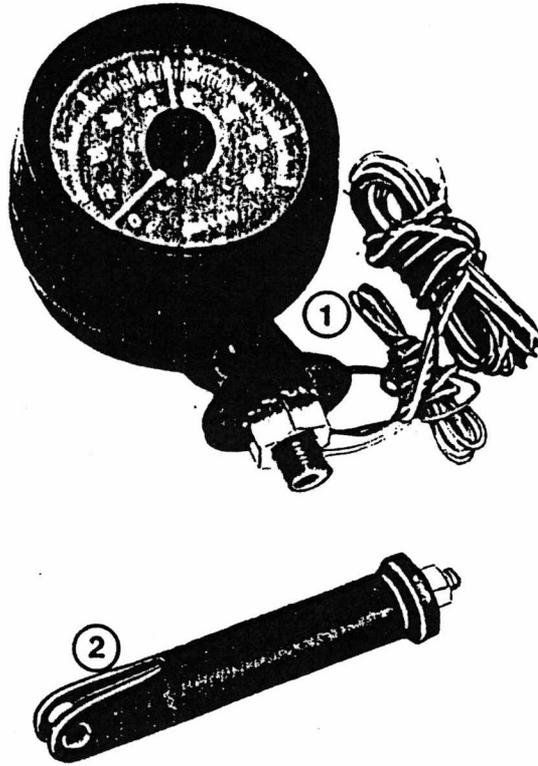


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Sektion 4

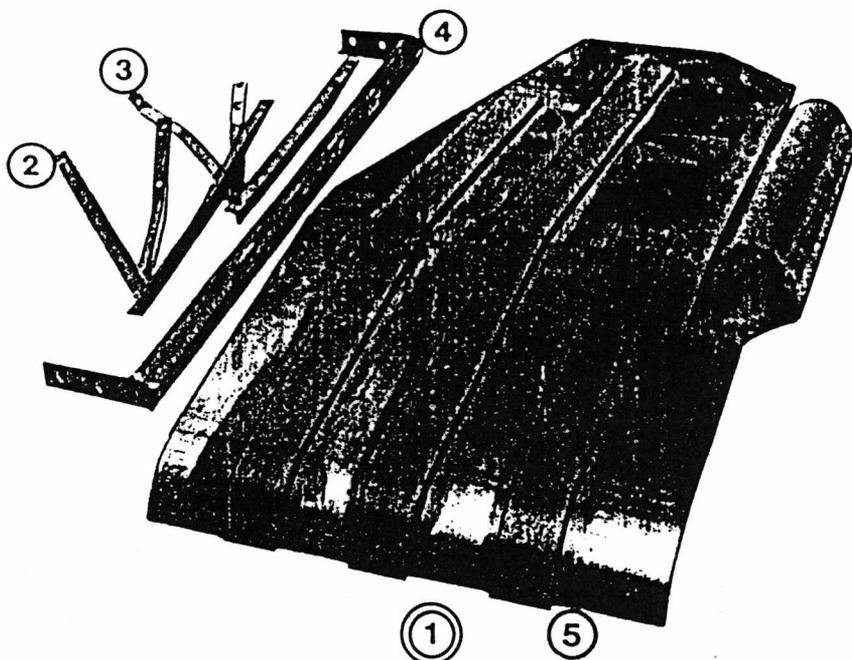
Grupp	Nr No	Group
Motorutrustning	1	Engine equipment
Motorinstrument	2	Engine instruments
Skyddsplåtar	3	Protection plates
Karossertillbehör	4	Body accessories
Stolar	5	Seats
Strålkastare	6	Extra lights
Kartläsningsutrustning	7	Co-driver's equipments
Rattar m m	8	Steering wheels etc
Säkerhetsutrustning	9	Safety equipments
Nödutrustning	10	Emergency equipments



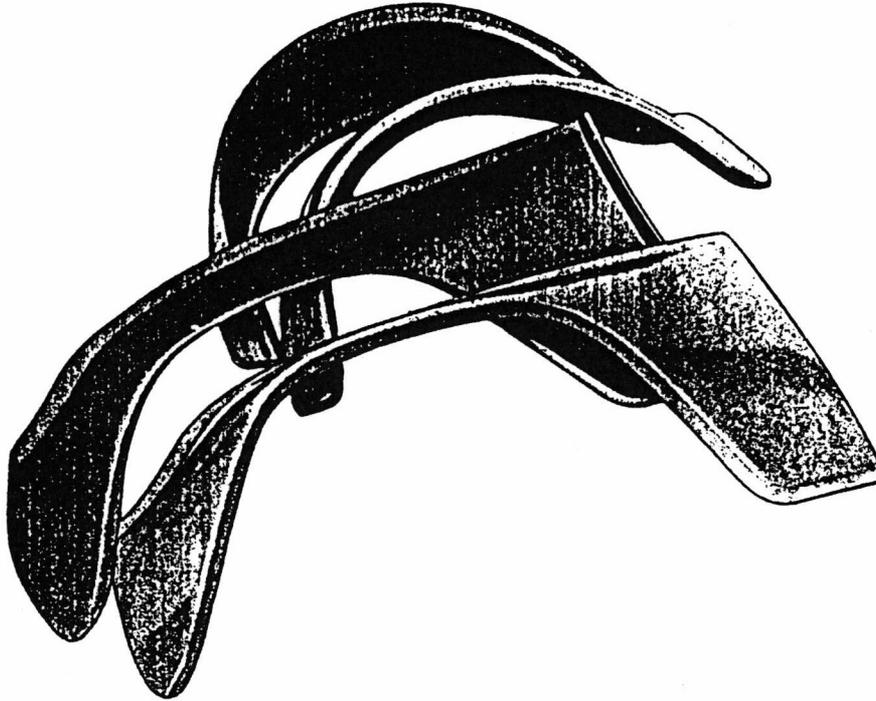
Benämning	Ant		Det nr	Anmärkning	Description
	Qty	Pos			
Oljekylare kpl			12302		Oil cooler assy
Slang			12799	1023	Hose



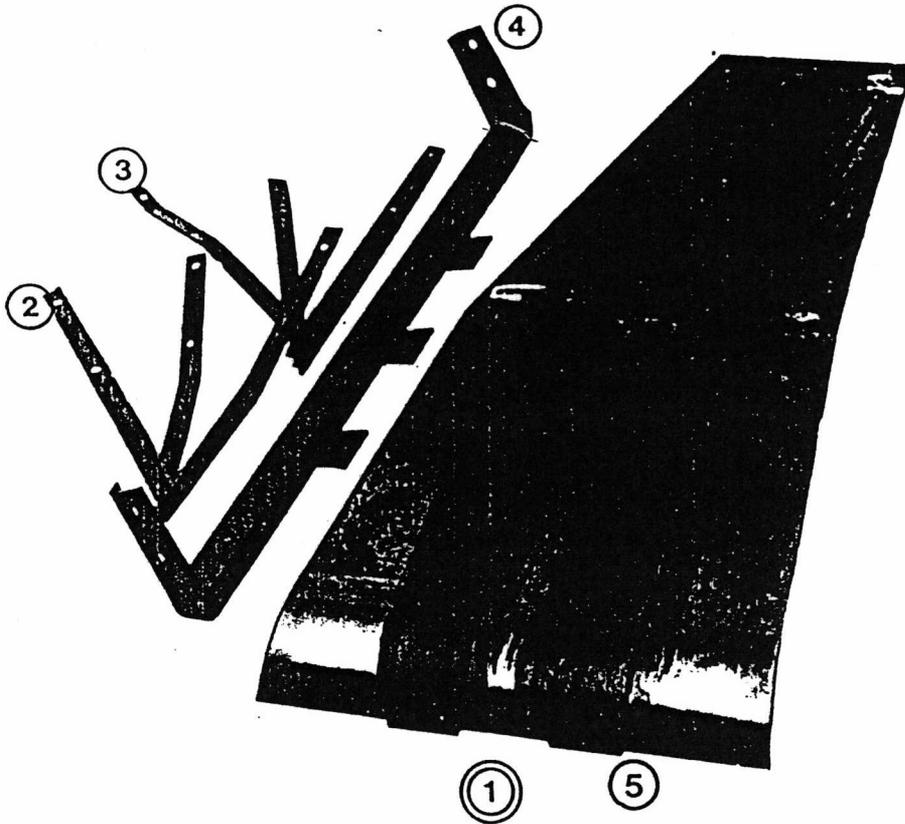
Benämning	Pos	Det nr Part no	Anmärkning Remarks	Description
Varvräknare	1	11015		Revolution counter
Fäste	2	12161		Bracket



Benämning	Pos	Det nr Part no	Anmärkning Remarks	Description
Skyddsplåt kpl	1	11007	Grp 1	Protection plate assy
.Sidostag, vänster	2	10645		.Sidebracket, left
.Sidostag, höger	3	10686		.Sidebracket, right
.Fästjärn, främre	4	10660		.Bracket, front
.Skyddsplåt	5	13219		.Protection plate



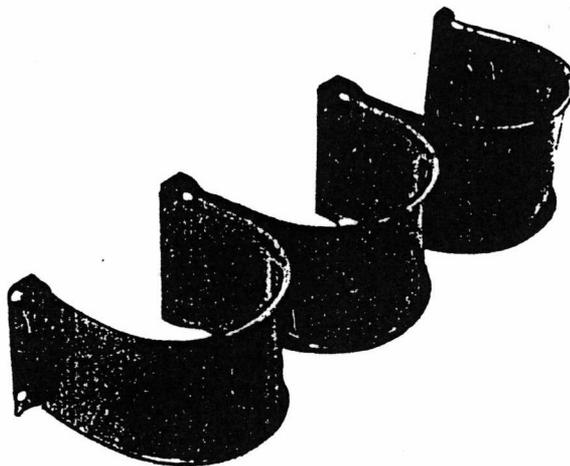
Benämning	Ant Qty	Pos	Det nr Part no	Anmärkning Remarks	Description
Skärmbreddningssats	1	1	10702		Wing extensions



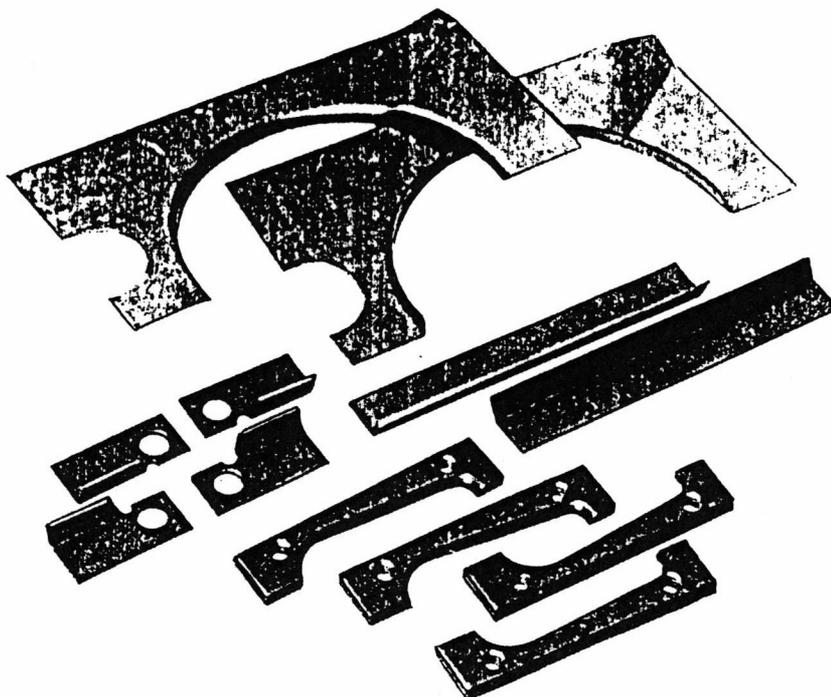
Benämning	Pos	Det nr Part no	Anmärkning Remarks	Description
Skyddsplåt	1	10652	Grp 2	Protection plate assy
.Sidostag, vänster	2	10645		.Sidebracket, left
.Sidostag, höger	3	10686		.Sidebracket, right
.Fästjärn, främre	4	10678		.Bracket, front
.Skyddsplåt	5	13227		.Protection plate



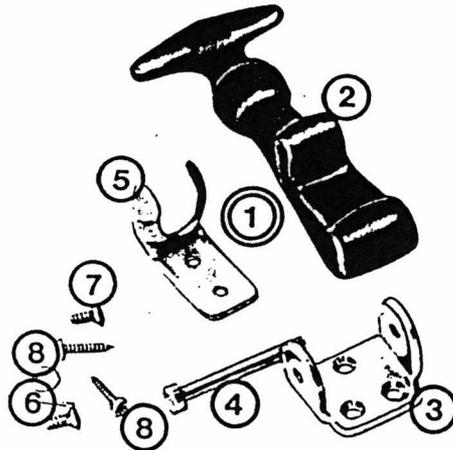
Benämning	Det nr Part no	Anmärkning Remarks	Description
Störtbåge	10694		Roll bar
Klädsel	10900		Cover



Benämning	Det nr Part no	Anmärkning Remarks	Description
Oljeburkshållare	10777		Oil tin holder



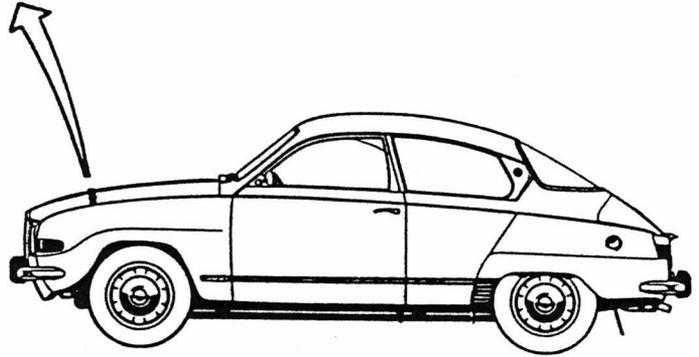
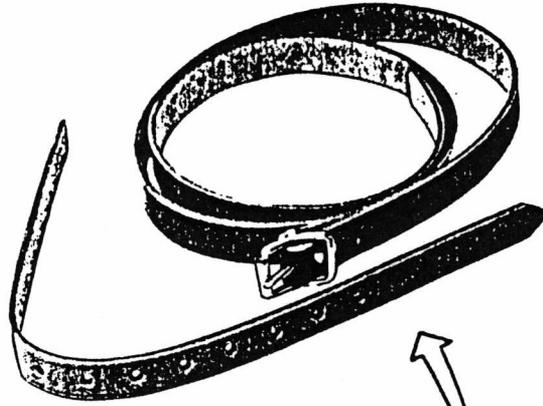
Benämning	Ant Qty	Pos	Det nr Part no	Anmärkning Remarks	Description
Modifieringssats			11833		Modification set



Benämning	Ant Qty	Pos	Det nr Part no	Anmärkning Remarks	Description
Stropp	1	1	11817		Strap
.Gummi	1	2	(10)7404312		.Rubber
.Fäste	1	3	(10)7404320		.Bracket
Fäste	1	4	(10)7404338		.Bracket
.Hake	1	5	(10)7404346		.Clutch
.Saxpinne	1	6	(10)7904337		.Cotter pin
.Skruv	2	7	(10)7921794		.Screw
.Bricka	1	8	(10)8029974		.Washer
.Skruv	2	9	(10)7922222		.Screw



Tillbehör
Accessories
Karosseritillbehör
Body accessories
4:4 E 2



Benämning	Ant Qty	Pos	Det nr Part no	Anmärkning Remarks	Description
Huvrem			11809		Hood belt

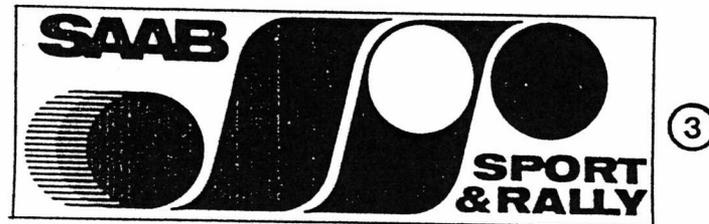
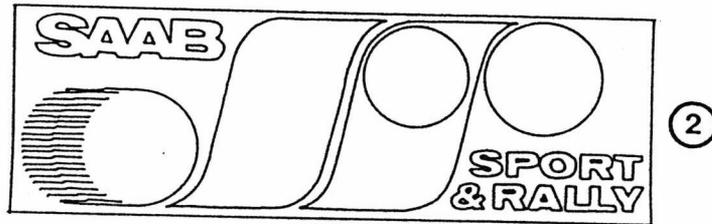


Tillbehör
Accessories

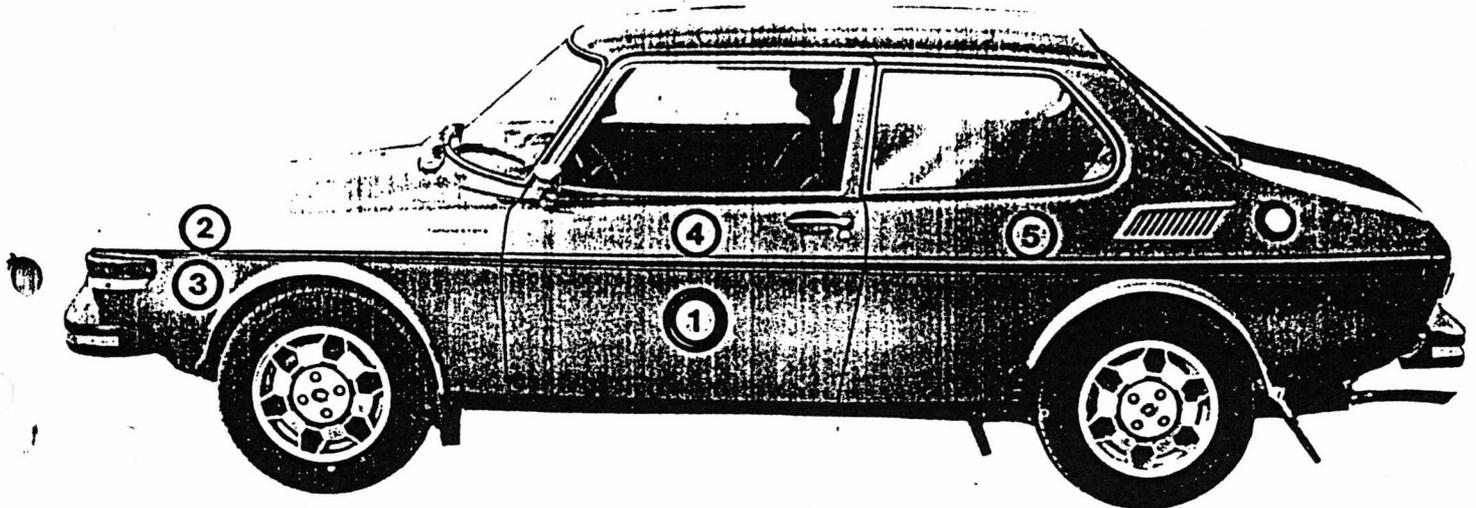
Karossritillbehör
Body accessories

4:4 F

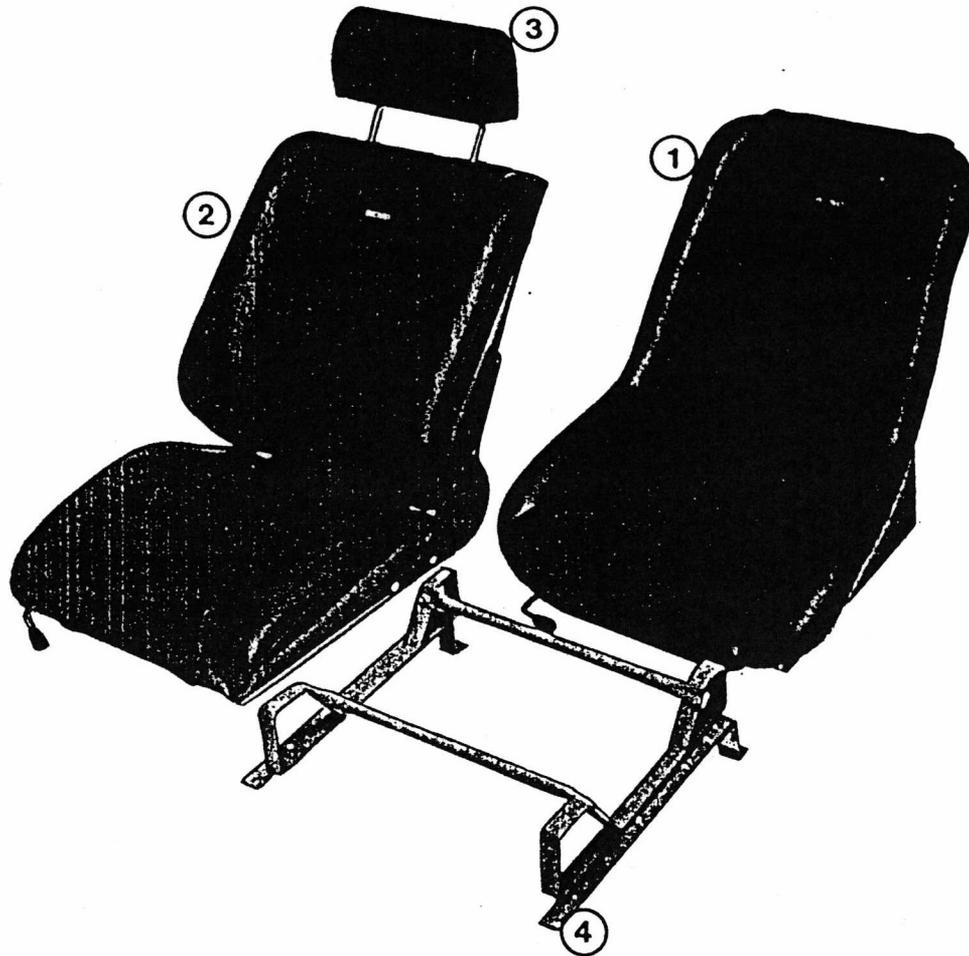
SAAB V4 ①



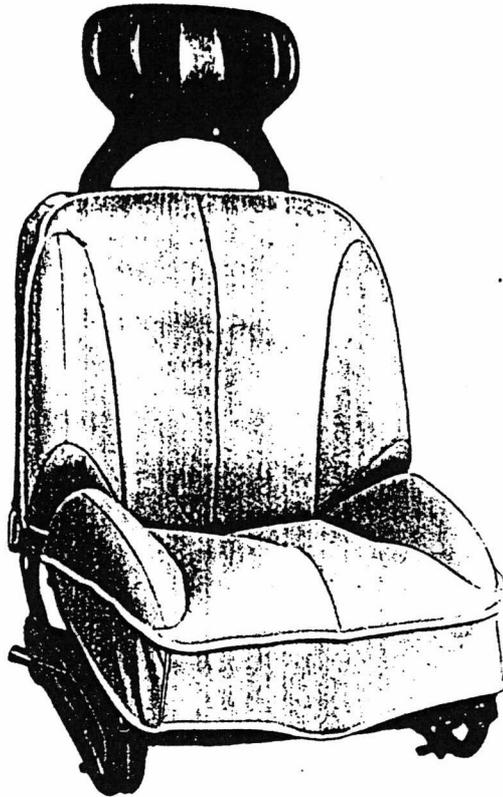
Benämning	Ant Qty	Pos	Det nr Part no	Anmärkning Remarks	Description
Dekal, vit	1		12229		Decal, white
Dekal, svart	1		12781		Decal, black
Dekal, vit-transparent	2		11866	140 x 410 mm	Decal, white-transparent
Dekal, blå-vit	3		11874	140 x 410 mm	Decal, blue-white
Dekal, vit-transparent	2		11882	180 x 530 mm	Decal, white-transparent
Dekal, blå-vit	3		11890	180 x 530mm	Decal, blue-white



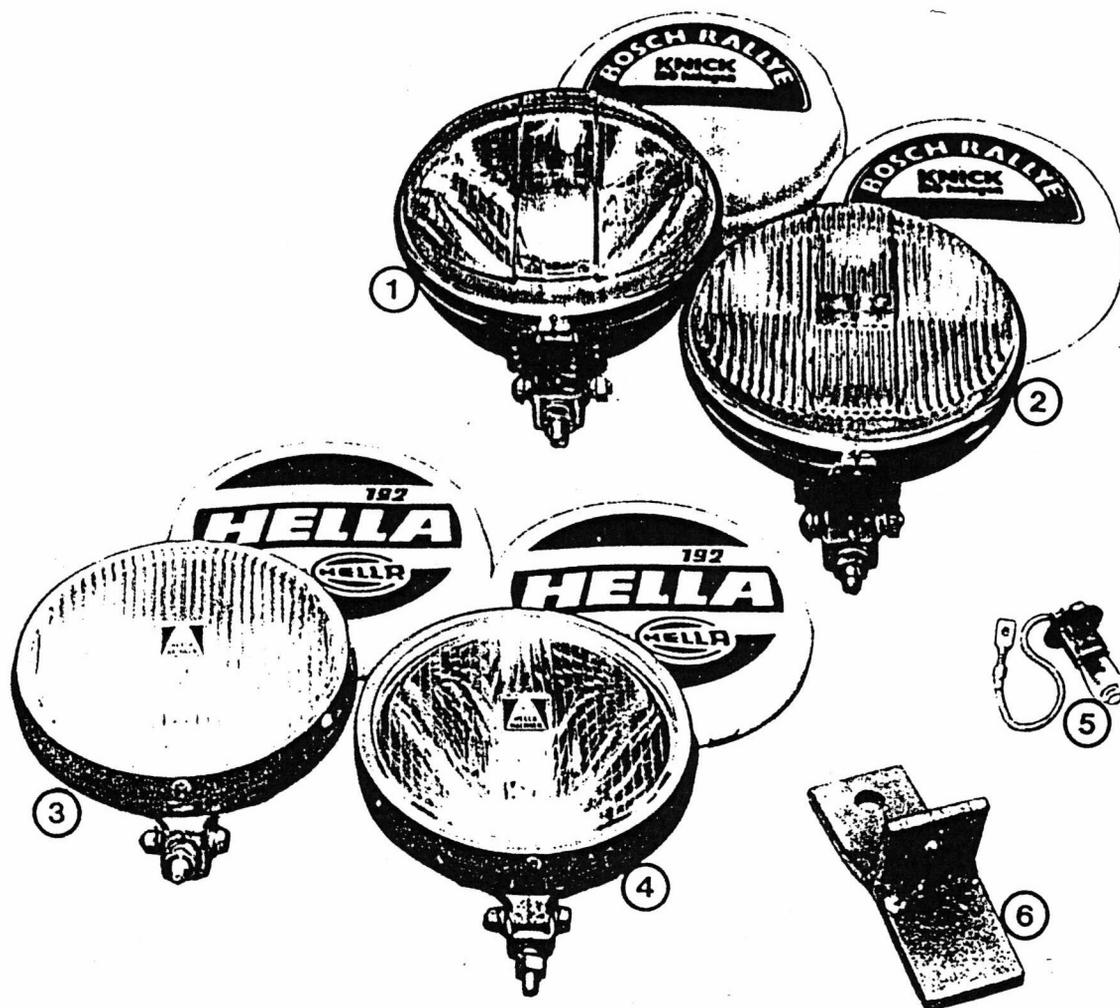
Benämning	Ant Qty	Pos	Det nr Part no	Anmärkning Remarks	Description
Dekortape	1	1	11965	Saab 99	Stripes
.Dekortape, vänster	1	2	13771		.Stripe, left
.Dekortape, höger	1	2	13789		.Stripe, right
.Dekortape, vänster	1	3	13797		.Stripe, left
.Dekortape, höger	1	3	13805		.Stripe, right
.Dekortape, vänster	1	4	13813		.Stripe, left
.Dekortape, höger	1	4	13821		.Stripe, right
.Dekortape, vänster	1	5	13839		.Stripe, left
.Dekortape, höger	1	5	13847		.Stripe, right



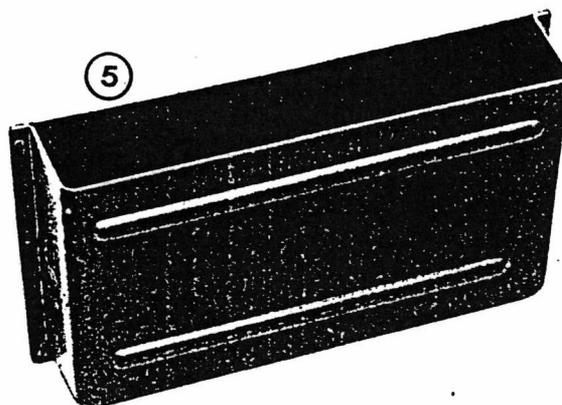
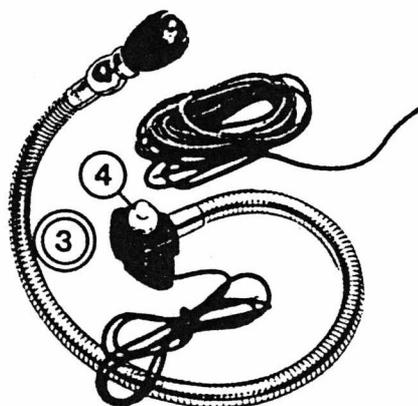
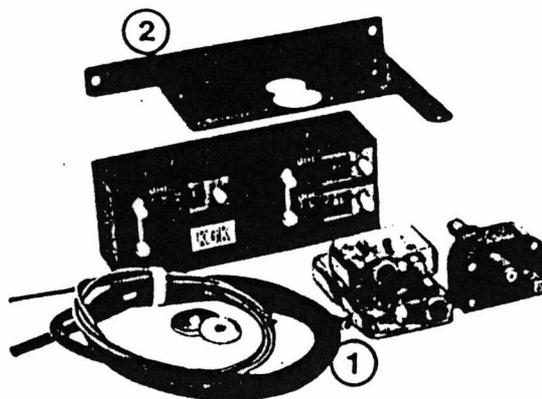
Benämning	Ant Qty	Pos	Det nr Part no	Anmärkning Remarks	Description
Förarstol	1	1	10710		Driver's seat
Kartläsarstol	1	2	10728		Co-driver's seat
Nackstöd	2	3	11551		Head rest
Stolunderrede	2	4	10736		Seat frame



Benämning	Pos	Det no Part no	Anmärkning Remarks	Description
Rallyklädsel	1	11908		Rallye seat cover



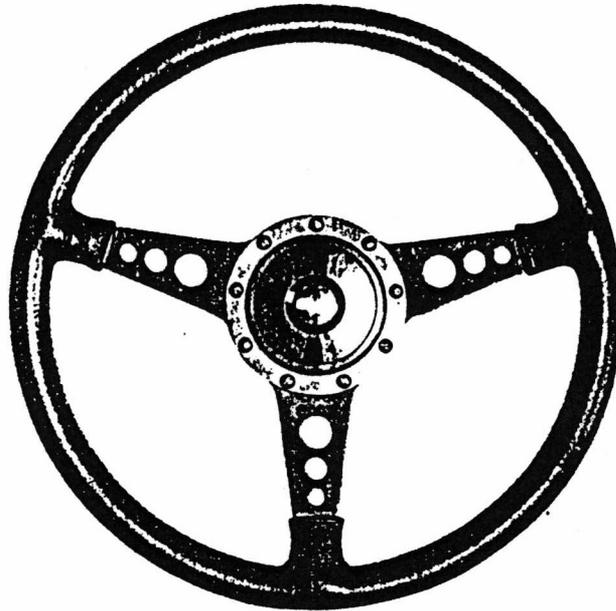
Benämning	Pos	Det nr Part no	Anmärkning Remarks	Description
Fjärrstrålkastare	1	10827	Bosch 180	Long distance light
Kurv- och dimstrålkastare	2	10819	Bosch 180	Foglight
Kurv- och dimstrålkastare	3	12419	Hella 192	Long distance light
Fjärr	4	12427	Hella 192	Foglight
Halogenlampa 100 W	5	10843		Halogen bulb 100 W
Hållare	6	10751		Bracket



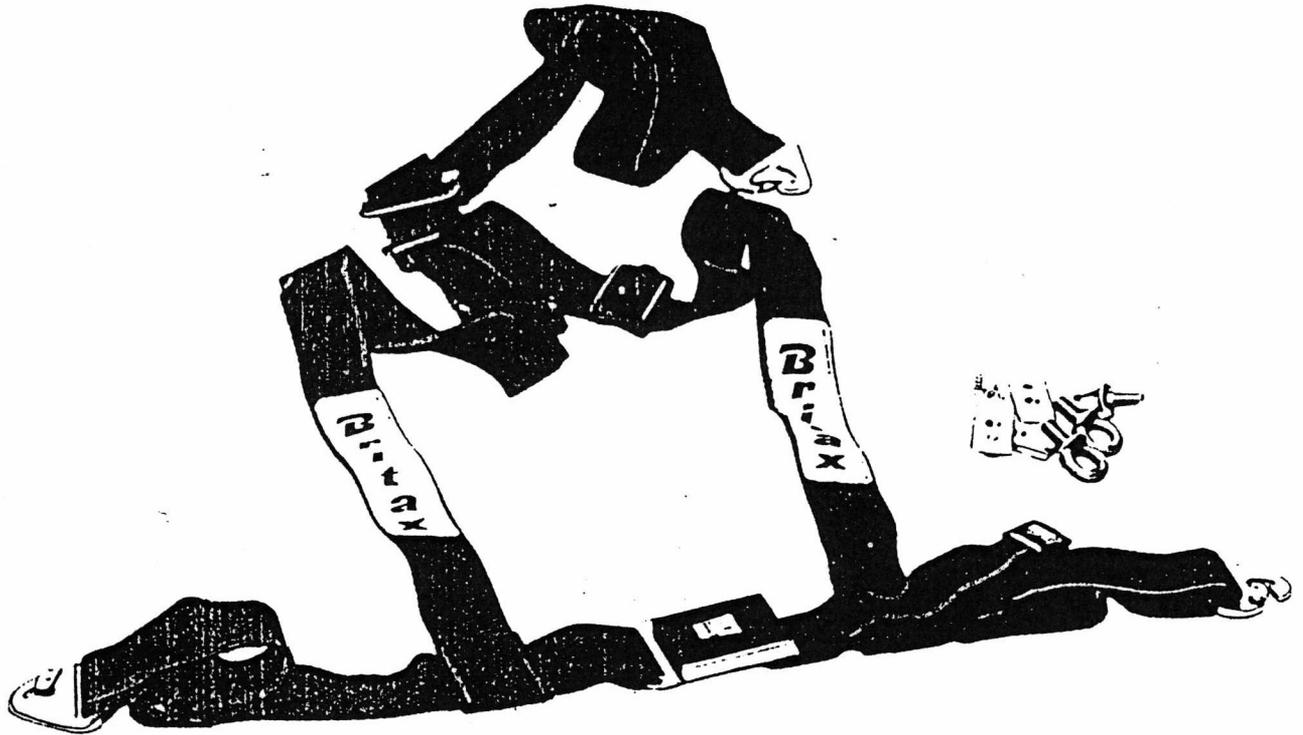
Benämning	Ant Qty	Pos	Det nr Part no	Anmärkning Remarks	Description
Trippmätare	1	1	10793		Tripmaster
Fäste	1	2	10801		Bracket
Kartläsningslampa	1	3	11197		Map light
.Kontakt	1	4	11296		.Switch
Kartfack	1	5	10785		Map box



Tillbehör
Accessories
Rattar m m
Steering wheels etc
4:8 A



Benämning	Ant Qty	Pos	Det nr Part no	Anmärkning Remarks	Description
Ratt, kpl			12401	Saab V4	Steering wheel, assy



Benämning	Ant Qty	Pos	Det nr Part no	Anmärkning Remarks	Description
Bilbälte, 4-punkt			12286		Safety-belt, 4-point



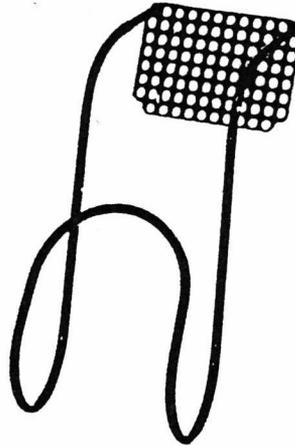
Personlig utrustning
Personal equipment
Innehållsförteckning
Table of contents
Sektion 5

Grupp	Nr No	Group
Hjälmar	1	Crash helmet
Kläder	2	Clothes



Personlig utrustning
Personal equipment

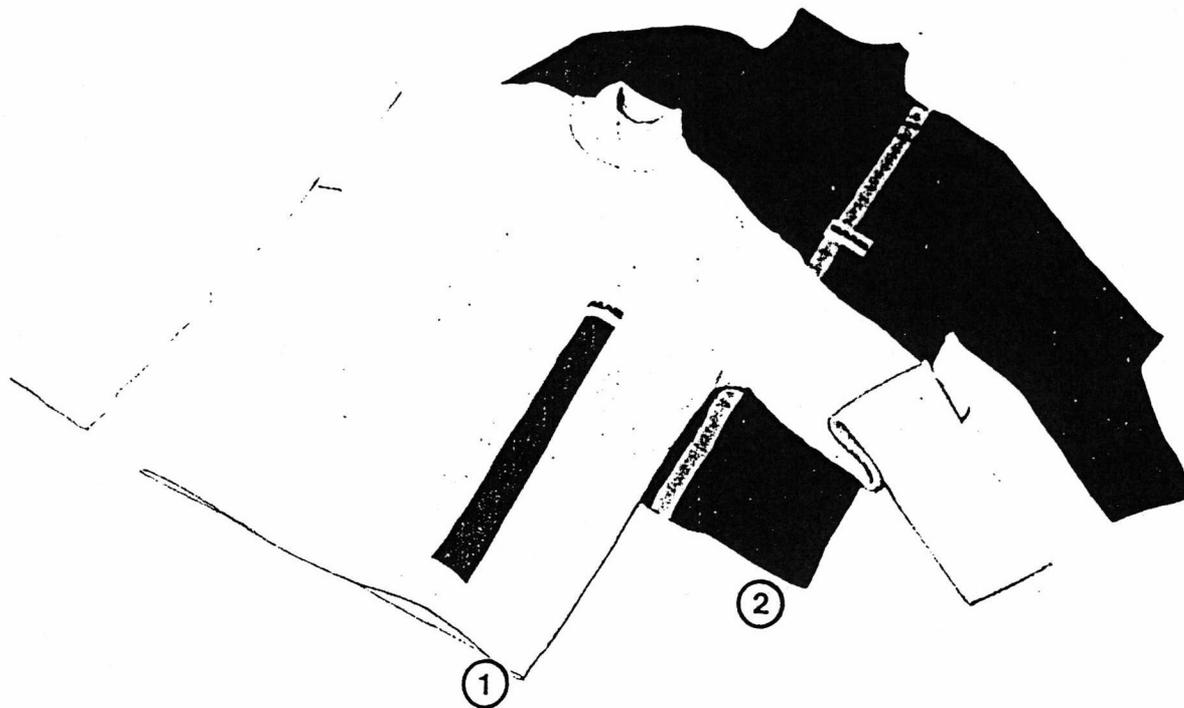
Hjälmar
Crash helmets
5:1 A



Benämning	Det nr Part no	Anmärkning Remarks	Description
Hjälmhållare	11957		Crash helmet holder



Benämning	Ant Qty	Pos	Det nr Part no	Anmärkning Remarks	Description
Saab sportjacka	1		11064	46	Saab sports jacket
Saab sportjacka	1		11072	48	Saab sports jacket
Saab sportjacka	1		11080	50	Saab sports jacket
Saab sportjacka	1		11098	52	Saab sports jacket
Saab sportjacka	1		11106	54	Saab sports jacket
Saab sportjacka	1		11114	56	Saab sports jacket
Emblem	2		12724		Emblem



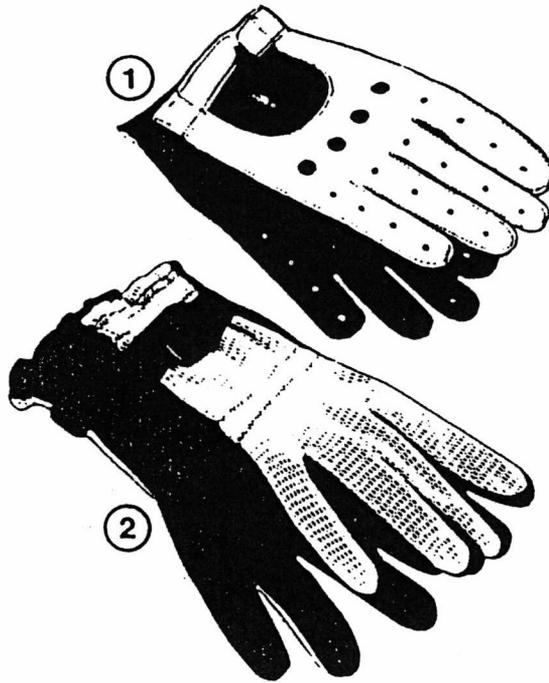
Benämning	Ant Qty	Pos	Det nr Part no	Anmärkning Remarks	Description
Saab polotröja, gul	1		10934	Small	Saab pullover, yellow
Saab polotröja, gul	1		10942	Medium	Saab pullover, yellow
Saab polotröja, gul	1		10959	Large	Saab pullover, yellow
Saab polotröja, blå	2		13151	Small	Saab pullover, blue
Saab polotröja, blå	2		13169	Medium	Saab pullover, blue
Saab polotröja, blå	2		13177	Large	Saab pullover, blue



Personlig utrustning
Personal equipment
Kläder
Clothes
5:2 C



Benämning	Ant Qty	Pos	Det nr Part no	Anmärkning Remarks	Description
T-tröja			14126	120	T-shirt
T-tröja			14134	140	T-shirt
T-tröja			14142	160	T-shirt
T-tröja			14159	Small	T-shirt
T-tröja			14167	Medium	T-shirt
T-tröja			14175	Large	T-shirt



Benämning	Pos	Det nr Part no	Anmärkning Remarks	Description
Handskar	1	11122	Small 6	Gloves
Handskar	1	11130	Medium 6 1/2	Gloves
Handskar	1	11148	Large 7	Gloves
Handskar	1	11155	Small 8	Gloves
Handskar	1	11163	Medium 8 1/2	Gloves
Handskar	1	11171	Large 9	Gloves
Handskar	2	12237	Medium	Gloves
Handskar	2	12245	Large	Gloves



Tuning and assembling

Table of contents

Section 6

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 DFF)



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 model 1969 or later, the two middle bolts have to be exchanged with the two bolts in the kit.

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 brake 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.

First 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 engine 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.

Next, the holes for the front mufflers rubber cushions are drilled and the cushions installed.

With the exhaust system fully suspended and hanging free without support, it should be checked that the clearance between the floor and the left part of the "Y" connection is 20 – 30 mm. If it is less, bend it out with a bar between the front pipe in the muffler and the car floor. Check that none of the rubber cushions have been stressed too much. If necessary, bend the muffler clamps.

ADJUSTMENT

When the installation is completed, start the engine and let it warm up at approximately 2000 rpm. Check the following:

1. Oil pressure and coolant temperature
2. Oil and water leaks
3. Exhaust system which should not be leaking and not in contact with the body.

When the engine reaches normal operating temperature, the idle should be set using a tachometer and a CO-meter. Adjust the idle to 800 – 900 rpm. Adjust the CO-level to 3 – 3,5 % with the mixture screw at the very bottom of the right short side of the carburetor.

Install the air cleaner. Turn the top cover so the air intake is pointed towards spark plug on cylinder number 3 for summer use and behind the heat shield for winter use. If there is no such shield, it should point directly to the exhaust pipe for cylinder number 3 and 4.

1700 cc

The engine displacement is increased with a stroker kit. It contains a new crankshaft and new pistons. The pistons are complete with connecting rods and piston rings. For this modification the engine has to be removed and the directions in the "V4 Service Manual" should be followed.

Install the following bearings:

- Outer crankshaft bearing – 881238
- Center crankshaft bearing – 881240
- Connecting rod bearing – 881121

The 1700 cc modification makes it necessary to also change the pressure plate and the clutch disc. The pressure plate, part number 1052, is identical with the standard one except that the springs are stiffer and marked red. The clutch disc, part number 1053, has also stiffer springs.

At hard acceleration, especially on the 1700 cc version, it might be that vibrations are encountered. They can be prevented by installation of an engine side support kit.

These parts are included in the kit:

Part Description	Quantity	Part Number
Bracket	1	710469
Side Support	1	733239
Bracket	1	717642
Screw	4	794674
Nut	2	791470
Washer	2	791055
Washer	2	791650
Rubber Grommet	1	708563
Spacer	1	710473
Rubber Washer	1	710474

Modified vehicles should have radial tires with dimensions of 155 x 15 or larger.

1700 CC LOW COMPRESSION ENGINE

For cars with 1700 cc LC-engine the installation of the kit is carried out in conformity with that for the 1500 cc-engine. Due to the lower C-R the net output will be about 86 HP.

The power output with the three different stages is:

1500 cc	1700 cc	1700 cc
80 HP (DIN)	86 HP (DIN)	90 HP (DIN)
90 HP (SAE)	96 HP (SAE)	100 HP (SAE)



Installation instruction – Carburetor kit no. 1160
Weber 40 DFI

Preparations

The ports in the intake manifold should be ground to the same dimensions as those of the cylinder heads by means of a rotating cutter or file. There should not be any sharp corners or mismatch between the ports in the intake manifold and in the cylinder head. The passages in the intake manifold should be ground similarly and then polished with an emery cloth.

The intermediate flange should be fastened with screws to the inlet manifold in its final mounting position. All sharp passages down to the central longitudinal passage in the inlet manifold should be rounded off.

Carburetor Weber 40 DFI-2 is delivered with fixed venturis of 28 mm diameter. In order to get maximum performance these ought to be turned or bored to a 32 mm diameter. The remaining sharp edges should be rounded to form a smooth contour.

Installation instructions

The gasket between the intake manifold and the cylinder head is to be fastened with gasket cement to the intake manifold in its final position. Excess material around the ports should be cut away. The temperature indicator and nipple for water inlet to the heater must be moved from the standard intake manifold to the new intake manifold before it is mounted on the engine. When the valve covers have been installed, the carburetor mounting studs are to be screwed down into the carburetor mounting flange. The valve for crankcase ventilation (PCV valve) is to be mounted on the spacer flange in such a way that it is pointing straight up on the right-hand side of the carburetor; the nipple for the vacuum servo is mounted horizontally forward to the left side of the carburetor.

The spacer flange is to be mounted with gaskets meant for this purpose on each side of it. After that the carburetor is installed on the intake manifold. Install the bracket for the carburetor linkage under the rear right side nut. The rear mounting hole for the carburetor linkage should be drilled in the heater cover about 85 mm to the right and 55 mm above the standard rear holder for the carburetor linkage. The

standard bearing is to be moved to the hole which shall have a diameter of 14 mm. Now install the complete carburetor linkage assembly.

Throttle linkage arrangement

Clamp the fuel line to the fuel inlet nipple on the carburetor. Then install the air cleaner. Connect the hoses for the crankcase ventilation from left valve cover to the valve in the spacer flange and from right valve cover the flame protection cover in the air cleaner.

Jet setting	Standard	Modified
Venturi	28	32
Emulsion jet	160	160
Main jet	190	220
Air correction jet	60	60
Float level		
5 mm		

Check the float level as follows: Remove the carburetor cover and hold it with the fuel inlet in vertical position with the float resting against the needle valve. The distance between the float and the gasket should be 5 mm. Adjust by bending the arm, if necessary.

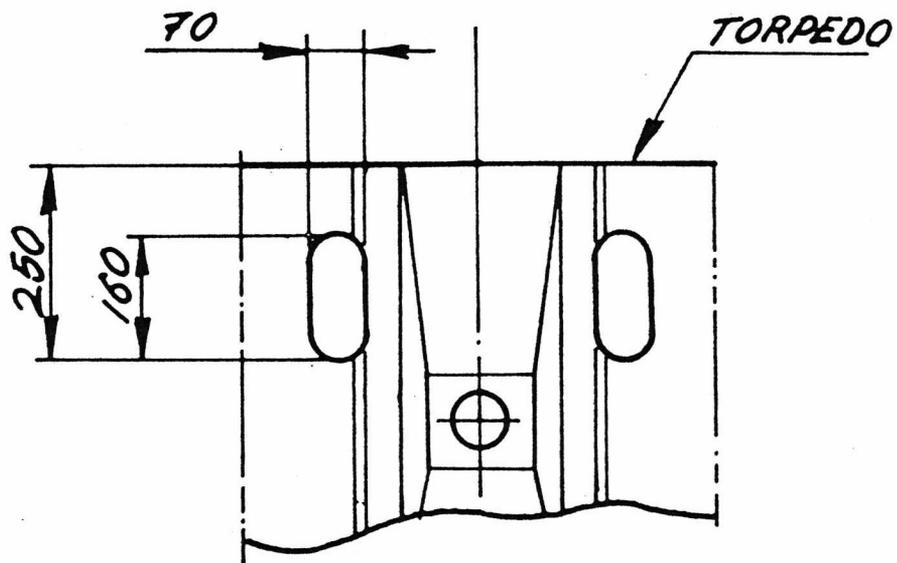
Idle Adjustments

Check the idling speed with the engine warm and adjust CO level to 2.5 %. If you have no CO meter adjust best possible idel with mixture screws.

Drawing of front floor

The holes for the exhaust pipes should be made with one side in the upper corner of the floor. See the drawing below.

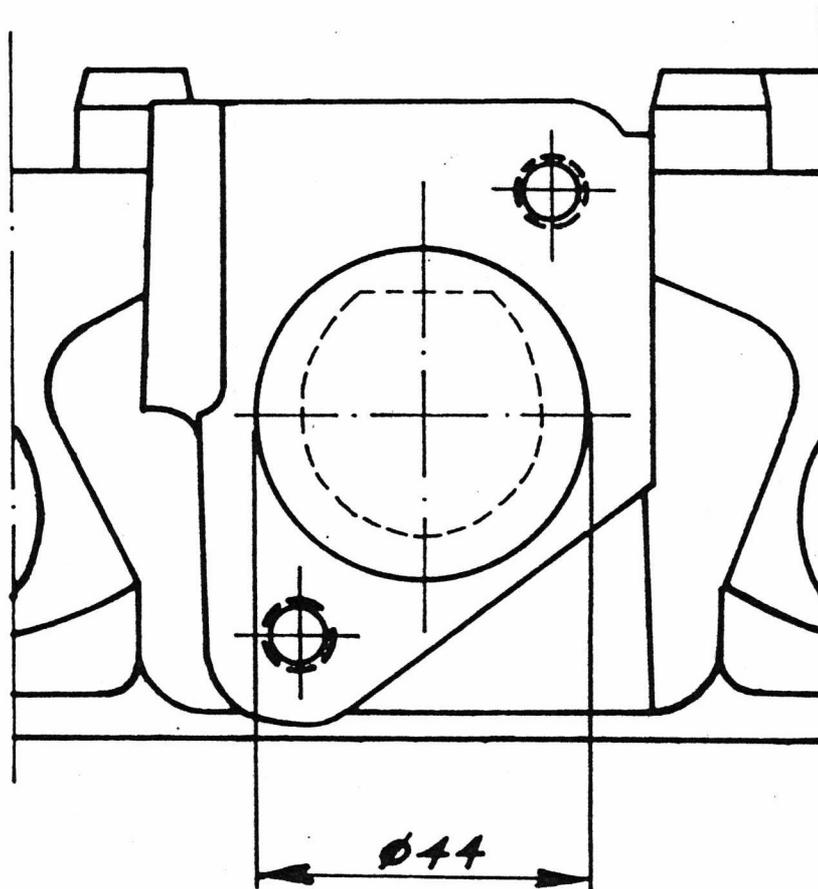
Make the holes 160x70 mm with \emptyset 30 mm radius in all corners.



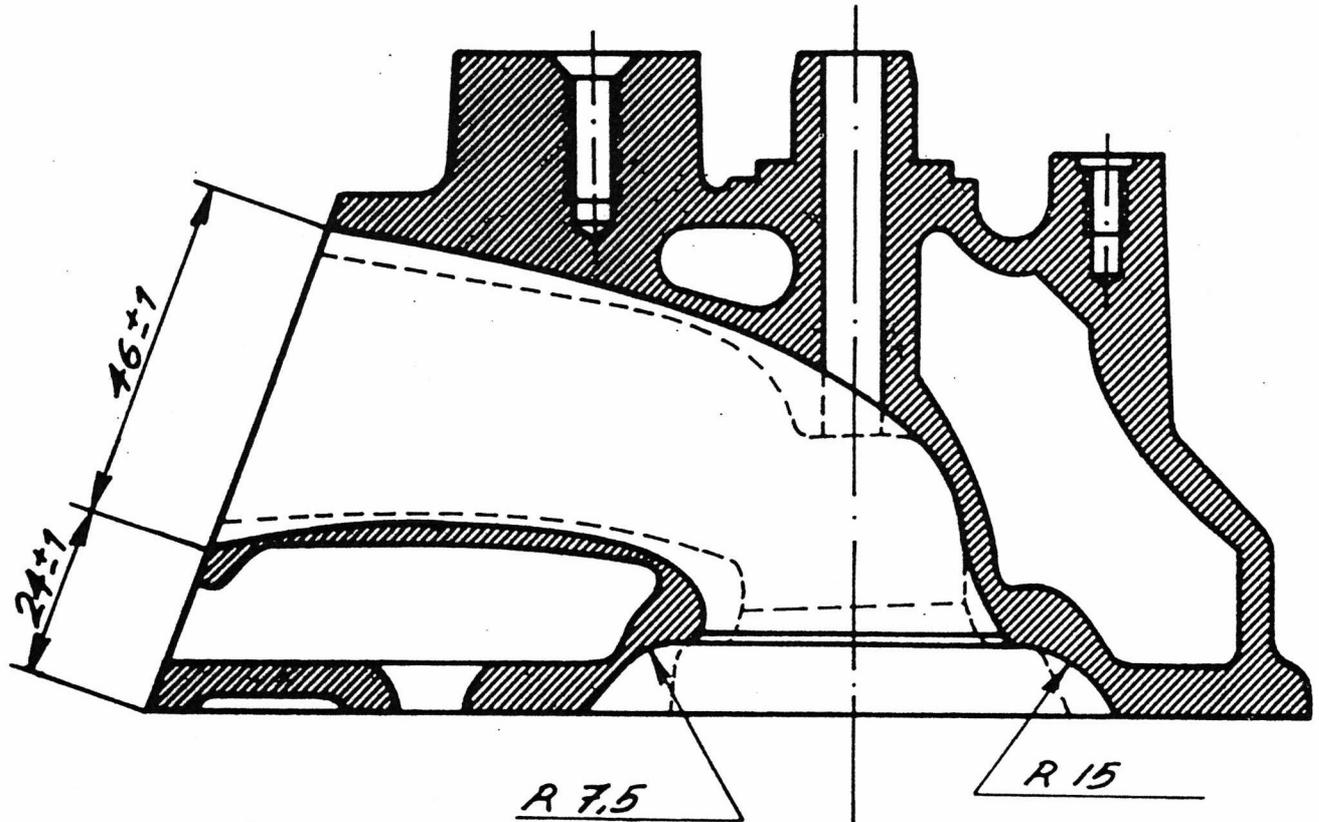
Modification of the exhaust ports

Exhaust ports are to be milled out to 44 mm. The middle flange must also be bored out to same diameter.

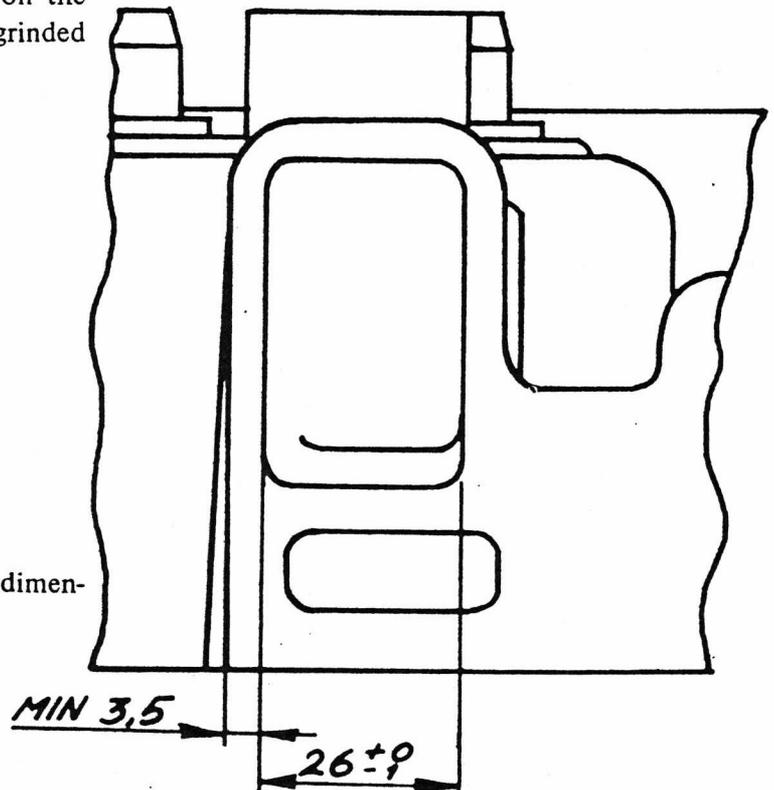
The gasket 707712 can be used by enlarging the bolt holes.



Modification of the intake ports

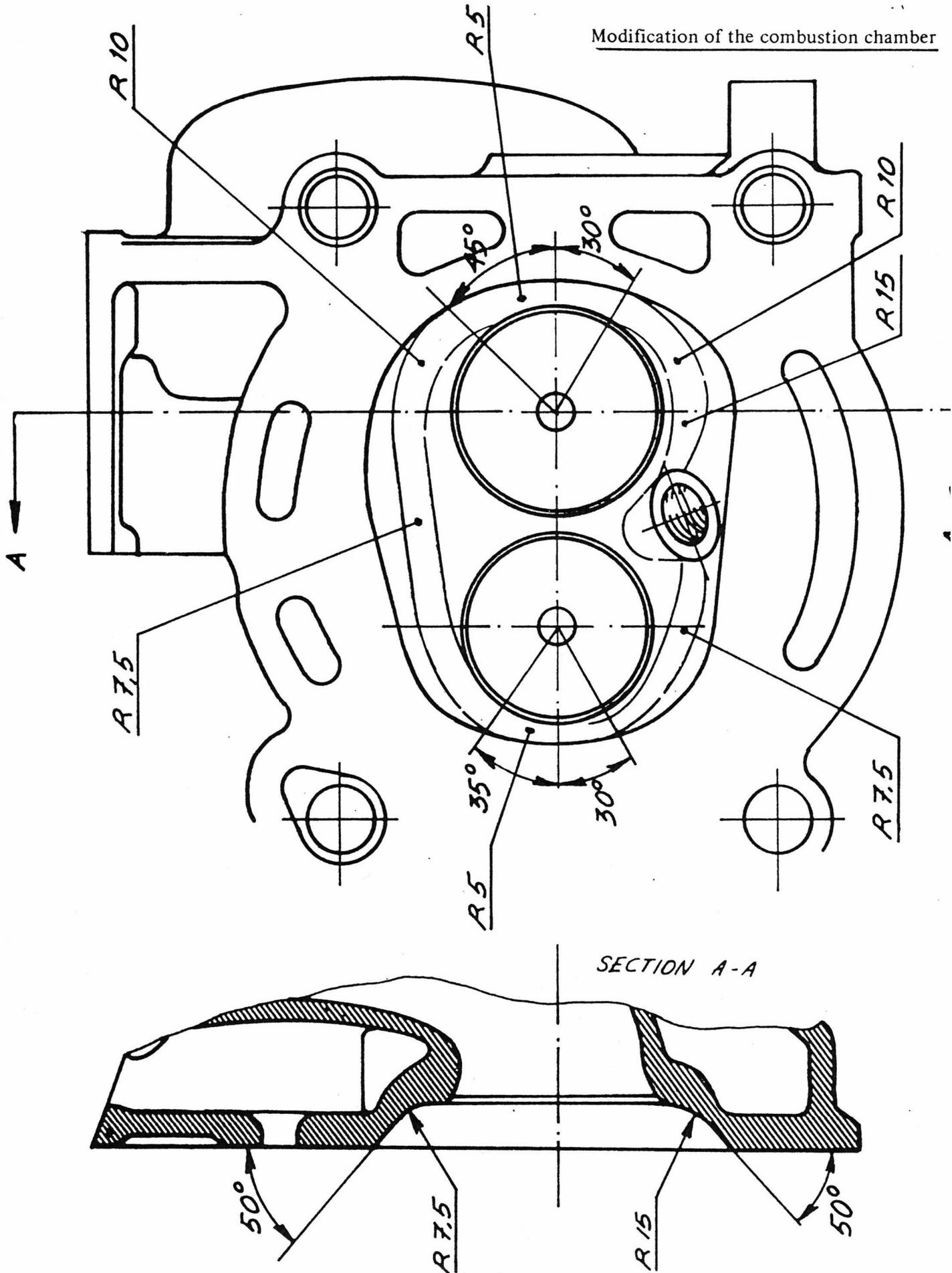


Grind out the intake ports to the dimensions as shown on the drawing. Note! If the guide on the grinder has an expander, the seat must be grinded before the edge is filed down.



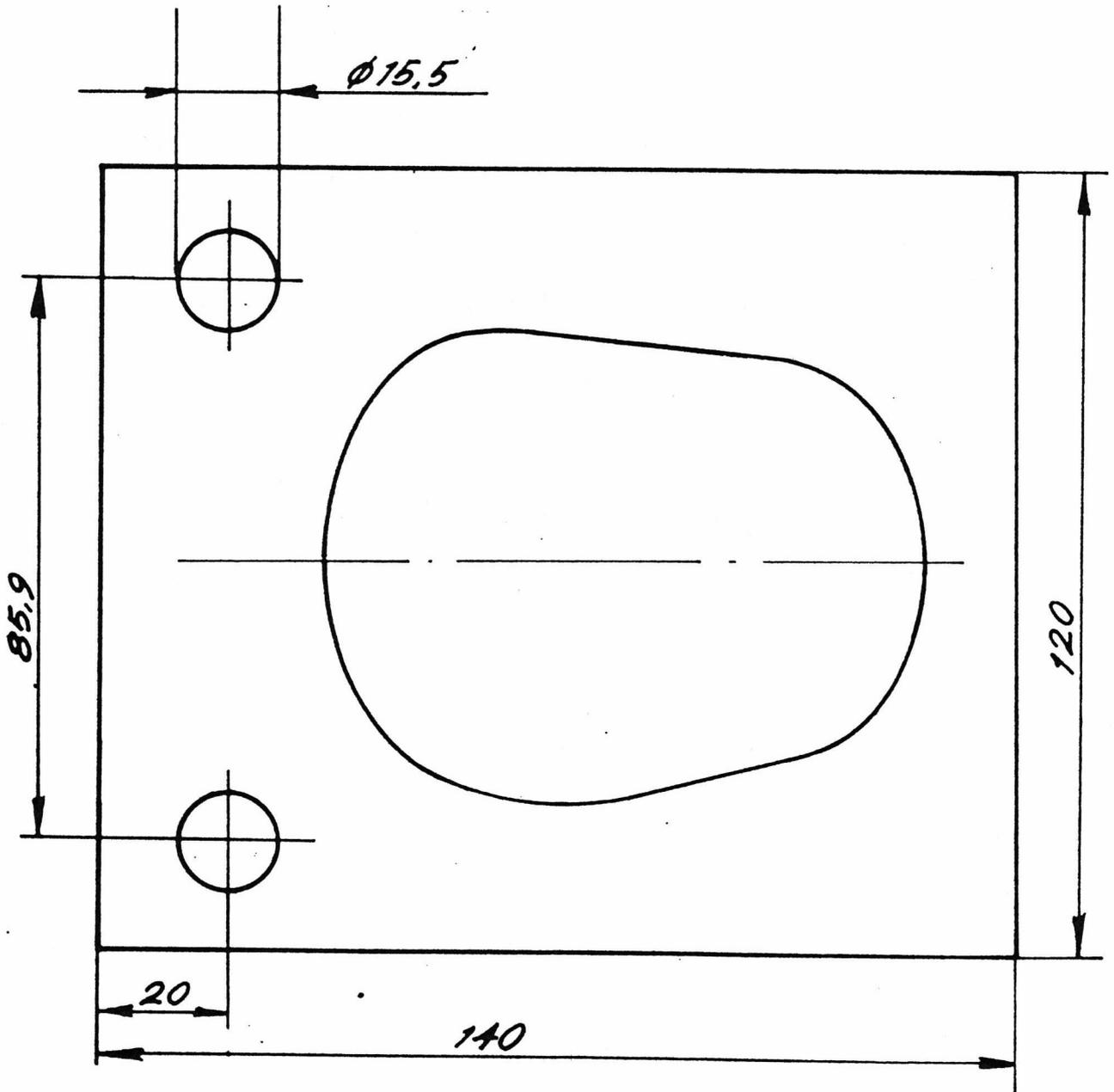
Before grinding the ports mark off the new dimensions.

Modification of the combustion chamber



Template for combustion chamber

The template can be made of 2 mm sheet aluminium.





Directions for competition modification of the Saab V4

(Grupp 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

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 surface for the oil filter, head gaskets, and bearings. The surfaces must be absolutely even and undamaged.

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

- a. that the cap and block mating surfaces are straight and even
- b. that the bearing surfaces are even.
- c. that the out-of-round is no more than .000 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

1. 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 right angle to the wrist pin approximately 0.6" (15 mm) from the piston's 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 must not exceed 0.004" (0.1 mm).



The recommended piston clearance for forged pistons is 0.0056" (.014 mm). The clearance must not be less than 0.0056" (.014 mm) due to cylinder taper or out-of-round. Clean after honing and blow dry with compressed air. The cylinder walls should then be wiped off with a clean rag soaked in motor oil. Wipe the cylinder walls until the rags no longer get dirty. That way you get rid of all metal dust from the honing procedure which otherwise might cause rapid wear of the piston rings.

2. Head Gasket with Separate Copper Rings

A. If the head gasket with separate copper rings (part no. 1016) is used, grooves have to be made in connection with the cylinder boring. See Enclosure.

3. Compression Ratio Increase by Milling (when cast standard pistons are used)

A. The block may not be milled on the blue and black engines. If a higher compression ratio is wanted, and standard pistons are used, the heads can be milled up to 0.07" (1.75 mm) without jeopardizing the strength. This will increase the compression ratio to 10.5-11.0 if the combustion chamber is left unmodified. See Enclosure 8 and 13.

B. 1700 cc (1500 cc engine modified with a stroker kit or the standard 1700 cc engine modified with new pistons and connecting rods). With pistons 1001 or 1002, diameter 3.545" or 3.58" (90 or 91 mm), there are two different ways to increase the compression ratio.

a. Mill the engine block 0.04" (1.0 mm) so that the piston tops at top dead center are level with the engine top surface. Also, mill the cylinder heads to make sure they are straight. Also, mill 0.047" (1.2 mm) from the engine block surface against the intake manifold to obtain better alignment.

b. Mill the cylinder heads (maximum 0.07" (1.75 mm)).

If the alternative is chosen, the combustion chamber can be modified as per Enclosure 4 and a compression ratio of 10.5-11.0 can still be obtained. By milling the cylinder heads only, a compression ratio of 10.5-11 can be obtained if the combustion chambers are not modified which is shown in the sketches number 3 and 6.

Alternative number 1 is better from a performance point of view, but also more expensive.

CRANKSHAFT SECTION

Crankshaft 1500 cc Engine

Do not modify the connecting rod. However, check and adjust the clearances for the main bearings and connecting rod bearings.

The clearances are supposed to be:

Main bearings – 0.035 - 0.045 mm

Connecting rod bearings – 0.035 - 0.050 mm

Crankshaft main journal diameter:

Standard red 56.990 - 57.00 mm

Standard blue 56.980 - 56.99 mm

Corresponding bearing diameter, installed:

Standard red 57.014 - 57.030 mm

Standard blue 57.004 - 57.020 mm

Crankshaft connecting rod journal diameter:

Standard red 53.990 - 54.00 mm

Standard blue 53.980 - 53.99 mm

Corresponding bearing diameter, installed:

Standard red 54.014 - 54.044 mm

Standard blue 54.004 - 54.034 mm

Use green Plastigauge to check the bearing clearances

If the clearance is 0.00118-0.00138" (0.030-0.035 mm) and the bearings are the blue marked type replace the bearing half in the cap with a red marked type and check the clearance again. If the initial clearance is more than 0.00197" (0.050 mm), both bearings should be replaced with the blue marked type and the clearances checked again.

If necessary, check the clearances using several different bearings until the right clearances are obtained. During every check it is necessary to torque the bolts properly which means 70 ft lbs (10 kpm) for the main bearings and 28-30 ft lbs (4.0-4.5 kpm) for the connecting rod bearings.

The following bearings can be used:

Connecting rod bearings, blue 881122

Connecting rod bearings, red 881121



Outer main bearings, blue 881239

Outer main bearings, red 881238

Center main bearings, blue 881241

Center main bearings, red 881240

Crankshaft 1700 cc engine

The same instruction as for the 1500 cc engine above. For tuning, special checked crankshafts, number 1062, have to be used.

CYLINDER HEADS

Modification instructions for cylinder heads on the blue and black engines used from year model 1968 and on:

1. The intake ports should be ground or filed according to the instructions in Enclosure number 3. The measurements should be 25-26 mm wide and 45-47 mm high, measured on the gasket surface. The gasket surface surrounding the port should not be less than 3.5 mm wide or satisfactory tightening cannot be accomplished.

Before modification, it is advisable to paint the gasket surface with machinists' dye and then mark out the future measurements.

If valves with chrome plated stems and separate valve guides are to be used, (44/37 mm and 44/38 mm), remove the valve guide portion of the valve guide which extends into the port.

If these valves are not used, the valve guide sides should be tapered toward the port. The height should not be reduced.

If larger valves are to be used (42/37 mm, etc.), the valve seat machining should be done before the valve guide extruding portion is removed, as it afterwards is extremely difficult to center the mill.

2. Combustion Chamber — When valves larger than standard are installed, the combustion chamber should be modified in order to improve the breathing. The modifications are shown in Enclosure 4 a.

In order to get the same volume in all combustion chambers it is advisable to make a template of cardboard, steel sheet, or similar, according to Enclosure 4 a.

The combustion chamber volume after modification should be 44 cm³. Note: This volume is obtained for the combustion chamber in a cylinder head that has not been milled. It gives a compression ratio of 11.1 with 1700 dome type piston. If a different type of piston is used, the heads have to be milled to obtain this compression ratio.

3. Valve Seats — The valve seat angle should be 45°. With the seat outer diameter the same as the valve diameter, the inner diameter should be 2 mm smaller. This applies to both the intake and exhaust valves.

Machine the valves in a valve grinder as follows:

1. Grind the inner part of the valve to 30°.
2. Grind the 45° part of the valve to the same measurements as the corresponding seat; this means the outer diameter the same as the seat and the inner diameter 2 mm smaller.

The sharp edges on both sides of the 45° angle on the valve and on the seat should be slightly rounded. Before the valves are installed, the tightness of each one should be checked. Here is an easy way to do that: make approximately 15 thin lines across the valve seat using chalk. Install the valve and turn it on the seat a few times in both directions using a slight pressure. Remove the valve and check that the chalk lines have been erased and similarly.

4. Recommended Compression Ratio — When the valves are fitted, the compression ratio and the level of the cylinder head can be set. (See /2 above). No install the spark plugs which will be used in the final installation.

The compression ratio is limited to 10.5 if standard head gaskets are to be used. With the special arrangement with copper rings the compression ratio can be raised to 11.5 using one two-barrel carburetor and to 11.0 using two two-barrel carburetors.

5. Exhaust Ports — Bench tests show that the V engine torque increases continuously with increased port areas. This is valid for intake ports as well as exhaust ports.

The limitation is the wall thicknesses (limit 4 mm) in the head and the gasket areas between the heads and the manifolds.



The exhaust port should increase in area all the way from the valve to the exhaust manifold. The valve guide should be filed or ground so it no longer intrudes into the port. The outlet diameter should be increased to 44 mm. See Enclosure 2.

Use exhaust gasket number 1145. If the gasket is too small after the modification has been made, and tightening problems are encountered, a special gasket can be made of aluminum and covered with Permatex gasket compound on both sides prior to installation.

6. Valves and Guides – As mentioned earlier, special valves with diameters of 42 and 37 mm are available. The stem diameter is the same as standard which makes guide modification unnecessary unless the old ones are damaged or worn, in which case separate valve guides are to be installed. Part number 1172, Enclosure 7. When the valve guides are filed level with the port, the sharp edge at the guide end should be rounded to prevent valve stem damage or ground off.

The valves will recess into the valve seats as time is accumulated on the engine. This is first noted through decreasing valve clearance. When the valve recesses, the seat width also increases. When the seat width increase approaches 1 mm, it is time to reduce the inner diameter by using a 70° mill or grind on the head. If the recession is as much as 0.06-0.08" (1.5-2 mm), the valves should also be replaced. The cylinder head is in that case restored by installation of 44 mm intake valve number 1168 and 38 mm exhaust valve number 1167. As the stem diameter on these valves is 0.04" (1.0 mm) smaller than on the previous valves, separate valve guides have to be installed. Valves 42/37 and 44/38 give similar HP ratings.

7. Valve Springs, Retainers, and Locks – Install stiffer valve springs, part number 1011. If standard valves are used, install the standard valve retainer and lock. If larger valves are installed, the distance between the upper and lower spring seats should be measured. The distance should be 1.51"-1.55" (38.3-39.5 mm); never less than 38.3 mm if a camshaft with a lifting height of more than 7.2 mm is used.

There are two different valve retainers available. Black retainer 1087 should be used when new, large valves are installed, white retainer 1012 after the first recession.

After modification of a valve with new valves, spring length of approx. 1.52" (38.5 mm) is achieved with the black retainer and 1.45" (37.0 mm) with the white retainer.

CARBURETORS

There are three different alternatives for the 1500 cc and the 1700 cc engines..

1. Carburetor Kit – 1 Weber 40 DFI, Part No. 1160
2. Carburetor Kit – 2 Solex 40 – 42 CCI, Part No. 1161
3. Carburetor Kit – 2 Weber DCOE 16S, Part No. 1162

These carburetor kits include: intake manifold, carburetor with linkage, air filter, hardware and installation instructions. Alternative 3 (side draft carburetor kit) also includes a special distributor.

You will find the torque and HP information in Enclosures 14 and 15.

FLYWHEEL

The flywheel should be as light as possible without endangering the strength. Two different alternatives for lightening can be found in Enclosure 5.

- a. Reduce the outer diameter behind the starter gear to 19.45" (240 mm) by turning.
- b. After the turning, mill the flywheel so only a small amount of material is left around the retaining bolts for the clutch. Polish the surface and balance the flywheel. Always use new bolts for the installation of the flywheel and tighten to 50 ft. lbs (7.0 kpm).

Weights:

Standard flywheel – 16.1 lbs (7.3 kp)

Modified according to alternative 'a.' – 12.8 lbs (5.8 kp)

Modified according to alternative 'b.' – 11.5 lbs (5.2 kp)

Modified flywheel according to alternative 'b.' has part number 1169.



CLUTCH AND DISC

Clutch part number 1052 has stiffer springs (marked red). The disc, part number 1053 or number 1131, also has stiffer springs than the standard disc.

Pressures:

Standard pressure plate – 750-940 lbs (340-425 kp)
Competition type – 930-970 lbs (420-440 kp)

The competition-type pressure plate and disc should be used if the engine is tuned to more than 90 HP.

PISTONS

Cast standard piston 90 mm (1498 cc), Part No. 884834

Cast standard piston, oversize 91 mm, (1531 cc), Part No. 884836

Forged piston, size 91 mm, (1531 cc), Part No. 1003
Cast standard piston, 90 mm (1698 cc), Part No. 1001

Cast standard piston, size 91 mm (1740 cc), Part No. 1002

Forged piston, 91 mm (1740 cc), Part No. 1004

If the engine is intended mainly for competition, the forged pistons should be used. They can withstand higher pressures, temperatures and rpm's than the standard pistons. They are also domed which makes it possible to modify the heads more extensively.

The forged pistons are delivered with piston rings and bolts' pins. When assembling the piston and connecting rod, part number 1005, the top end of the connecting rod has to be heated to 535-610° F (280-320° C) when the bolt pin is being installed. The necessary press force is approximately 1900 lbs (800 kp). During the installation the piston has to be supported by a tool with a shape fitting the piston to prevent distortion of the piston.

Before installation of the pistons, the ring gap has to be measured as follows: Install the ring in the cylinder and press it down approximately 1" (20-30 mm) using the piston as a guide. The gap of the compression rings should be 0.012-0.020" (0.30-0.50 mm).

CONNECTING ROD

A. Standard Connecting Rod – In order to reduce the chances for breakage, the connecting rod should be polished with the grinding along the length of the rod. The rod bolts and nuts should be replaced every time they are removed. When installed they should be torqued to 28-30 ft lbs (4.0-4.5 kpm) and locked with Loctite, Lockn' Seal, (or similar, which will withstand a temperature of at least 300° F (150° C))

After installation, check that the connecting rods side play on the crankshaft are 0.004-0.008" (0.10-0.20 mm). The pistons and connecting rods can be balanced, but it is not necessary.

B. Connecting Rod No. 1005 – In order to reduce the chances of a connecting rod failure, especially on 1700 cc engines, a special connecting rod is available part no. 1005. NOTE: This connecting rod should not be polished!

CAMSHAFT

Three different camshafts are available:

7.2 – Part No. 1007

7.6 – Part No. 1008

8.3 – Part No.

Type 7.6 is recommended for rallies. It can also be used for track races where a high torque at tentatively low rpm is required (ice racing). For higher speed tracks, where the rpm can be held around 5000-7500 rpm, the type 8.3 camshaft is preferred, as it gives better performance above 6000 rpm.

The type 7.2 camshaft gives the maximum torque approximately 500 rpm earlier than type 7.6 but with approximately 5 % lower top performance. This is a good street cam.

When a high-performance camshaft has been installed the valve lift then should be checked intermittently in order to detect any wear of the camshaft. This can be done as follows:



Adjust the valve play correctly (for 7.6 intake 0.0197" (0.50 mm), exhaust 0.024" (0.60 mm)) on all valves except the one to be measured. Here you set the valve play first to '0' and then you tighten the adjustment screw another 1/10 of a turn to be sure all play is eliminated. Then use a dial indicator to measure the lifting height on the valve, parallel to the valve stem. Rotate the engine and repeat at least once on each valve to check the initial measurement. Readjust this valve to proper play and go on with the next one the same way.

The camshaft type 7.6 gives a valve lift of 10.90-11.50 mm, depending upon manufacturing differences in the rocker arms, etc. When the lift caused by wear has decreased 0.008" (0.2 mm), the power loss is significant and the camshaft and the valve lifters should be replaced.

	7.2	7.6	8.3
Valve play	0.50	0.50	0.50
Inlet	0.0197	0.0197	0.0197
Outlet	0.50	0.60	0.60
	0.0197	0.024"	0.024"

CAMSHAFT DRIVE TRAIN

Install the steel gear (part no. 881027) on the balance shaft (part no. 881133). The gear backlash should be 0.00197-0.0055" (0.05-0.14 mm). Check that the camshaft gear backlash is 0.00197-0.0055" (0.05-0.15 mm). Replace the gears if necessary.

BALANCE SHAFT

Use the balance shaft for the 1500 cc engine (part no. 881133) on the 1700 cc engine as well as the 1500 cc engine.

VALVE LIFTERS

Two different types of valve lifters are available the standard lifter and the competition type, part no. 1013. The later type is of highest quality and lighter (79 grams compared to 100 grams for the standard lifter). It is not recommended to try to make the standard lifter lighter, as experience has shown that they will easily fail.

New lifters should always be installed together with a new camshaft. If the lifters however, are in perfect condition they could be used over again, but if they have scratches or rings on the bottom surface they should be replaced.

Push rods

Replacement not needed but check straightness and the ball surfaces carefully.

Rocker arms

Modify the rocker arm by grinding the arm at the valve end to a 8 mm diameter half circle positioned directly over the valve stem. Do not reduce the height of the rocker arm.

Rocker arm shaft support

A competition-type rocker arm shaft support is available (part no. 1171). It is retained by the two standard bolts plus three head bolts have to be replaced by three special head bolts threaded for an M 8 x 1 mm in the head (part no. 883107).

At installation, the support is first retained by the two standard bolts. Adjust then the height of the spacers so they fit exactly, and tighten the side bolts.

The competition-type rocker arm shaft support bracket has the following advantages:

1. Valve recession will be decreased and, thereby, also the need for valve adjustment.
2. The rpm limit will be increased 500 rpm.

CYLINDER HEAD GASKET

There are three alternatives:

1. Standard gasket
2. A gasket, part no. 1017, which has a reinforced steel lining for blue and black engines only.
3. Gasket 1015 with copper rings (part no. 1016, separately).

The standard gasket should be used only with minor modifications (single carburetor or maybe two-barrel carburetor Weber 40 DFI) and never for a compression ratio higher than 10.5.



If difficulties are encountered with the standard gasket and arrangements are not made for the copper ring-type gasket, the gasket with a reinforced steel lining (which is market red) can be used.

In any case, the head bolts and nuts should be retorqued after approximately 300 and 600 miles (500-100 km). Torque to 85 ft lbs (12 kpm). If the bolt "creeps" (the torque does not increase continuously up to 85 ft lbs (12 kpm)) the bolt should be replaced immediately.

For competition use, only the copper ring-type gasket is recommended. This gasket consists of separate copper rings around the cylinders (part no. 1016 if sold separately) and a standard gasket, 1015, scaling for water and oil.

For the copper ring-type gasket a special recess has to be made in the block. See Enclosure 6. It is very important that the recess has exactly the measurements indicated on the sketch. Note the following concerning the copper rings:

- a. Replace the copper rings every time the head is removed. If this for any reason cannot be done, reinstall the old copper rings but make sure they are installed in the same cylinder and the same position as before. It is, therefore, necessary to mark them before they are removed from the recesses.
- b. The copper ring must not be less than 0.0846" (2.15 mm) high. If there are differences in the copper ring thickness, install copper rings with the same thickness under the same head. Torque the head bolts to 85 ft lbs (12.0 kpm). No retorquing is necessary.

NOTE: When ordering head gasket, also specify the engine model year.

OIL PUMP

Replace the oil pump spring with the stiffer spring, part no. 1014. The oil pump plunger should be modified as follows:

- a. Polish the plunger inside in order to reduce the spring wear.

- b. The outer sharp edge on the plunger top should be honed round.

Despite the polishing of the plunger inside experience has shown that the spring is worn and therefore, it should be replaced every time the engine is rebuilt or after 8000-12000 miles (15000-20000 km) of competition driving.

The oil pressure, with a warm engine, should be approximately 85-90 lbs/sq in (6-6.5 kp/cm²). If the maximum pressure is lower than approximately 55-60 lbs/sq in (4 kp/cm²) the reason for it has to be determined.

FUEL PUMP

The standard fuel pump is sufficient up to horsepower output of approximately 115 DIN HP. Fuel pump, part no. 1024, has capacity for 160 HP. It is installed in place of the standard pump.

In summertime there is a chance for vapor locks in the fuel pump. Normally, this happens after a hot engine has been shut off a few minutes or has been idling and a demand for maximum fuel is made. Suddenly the engine loses power for a while and then recovers when colder fuel has reached the pump.

In order to insulate the fuel pump from the engine heat, a fiber gasket, no. 1174, can be installed under the fuel pump. The fuel pump push rod then has to be extended the same distance. Put the extended portion towards the pump. Extended push rods for the fuel pump, part no. 1175.

If the ambient temperatures are very high, it is sometimes not enough to insulate the fuel pump. The fuel reaches the pump too hot and is heated up too much there. An electric fuel pump can eliminate the problem. It should never be installed close to the exhaust system.

OIL COOLER

The oil cooler, part no. 1023, is necessary for competition engine. The oil temperatures can still reach as much as 285-300° F (140-145° C). This does not indicate engine trouble, but the additives in the engine oil are used up very fast, and the engine oil has to be changed often.



The oil cooler should be installed in a place where the best possible air is obtained; for instance, on the left engine housing level with the engine valve train.

COOLING SYSTEM

The original cooling system is in most cases sufficient for a mildly tuned engine (about 110 HP). For more tuned engines and especially for competition use a larger radiator (part no. 1166) with a special overflow container (part no. 1164) should be fitted. When fitting the larger radiator it is necessary to exchange the rectangular headlamps with round ones see group 10 catalogue for the US Market.

For summertime competition, note:

- a. Do not cut the fan.
- b. The thermostat housing should be modified so that all unnecessary material is removed and the thermostat is left resting only on a small shelf with an inner diameter of 39 mm. The thermostat can also be removed completely.

As temperatures below -5°F (-15°C), a standard thermostat can usually be used. If it is not sufficient, the thermostat can be modified as follows:

Make a screwdriver groove with a hack on the center screw on the thermostat. Then melt the solder around the screw and screw and screw it down approximately four (4) turns. Drill three 3 mm holes in the seat circumference.

If the cooling capacity is not sufficient, install a bigger radiator, part no. 1166.

IGNITION SYSTEM

Install ignition coil, 850663, together with resistor, 850059. Remove the resistors in the ignition wires and install connectors no. 1178. Change to rotor, no. 1177.

Remove the vacuum unit and lock the breaker plate to the fixed bottom plate in the distributor.

The basic (static) ignition timing should be 9°BTDC with vertical carburetor system and 6°BTDC with side draft carburetor Weber 45 DCOE – 16S.

Recommended spark plugs:

Motorcraft (Autolite) AG 901 – Part No. 1099
Bosch W 280 T2
Champion N 60

(Grey engine)

Motorcraft (Autolite) AE 901 – Part No. 1176
Bosch W 280 T 13S
Champion L64Y

EXHAUST SYSTEM

From both an efficiency and a strength point of view, the exhaust system has to be replaced with part no. 1091. Make a hole in the engine compartment floor according to Enclosure 1. Use hardware kit, part no. 1092. For street modifications, exhaust system kit, part no. 1147 can be used.

CRANKCASE VENTILATION

The engine should have a closed crankcase ventilation system. Connect the right side valve cover with a hose to the flame guard in the air filter. Connect the left side valve cover to the connection on the intake manifold. Under this connection a 1 mm hole enters into the intake manifold.

For the side draft carburetor, Weber 45 DCOE – 16 S, the left side valve cover should also be connected with the air filter for the left side carburetor.

Oil filler cap, part no. 881156, should also be installed.

MODIFICATION OF CARBURETOR

Included in the carburetor kits are modification specifications. For dual carburetor installations, it is important that the carburetors are synchronized and the linkage straight and in order. No play in the linkage is allowed.



LUBRICATION

Competition-type oils should be used. In the summer, use viscosity SAE 40; and in the winter, use SAE 30. Vegetable base racing oils may not be used.

The oil should be changed at least every 1200 miles. During winter, the low temperatures cause the oil to become diluted and should be changed even more frequently. If you change to a different oil brand, the engine should be flushed with a standard engine oil.

The oil level should be from "medium" (between the oil level marks) to "high" (upper oil level mark).

For the transmission, Hypoid oils should be used - quantity 1.5 liter.

TRANSMISSION

It is possible to modify the transmission by installing alternate gear sets with different ratios. It is also possible to change the ring and pinion gear.

Three different gear sets are available: Standard, Special 1, part no. 1085, and Special 2, part no. 1086.

The standard gear set has the widest ratios. Special 1 has standard third (3rd) gear, while first (1st) and second (2nd) are higher and fourth (4th) lower than standard.

Special 2 has the same fourth (4th) gear as Special 1, but the other gears are higher.

Ring and pinion gear

The standard ring and pinion gear has the ratio 8:39 and is not very well suited for modified cars. The 7:36 gears, part no. 783629, are recommended for engines without extensive modifications. The ring and pinion gears 7:38, part no. 1049, and 6:35, part no. 1048, are both made of very good material and are well suited for modified engines.

Most widely used is 6:35 while 7:38 is mostly preferred for private driving.

Below are shown the speeds in miles-per-hour per 1000 rpm's in each gear based on a tire radius of 300 mm (155 x 15 tires).

Ring and

Pinion Gear	Gear Set	1	2	3	4
8:39 (4.87 to 1)	Standard	4.1	6.9	11.1	17.2
7:36 (5.15 to 1)	Special 1	4.3	7.3	11.6	14.8
7:38 (5.43 to 1)	Special 1	4.1	6.9	10.0	14.2
6:35 (5.83 to 1)	Special 1	3.8	6.4	9.1	13.2
7:38 (5.43 to 1)	Special 2	4.9	8.1	10.9	14.2
6:35 (5.83 to 1)	Special 2	4.5	7.6	10.2	13.2

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Ring and

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8:39 (4.87 to 1)	Standard	6,7	11,1	17,9	27,7
7:36 (5.15 to 1)	Special 1	7,0	11,8	17,0	23,9
7:38 (5.43 to 1)	Special 1	6,6	11,2	16,1	22,7
6:35 (5.83 to 1)	Special 1	6,2	10,4	14,9	21,1
7:38 (5.43 to 1)	Special 2	7,9	13,1	17,5	22,7
6:35 (5.83 to 1)	Special 2	7,3	12,2	16,3	21,1

Use a cast iron transmission housing, part no. 1051, when you install close ratio gear sets or non-standard ring and pinion sets, and always when the power output is more than 130 HP. It is also advisable to install a modified motor mount, 880170, between the transmission and floor pan to give the transmission additional support. Also, install the engine support brackets, part no. 1018, between engine and transmission.

BODY

For off-road racing and rallies, it is important to install a belly protection plate which is long enough and well supported. Part no. 1100 (for Group I) and part no. 1065 (Group II) meet these requirements.

CHASSIS

For competition cars, special rally front springs, part no. 1057, and shock absorbers, part no. 1059 and 1060 are recommended. Rally Special front springs part no. 1057. Should be installed only with spring supports, part no. 1088.

If a larger fuel tank is used, the rear springs should be changed to a more progressive type (part no. 1058). They can, of course, be used for other purposes.



LUBRICATION

Competition-type oils should be used. In the summer, use viscosity SAE 40; and in the winter, use SAE 30. Vegetable base racing oils may not be used.

The oil should be changed at least every 1200 miles. During winter, the low temperatures cause the oil to become diluted and should be changed even more frequently. If you change to a different oil brand, the engine should be flushed with a standard engine oil.

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6:35 (5.83 to 1)	Special 1	6.2	10.4	14.9	21.1
7:38 (5.43 to 1)	Special 2	7.9	13.1	17.5	22.7
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Use a cast iron transmission housing, part no. 1051, when you install close ratio gear sets or non-standard ring and pinion sets, and always when the power output is more than 130 HP. It is also advisable to install a modified motor mount, 880170, between the transmission and floor pan to give the transmission additional support. Also, install the engine support brackets, part no. 1018, between engine and transmission.

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If a larger fuel tank is used, the rear springs should be changed to a more progressive type (part no. 1058). They can, of course, be used for other purposes.



Rear axel

A modified rear axle has part no. 1061 and is used by Saab on all rally cars.

Brakes[†]

Brake pads Ferodo DS 11, part no. 1056, or Ferodo 2430, part no. 786828, should be used. It is important to "fade" the new pads after installation. This is accomplished by braking several times, getting the brake pads so hot that the braking power disappears. This causes the brake pads to cure so that the initial "break in" fade does not occur in the early part of a race.

It is also important to change brake fluid to a type with a very high boiling point. For example, BP Disc Brake Fluid, ATE Blaue S, Castrol Green, LMA, or similar.

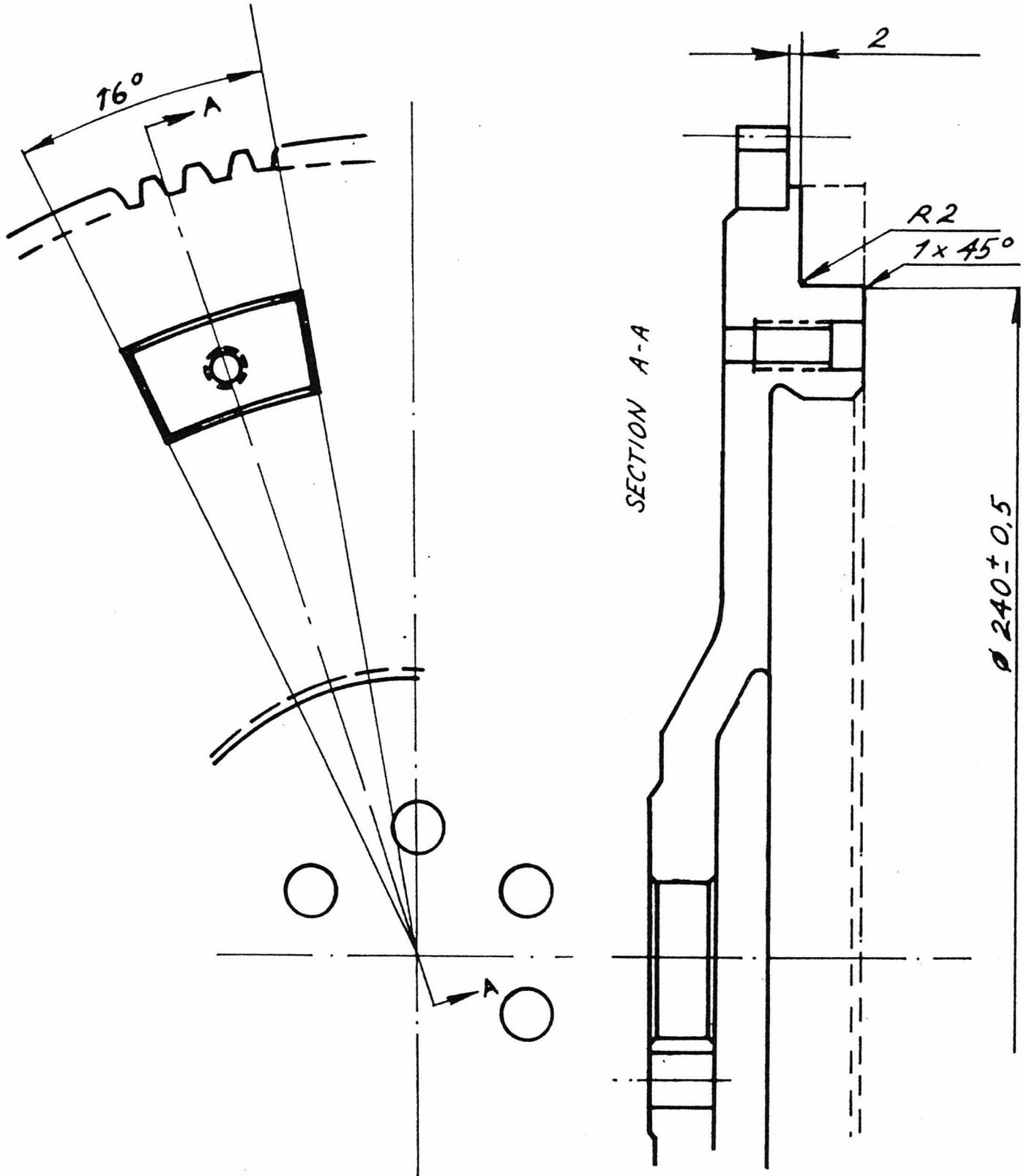
The dust shield plates on the inside of the front brake discs should be bent so a better air stream towards the discs is accomplished. The rear brakes should not be modified.

Wheels

Two types of wheel rims are recommended: The Saab Sonett wheel rim, 741207, of steel or the aluminum wheel rim, part no. 1120. For the aluminum wheel special bolts, part no. 1121, and special washers, part no. 1122, should be used.

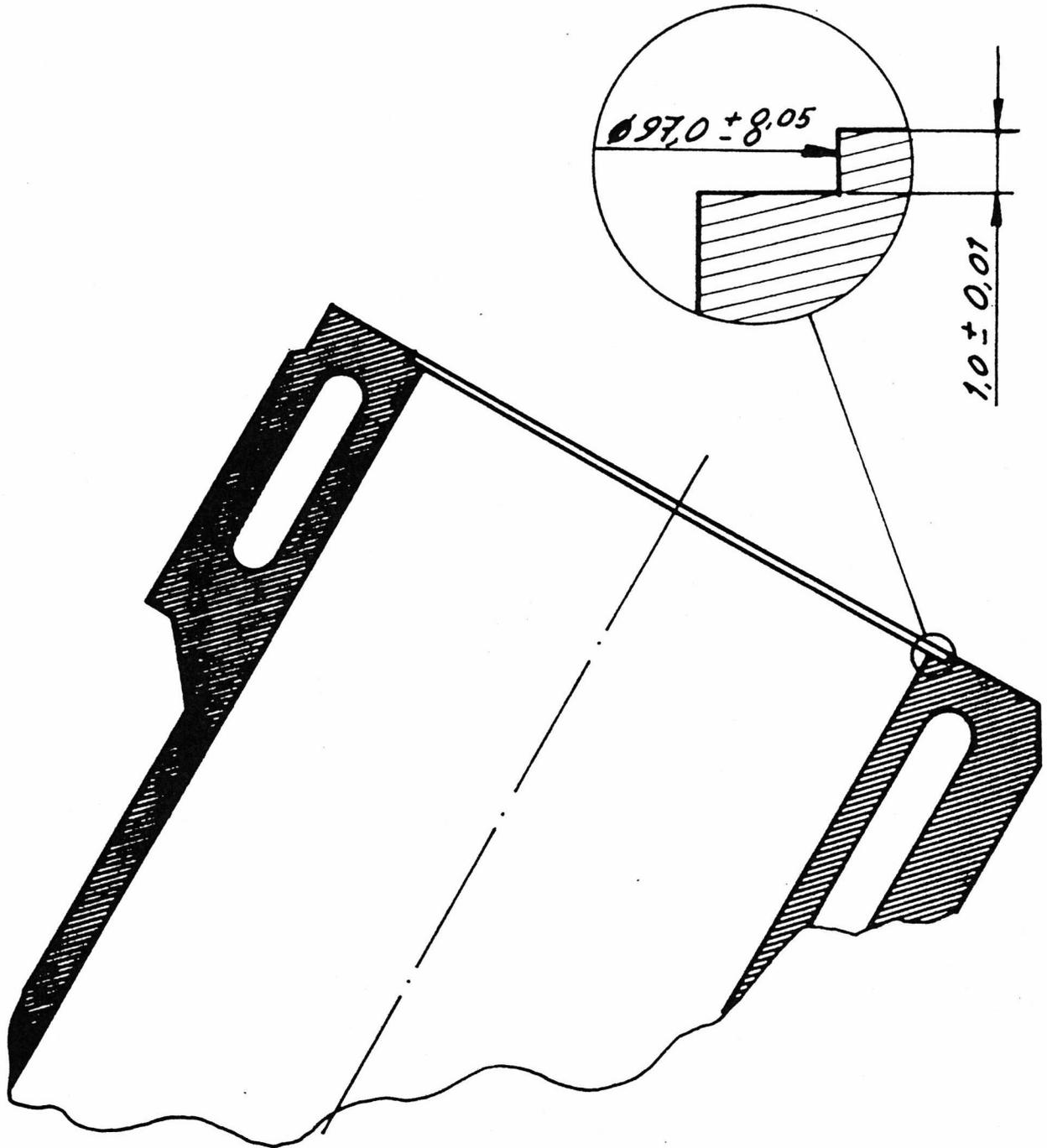
Recommended tire sizes are 155 x 15 or 165 x 15

To lighten the flywheel



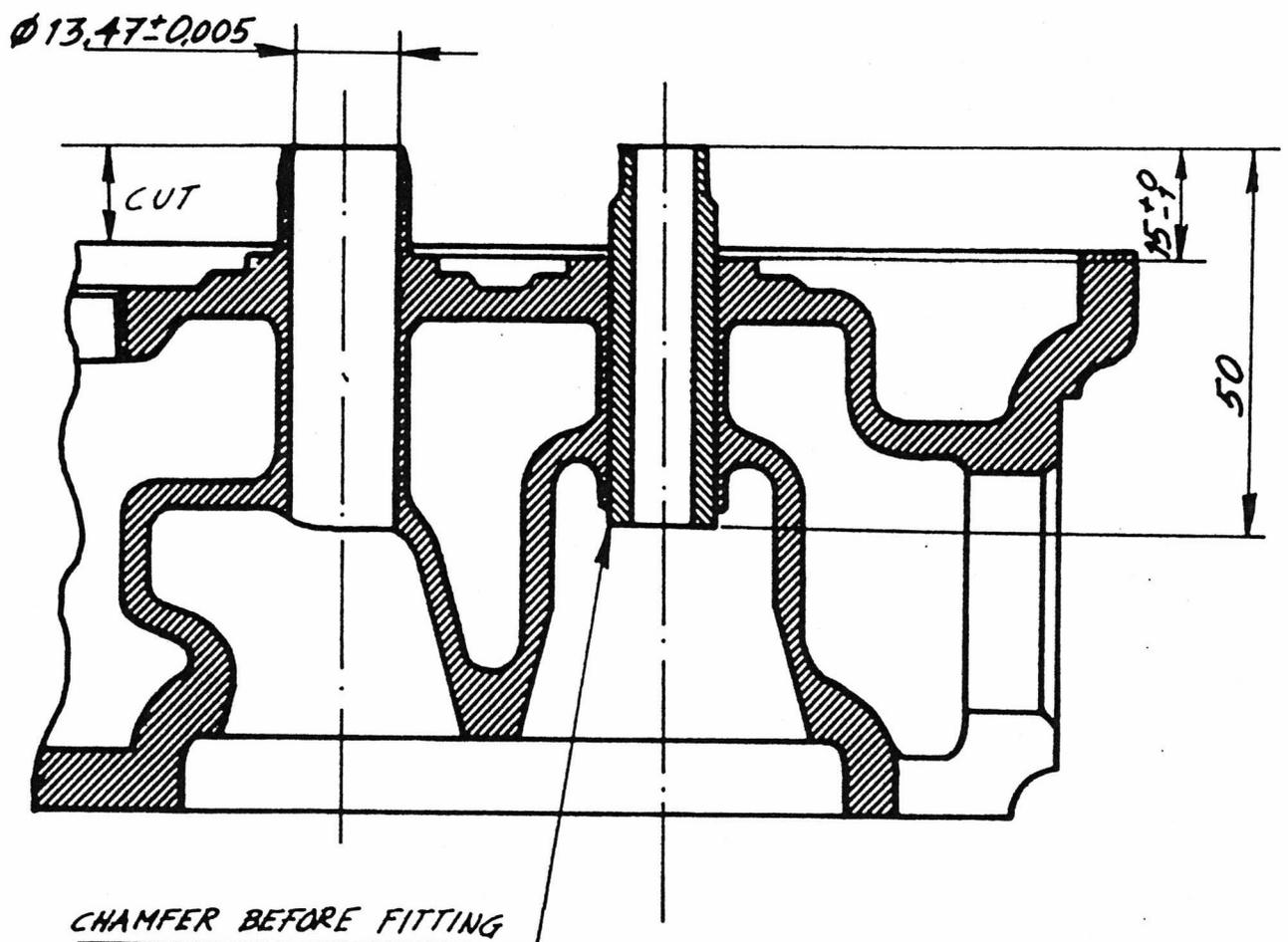
Modification of the combustion chamber

Recess for copper ring



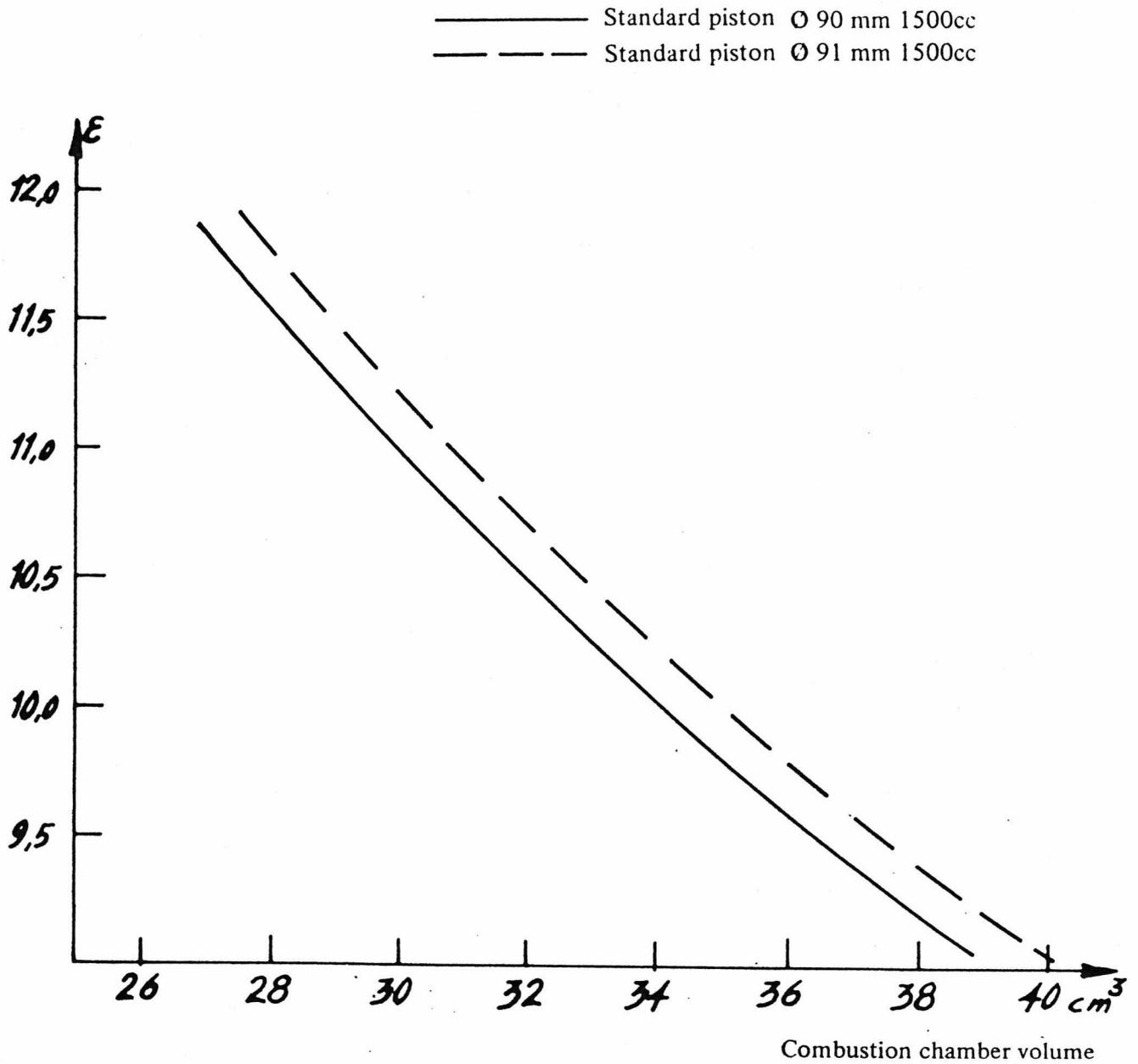
Fitting separate valve guides

Cut the remaining part of the old guide. See drawing below. Chamfer the guide. After lubricating press it down.





Compression ratio as a function of combustion chamber volume



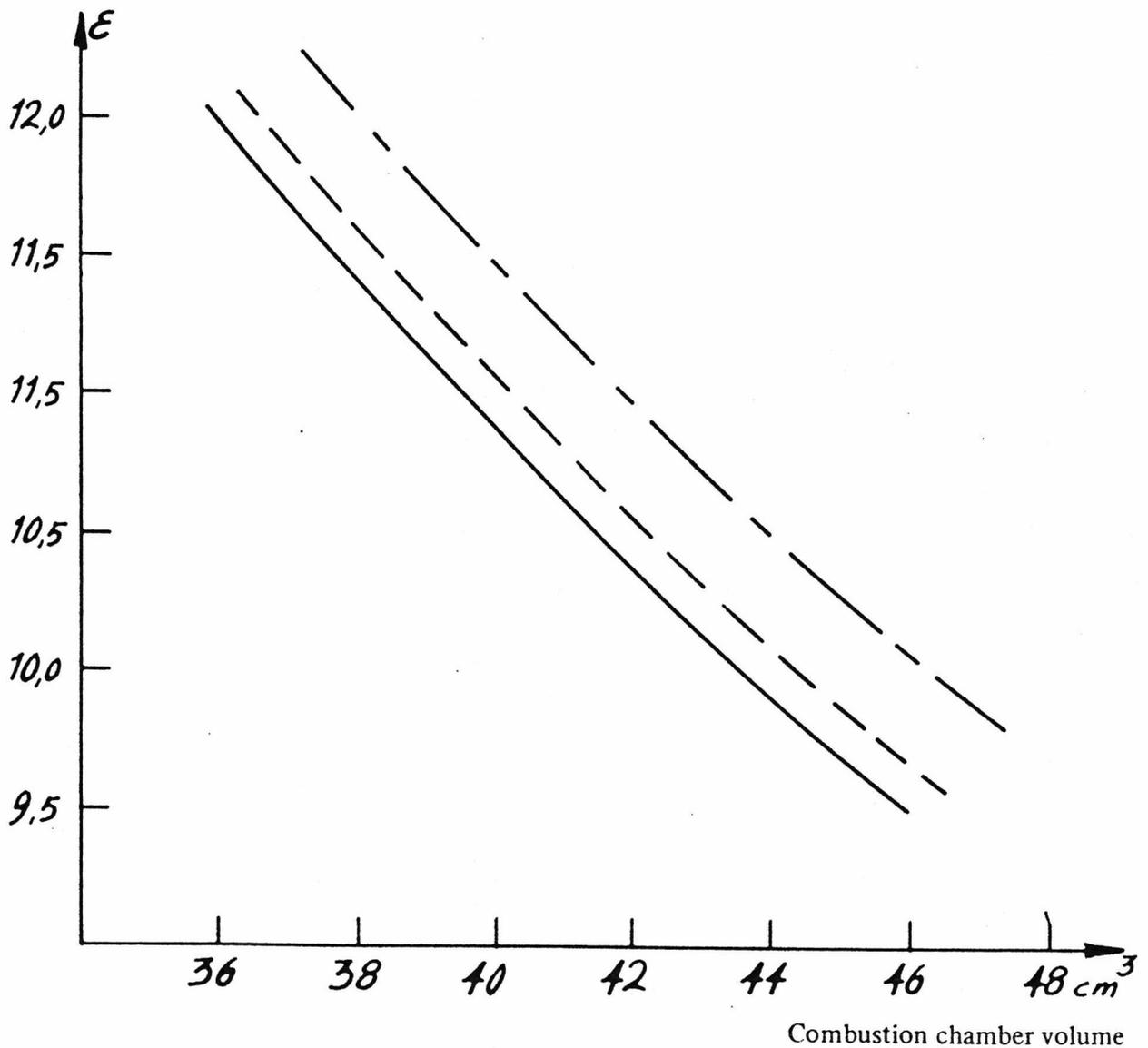


Tuning and assembling
Tuning instructions

Group 2
Saab V4
Enclosure 9

Compression ratio as a function of combustion chamber volume

- Forged piston Ø 90 mm 1500 cc
- - - - - Forged piston Ø 91 mm 1530 cc
- · — Forged piston Ø 93 mm 1600 cc



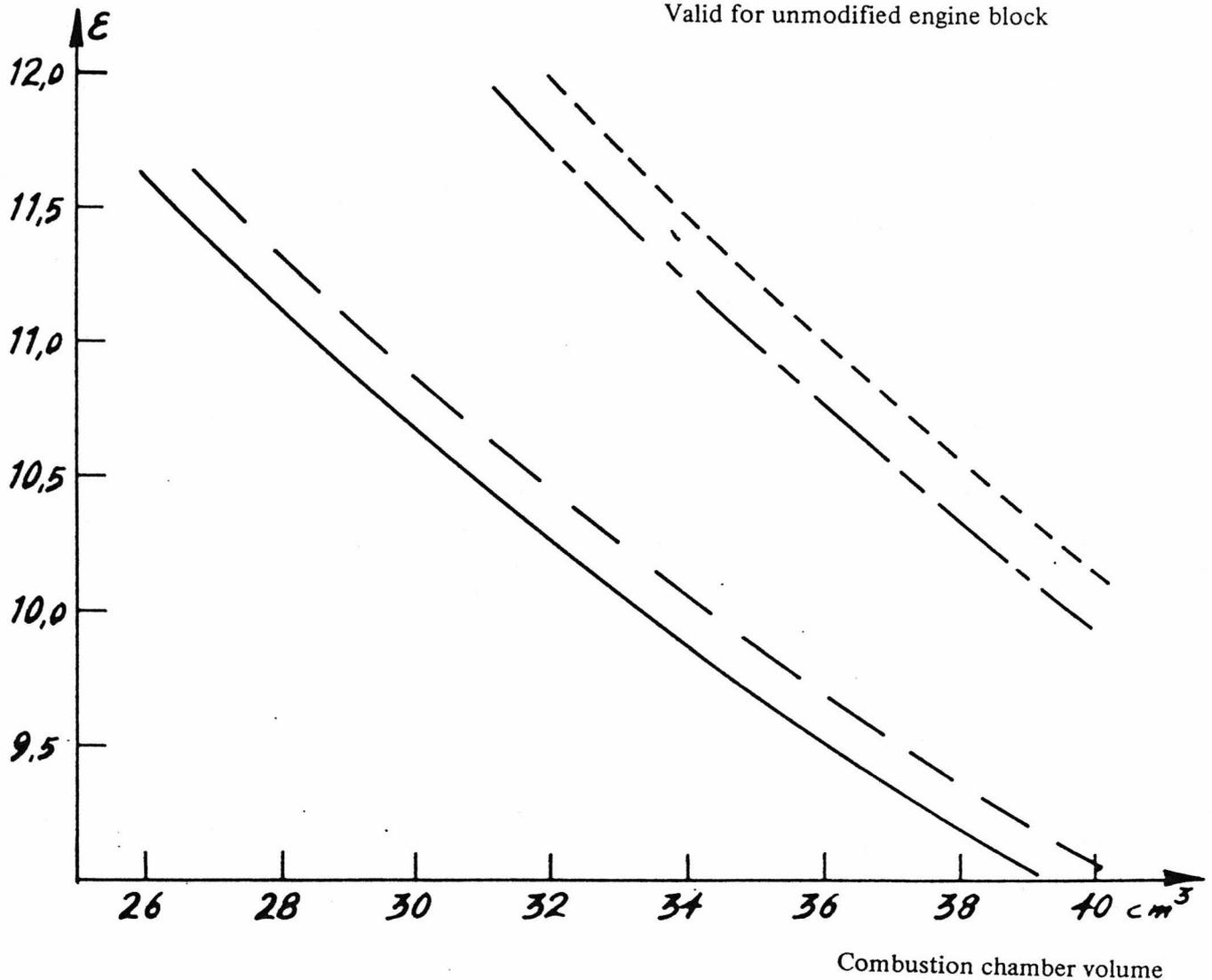
Compression ratio as a function of combustion chamber volume

----- Standard piston Ø 90 mm 1700 cc (HC-piston)
----- Standard piston Ø 901 mm 1740 cc (HC-piston)

Valid for milled engine block (1 mm)

----- Standard piston Ø 90 mm 1700 cc (HC-piston)
----- Standard piston Ø 91 mm 1740 cc (HC-piston)

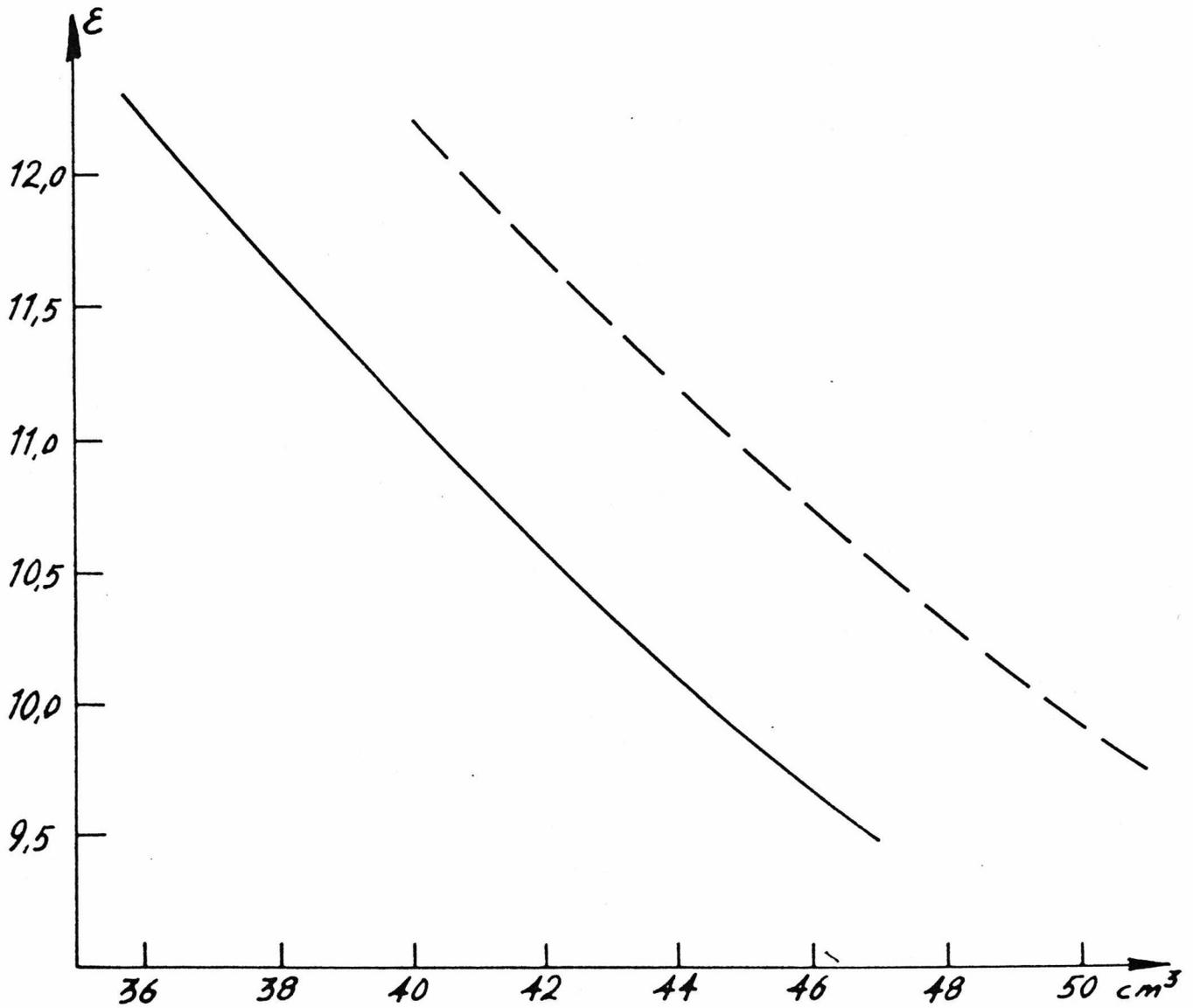
Valid for unmodified engine block





Compression ratio as a function of combustion chamber volume

- Forged piston (no 1003) 1530 cc h = 3 mm
- - - - - Forged piston (no 1004) 1740 cc h = 2,8 mm

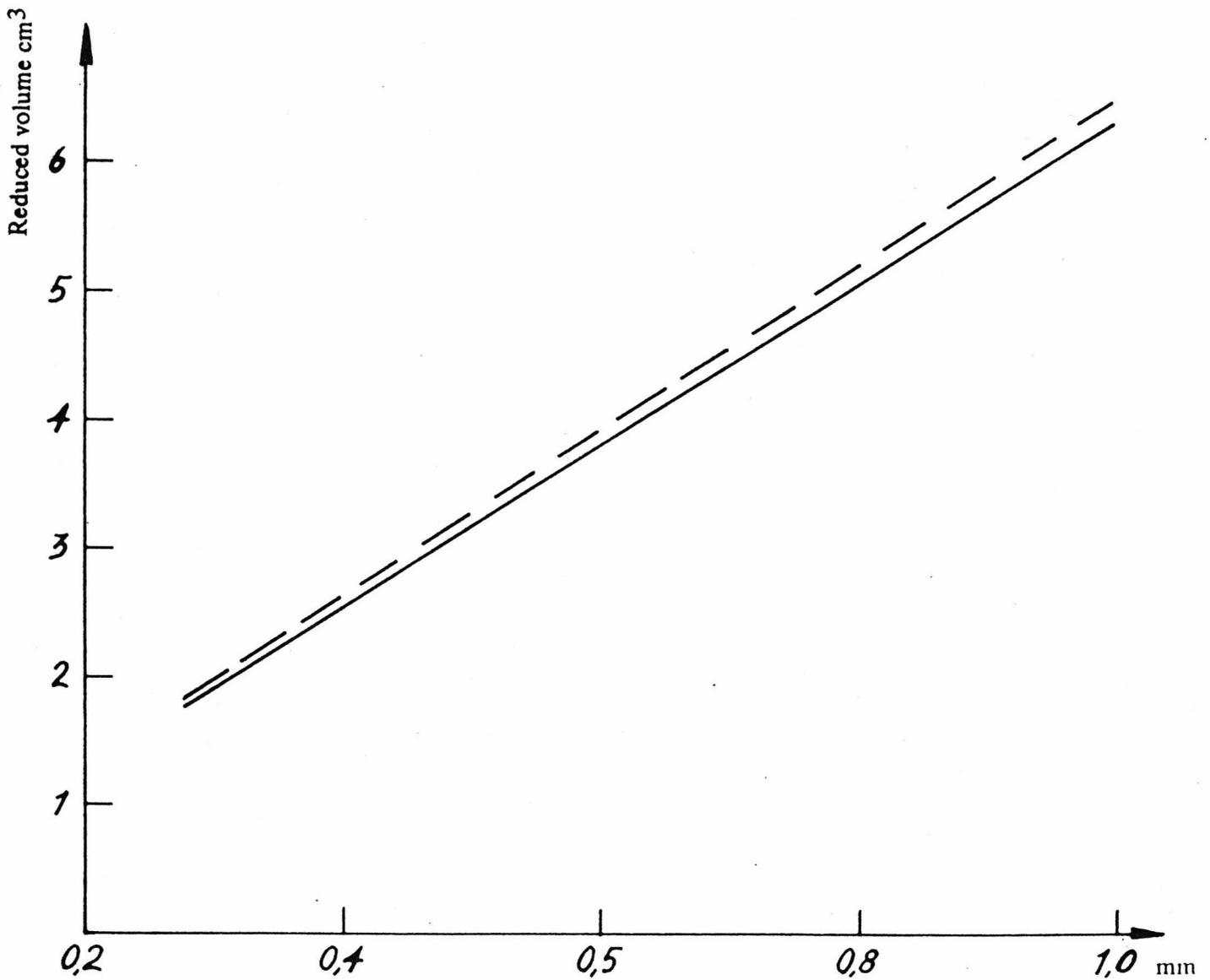


Combustion chamber volume

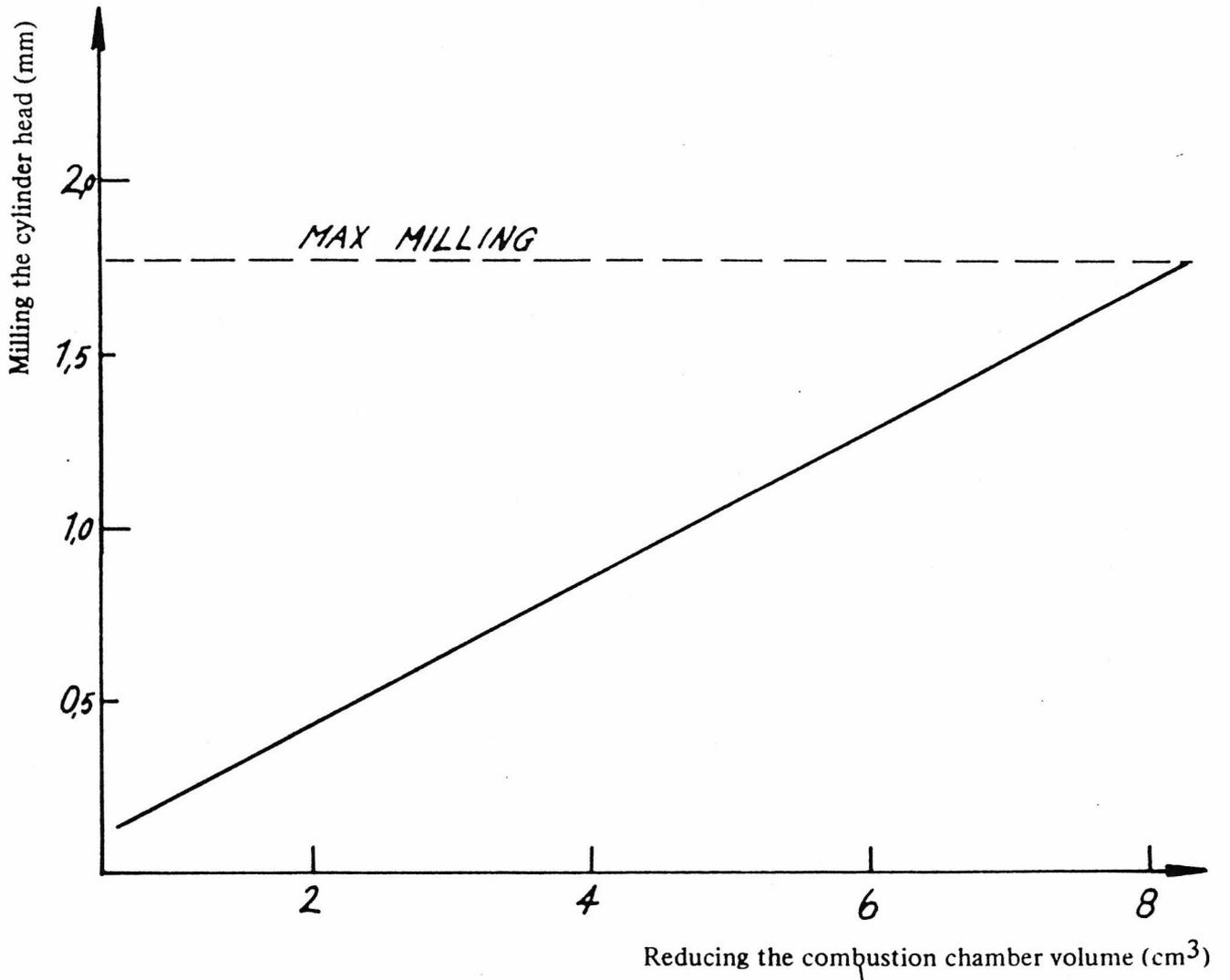
Reduced volume as a funktion of engine block milling

Valid 1700 cc engine with standard HC-pistons.

———— Standard piston Ø 90 mm
 - - - - - Standard piston Ø 91 mm



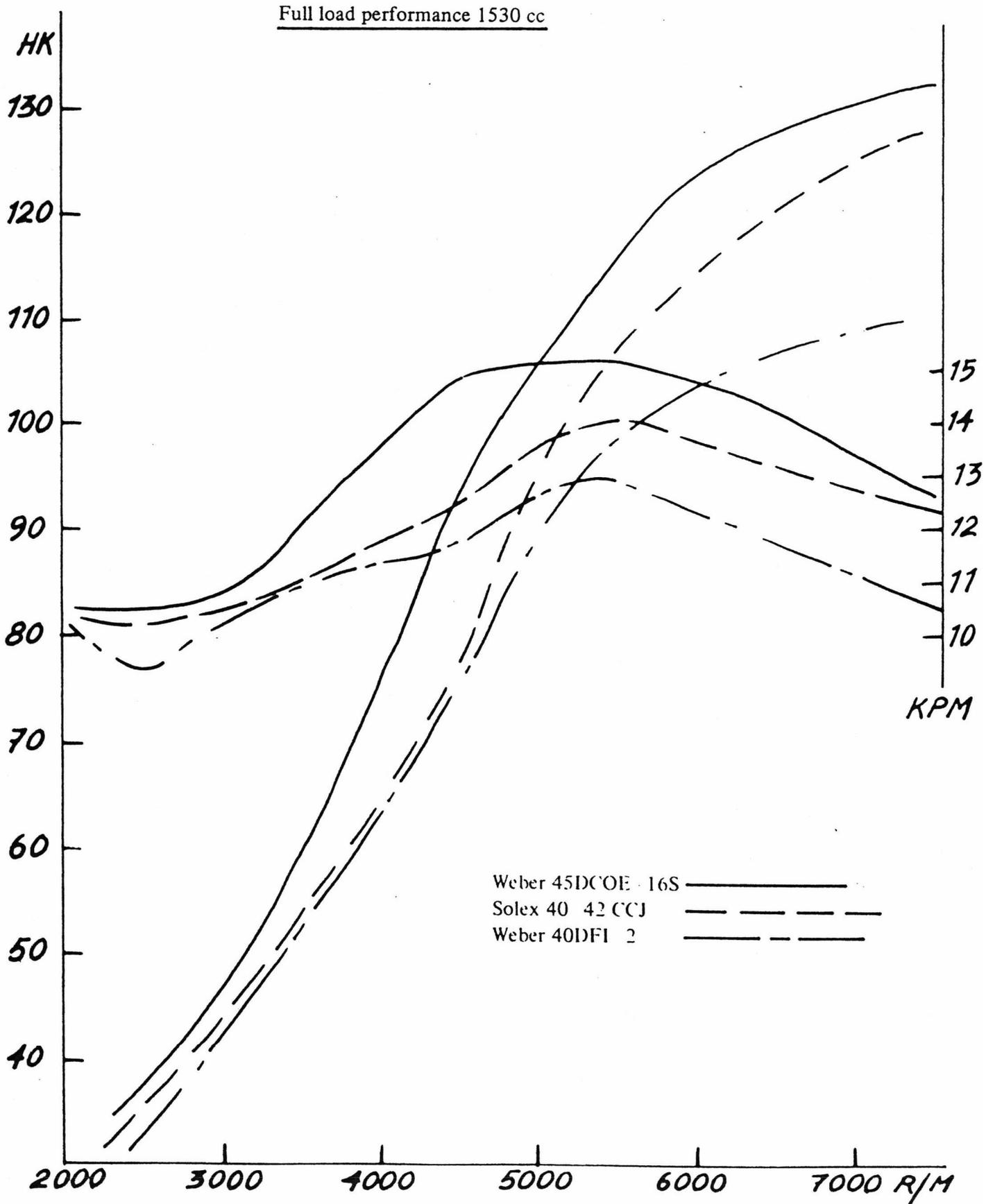
Reducing the combustion chamber volume through
milling the cylinder head





Tuning and assembling
Tuning instructions

Group 2
Saab V4
Enclosure 14



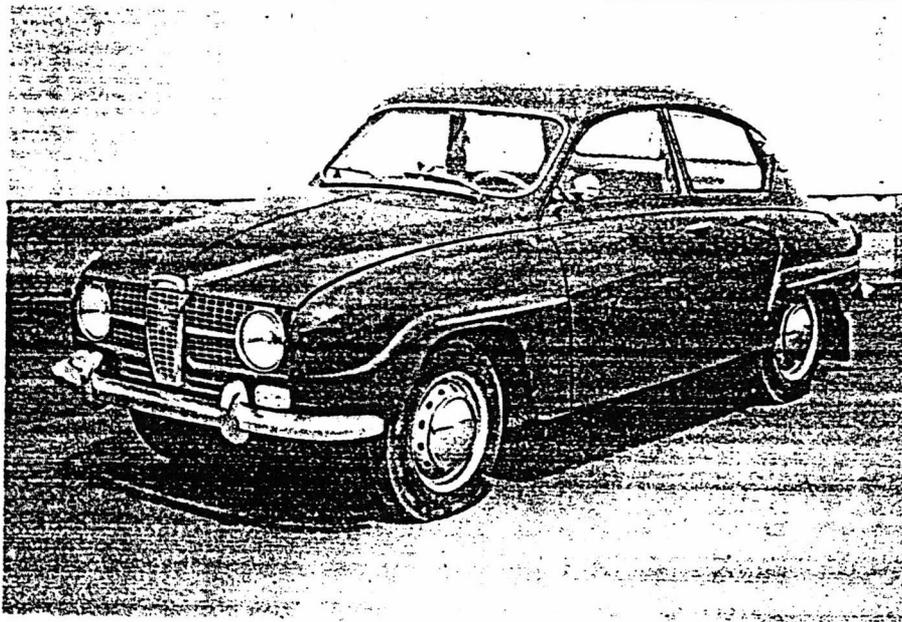


FEDERATION INTERNATIONALE DE L' AUTOMOBILE

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

Manufacturer SAAB AKTIEBOLAG Cylinder-capacity ..1498.....cm³ ..91.4...i
 chassis420001..... Model SAAB SEDAN V4
 Serial No of engine101..... Manufacturer SAAB AKTIEBOLAG
 Recognition is valid from *1st Nov. 1966* List *15/1*
 The manufacturing of the model described in this recognition form was started
 on1.7... 19 ⁶⁶... and the minimum production of ..5000... identical cars, in
 accordance with the specifications of this form was reached on *31.9*..... 19 ⁶⁶...

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.....

Stamp and signature of the
 National Sporting Authority

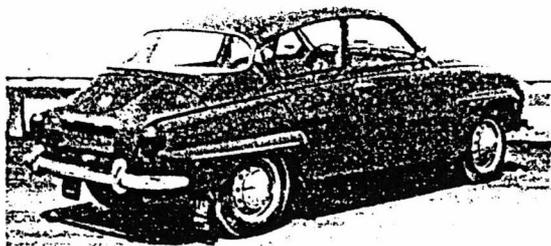
Stamp and signature of the F.I.A.



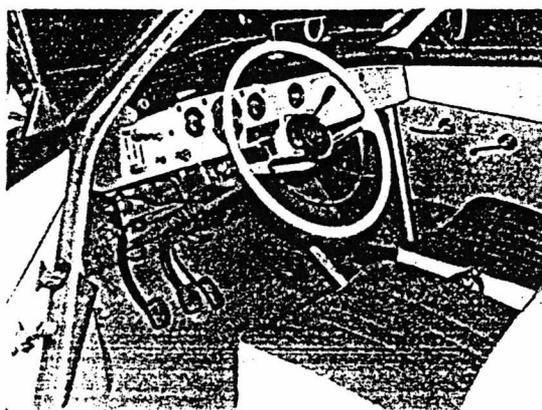
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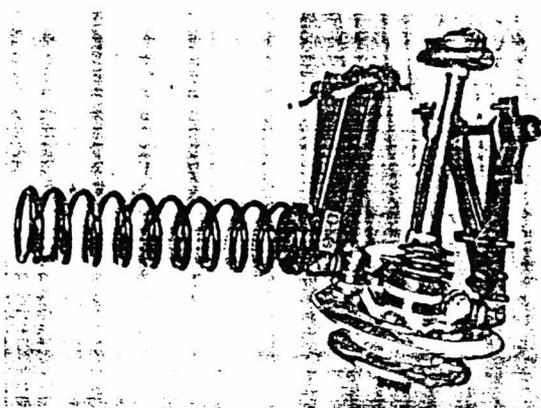
Photograph B



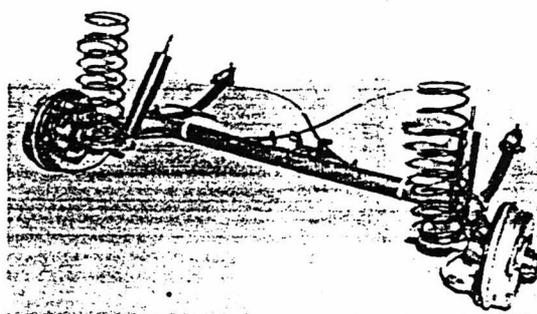
Photograph C



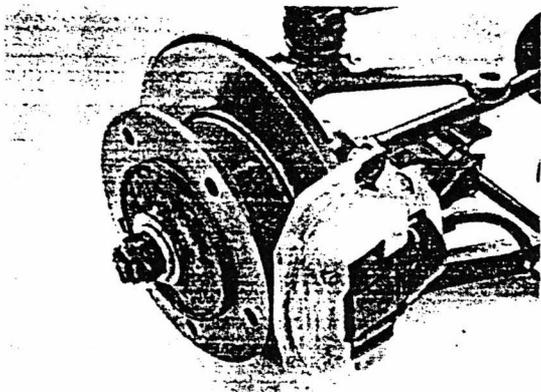
Photograph D



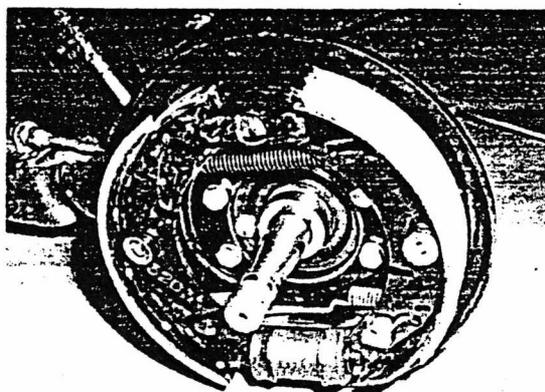
Photograph E



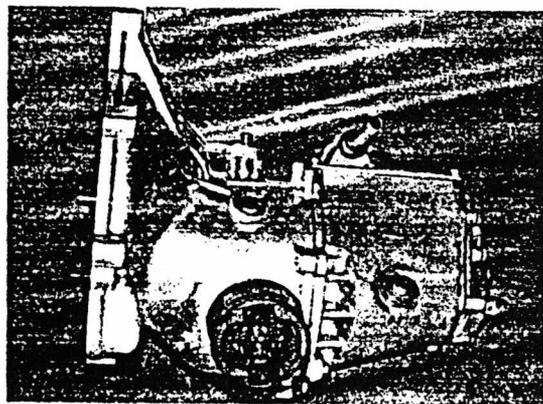
Photograph F



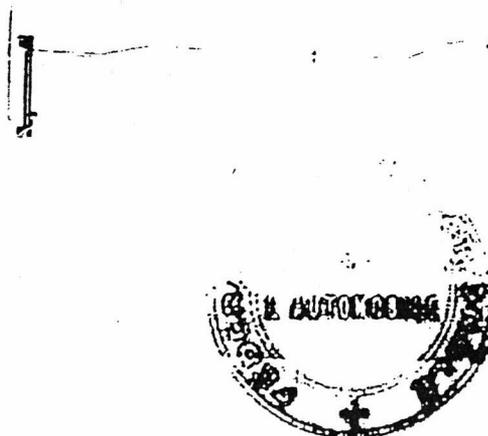
Photograph G



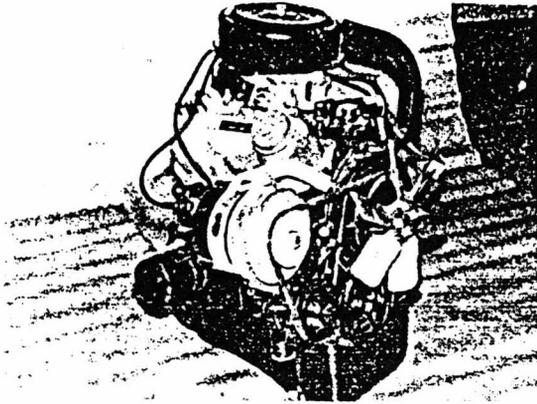
Photograph H



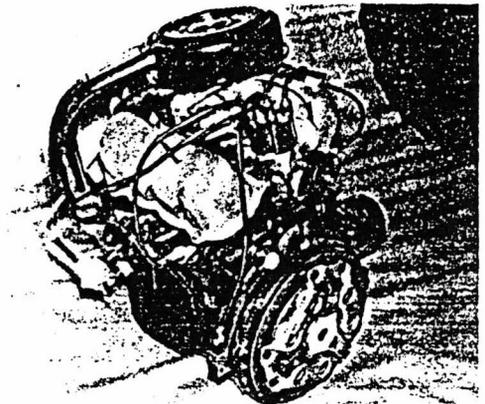
Photograph I



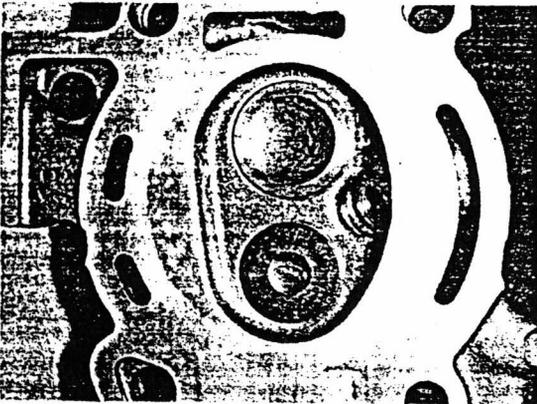
Photograph J



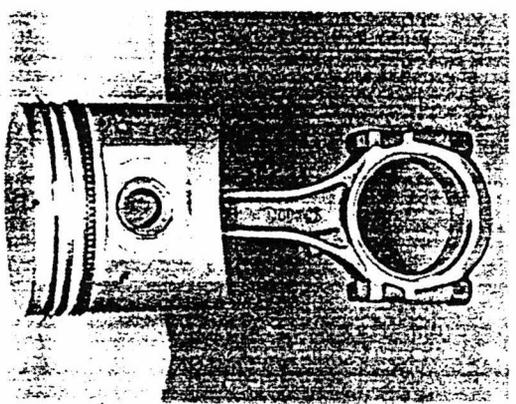
Photograph K



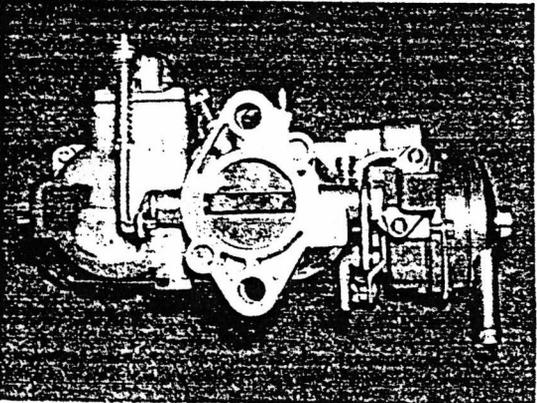
Photograph L



Photograph M



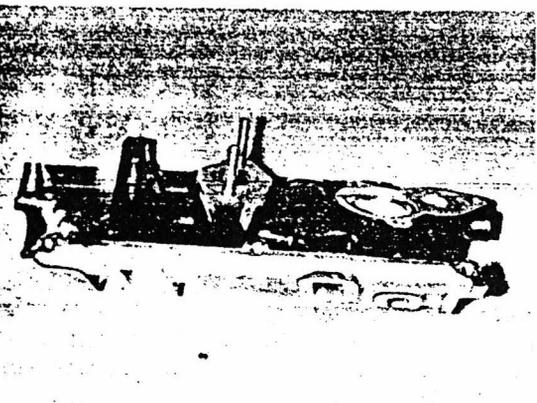
Photograph N



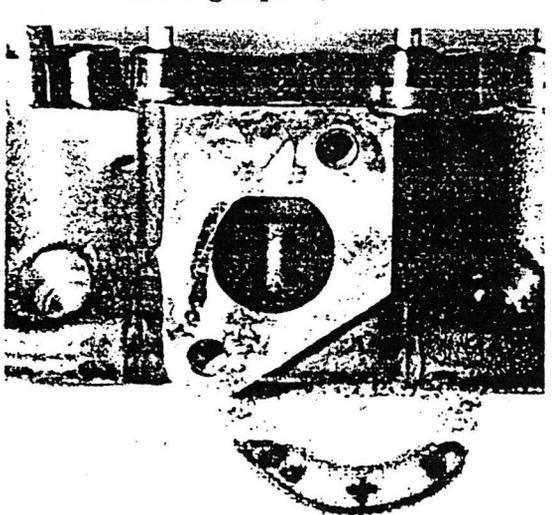
Photograph O



Photograph P



Photograph Q



Make

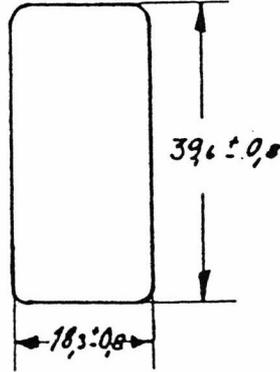
SAAB

Model

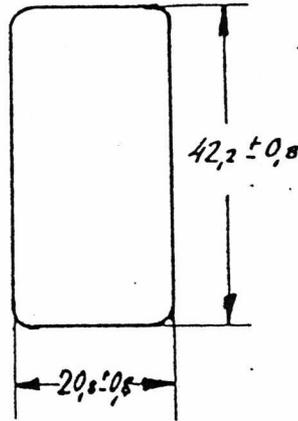
SEDAN V4

F.I.A. Rec. No 5125

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



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



Drawing exhaust manifold ports, side of cylinderhead. Indicate scale or dimensions and manufacturing tolerance.

INTEGRAL WITH HEAD

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



R = center of camshaft.

Inlet cam

S = 20,16-20,43

T = 13,77-13,84

U = 27,72-27,86

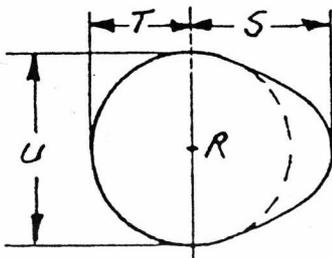
Exhaust cam

S = 20,16-20,43

T = 13,77-13,84

U = 27,72-27,86

mm	0,79-0,80	inches
mm	0,54-0,55	inches
mm	1,09-1,10	inches
mm	0,79-0,80	inches
mm	0,54-0,55	inches
mm	1,09-1,10	inches



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

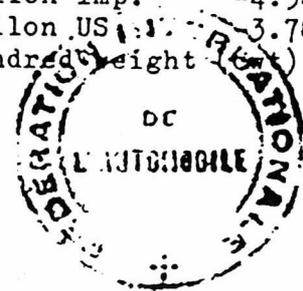
CAPACITIES AND DIMENSIONS

1. Wheelbase 2498 mm 98,35 inches
2. Front track 1220 mm 48,03 inches^x
3. Rear track 1220 mm 48,03 inches^x
4. Overall length of the car 417 cm inches
5. Overall width of the car 158 cm inches
6. Overall height of the car 147 cm inches
7. Capacity of fuel tank (reserve included) 40 ltrs
 Gallon US 8,8 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:
 812 kg 1790 lbs cwt

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

CONVERSION TABLE

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



CHASSIS AND COACHWORK (Photographs A, B and C)

20. Chassis/body construction : separate / unitary construction

21. Unitary construction, material(s) PRESSED STEEL SHEET

Separate construction

22. Material(s) of chassis

23. Material(s) of coachwork PRESSED STEEL SHEET

24. Number of doors 2 Material(s) --

25. Material(s) of bonnet --

26. Material(s) of boot lid --

27. Material of rear-window GLASS

28. Material(s) of windscreen --

29. Material(s) of front-door windows --

30. Material(s) of rear-door windows

31. Sliding System of door windows WHEEL AND LEVER MECHANISM

32. Material(s) of rear-quarter light GLASS

ACCESSORIES AND UPHOLSTERY

38. Interior heating : yes - no 39. Air-conditioning : yes - no

40. Ventilation : yes - no

41. Front seats, type of upholstery CLOTH AND GALON

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

43. Rear seats, type of upholstery CLOTH AND GALON

44. Front bumper, material(s) STEEL Weight 5,2 kg lbs

45. Rear bumper, material(s) STEEL Weight 5,4 kg lbs

WHEELS

50. Type DISC

51. Weight (per wheel, without tyre) 6 kg lbs

52. Method of attachment BOLTED TO DRUM

53. Rim diameter 381 mm 15 inches

54. Rim width 101,6 mm 4 inches

STEERING

60. Type RACK AND PINION

61. Servo-assistance : yes - no

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

63. In case of servo-assistance



SUSPENSION

70. Front suspension (photogr. D), type INDEPENDENT
 71. Type of spring COIL SPRING
 72. Stabiliser (if fitted)
 73. Number of shock absorbers 2 74. Type TELESCOPIC
 78. Rear suspension (photogr. E), type U-SHAPED RIGID BACKAXLE
 79. Type of spring COIL SPRING
 80. Stabiliser (if fitted)
 81. Number of shock absorbers 2 82. Type TELESCOPIC

BRAKES (photographs F and G)

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

	FRONT			REAR		
	1			1		
93. Number of cylinders per wheel						
94. Bore of wheel cylinder(s)	50,8	mm	in	15,9	mm	in
Drum brakes						
95. Inside diameter		mm	in	203	mm	in
96. Length of brake linings		mm	in	196	mm	in
97. Width of brake linings		mm	in	37	mm	in
98. Number of shoes per brake				2		
99. Total area per brake		mm ²	sq. in.	14500	mm ²	sq.
Disc brakes						
100. Outside diameter	267	mm	in		mm	in
101. Thickness of disc	9,6	mm	in		mm	in
102. Length of brake linings	93	mm	in		mm	in
103. Width of brake linings	42	mm	in		mm	in
104. Number of pads per brake	2					
105. Total area per brake	6500	mm ²	sq. in.		mm ²	sq.



ENGINE (photographs J and K)

- | | | | |
|---|----------------------------------|---|---------------------------|
| 130. Cycle | FOUR STROKE | 131. Number of cylinders | 4 |
| 132. Cylinder arrangement | V-FORM | | |
| 133. Bore | 90,0 mm 3,54 in. | 134. Stroke | 58,9 mm 2,32 in. |
| 135. Capacity per cylinder | 375 cm ³ 22,9 cu.in | | |
| 136. Total cylinder capacity | 1498 cm ³ 91,4 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 | 2 |
| 140. Number of inlet ports | 4 | 141. Number of exhaust ports | 2 |
| 142. Compression ratio | 8,6-9,4:1 | | |
| 143. Volume of one combustion chamber | 40,22-38,22 cm ³ | | cu.in. |
| 144. Piston, material | ALUMINIUM ALLOY | 145. Number of rings | 3 |
| 146. Distance from gudgeon pin centre line to highest point of piston crown | 45,4-45,5 mm | | inches |
| 147. Crankshaft: <u>moulded/stamped</u> | | 148. Type of crankshaft: <u>integral/cast</u> | <u>with balance weigh</u> |
| 149. Number of crankshaft main bearings | 3 | | |
| 150. Material of bearing cap | CAST IRON | | |
| 151. System of lubrication: <u>dry sump/oil in sump</u> | | | |
| 152. Capacity, lubricant | 3,3 ltrs | pts | quarts US |
| 153. Oil cooler: <u>yes/no</u> | | | |
| 155. Capacity of cooling system | 7,5 ltrs | pints | quarts US |
| 156. Cooling fan (if fitted), dia | 25,5 cm | | inches |
| 157. Number of blades of cooling fan | 6 | | |

Bearings

- | | | | | |
|-----------------------------------|---------------|------|---------|-----|
| 158. Crankshaft main, type | SHELL BEARING | Dia. | 57,0 mm | in. |
| 159. Connecting rod, big end type | -- | Dia. | 54,0 mm | in. |

Weights

- | | | |
|---|------------------------------|-----|
| 160. Flywheel (clean) | 6,5-7,3 kg | lbs |
| 161. Flywheel with clutch (all turning parts) | 10,2-11,1 kg | lbs |
| 162. Crankshaft | 10,2-11,0 kg | |
| 163. Connecting rod | including gear
SEE 164 | kg |
| 164. Piston with rings and pin | 1,2 including connecting rod | |



FOUR STROKE ENGINES

170. Number of camshafts 1 171. Location IN V-CENTER
 172. Type of camshaft drive WHEEL GEAR
 173. Type of valve operation PUSH ROD

INLET (see page 4)^x

180. Material(s) of inlet manifold ALUMINIUM ALLOY
 181. Diameter of valves 37,1-37,5 mm 1,46-1,48 inches
 182. Max. valve lift 9,77 mm 0,38 in. 183. Number of valve springs 1
 184. Type of spring COIL SPRING 185. Number of valves per cylinder 1
 186. Tappet clearance for checking timing (cold) 0,40-0,45 mm inches
 187. Valves open at (with tolerance for tappet clearance indicated) 21° B.T.D.C.
 188. Valves close at (with tolerance for tappet clearance indicated) 82° A.B.D.C.
 189. Air filter, type DRY FILTER CARTRIDGE

EXHAUST (see page 4)

195. Material(s) of exhaust manifold CAST IRON
 196. Diameter of valves 32,0-32,4 mm 1,26-1,28 inches
 197. Max. valve lift 9,77 mm 0,38 in. 198. Number of valve springs 1
 199. Type of spring COIL SPRING 200. Number of valves per cylinder 1
 201. Tappet clearance for checking timing (cold) 0,40-0,45 mm inches
 202. Valves open at (with tolerance for tappet clearance indicated) 63° B.B.D.C.
 203. Valves close at (with tolerance for tappet clearance indicated) 40° A.T.D.C.

CARBURETION (photograph N)

210. Number of carburetors fitted 1 211. Type DOWNDRAUGHT
 212. Make SOLEX 213. Model 28-32 PDSIT 7
 214. Number of mixture passages per carburettor 1
 215. Flange hole diameter of exit port(s) of carburettor 32 mm inches
 216. Minimum diameter of venturi/minimum diam. with piston at maximum height
 25,5 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

^x) for additional information concerning two-stroke engines and super-charged engines see page 13.



ENGINE ACCESSORIES

230. Fuel pump: mechanical ~~MM~~ or electric 231. No fitted 1
 232. Type of ignition system COIL, DISTRIBUTOR 233. N° of distributors 1
 234. N° of ignition coils 1 235. N° of spark plugs per cylinder 1
 236. Generator, number fitted 1 237. Method of drive V-BELT
 Alternator
 238. Voltage of generator 12 volts 239. Battery, number 1
 240. Location ENGINE COMPARTMENT
 241. Voltage of battery 12 volts

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

250. Max. engine output 65 (type of horsepower: DIN) at 4700 rpm
 251. Maximum rpm 5500 output at that figure 61
 252. Maximum torque 11,7 KPM at 2500 rpm
 253. Maximum speed of the car 146 km/hour 91 miles/hour



DRIVE TRAIN

CLUTCH

260.Type of clutch DRY PLATE 261.N° of plates 1
 262.Dia. of clutch plates 19,0 cm inches
 263.Dia. of linings, inside 12,5 cm inches outside 18-19cm in
 264.Method of operating clutch HYDRAULIC

GEAR BOX (photograph H)

270.Manual type, make SAAB
 271.N° of gear-box ratios forward 4 272.Synchronized forward ratios 4
 273.Location of gear shift ON STEERING COLUMN
 274Automatic, make type
 275.N° of forward ratios 276.Location of gear-shift

277.	Manual		Automatic		Alternative manual/automatic			
	Ratio	N° teeth	Ratio	N° teeth	Ratio	N° teeth	Ratio	N° teeth
1	3,48	35-27-31- 21-40-22			3,14	35-27-31- 21-41-25		
2	2,09	31-37-27- 40-22			1,86	34-37-30- 41-25		
3	1,30	35-27			1,30	35-27		
4	0,84	31-37			0,92	34-37		
5								
6								
reverse	3,18	35-20-40-22			2,87	35-20-41-25		

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

FINAL DRIVE

290.Type of final drive BEVEL GEAR (PINION - CROWN GEAR)
 291.Type of differential DIFFERENTIAL BEVEL
 292.Type of limited slip differential (if fitted) DE
 293.Final drive ratio 5,14 4,88
 Number of teeth 7:36 8:39



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, 184, 186, 187, 188, 189, 199, 201, 202, 203, 212, 213, 215, 216, 222, 225, 230, 250, 251, 252, 253 and photographs I, M and N.

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

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

(72) TRANSVERSE TORSION BAR STABILIZER 707638

TWO STROKE ENGINES

300. System of cylinder scavenging

301. Type of lubrication

302. Inlet ports, length measured around cylinder wall mm inche

303. Height inlet port mm in 304. Area mm² sq.in

305. Exhaust ports, length measured around cylinder wall mm inche

306. Height exhaust port mm in 307. Area mm² sq.in

308. Transfer port, length measured around cylinder wall mm inche

309. Height transfer port mm in 310. Area mm² sq.in

311. Piston ports, length measured around piston mm inche

312. Height piston port mm in 313. Area mm² sq.in

314. Method of precompression

315. Precompression cyl. : yes/no

316. Bore mm in 317. Stroke mm inche

318. Distance from top of cyl. block to highest point of exhaust port :

mm inches

319. Distance from top of cyl. block to lowest point of inlet port :

mm inches

320. Distance from top of cyl. block to highest point of transfer port :

mm inches

321. Drawing of cylinder ports.

330. Supercharging - state full details hereafter :

FEDERATION INTERNATIONALE DE L'AUTOMOBILE

Form of recognition (extension) in accordance with Appendix J to the International Sporting Code

Manufacturer SAAB AKTIEBOLAG Model SAAB SEDAN V4
 Serial No. inaugurating this extension Chassis 420001
 Manufacturing date of the first vehicle constructed with the modifications 1,8 19.66
 Commercial denomination of modified model SAAB SEDAN V4 (group 2)
 This extension of recognition is considered: variation - normal development of original vehicle type
 Recognition is valid from 1st Nov. 1966 List 15/1

Descriptions of modifications:

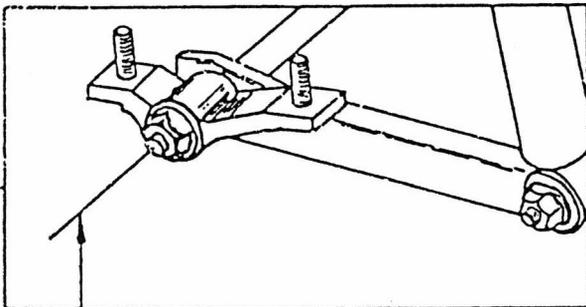
Optional equipment:

Final drive ratio 5,71:1 (7-40)
 Final drive ratio 5,43:1 (7-38)
 Rims 4½ Jx15" Bolted to drux, weight 7 kg, dia. 381 mm
 70 liter fuel tank width 114 mm

Not valid when car entered in group 1

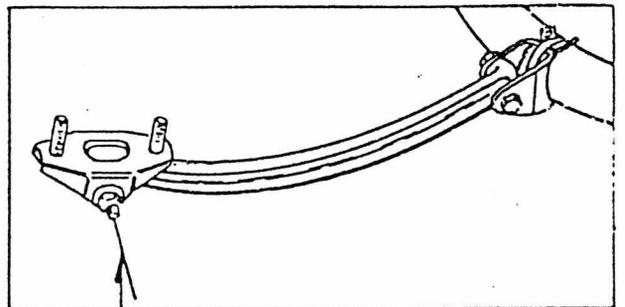
-"-
 -"-
 -"-

With 4½ inch rims - track: 1270 mm



Front: Distance from ground to fixed pivot of lower swinging arm 235 mm

Signature and stamp of the National Sporting Authority:

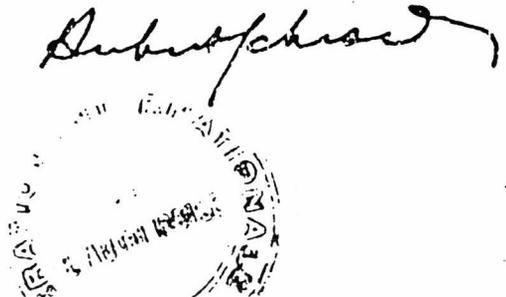


Rear: Distance from ground to fixed pivot of rear link 238 mm

Signature and stamp of the F.I.A.:



[Handwritten signature]



FEDERATION INTERNATIONALE DE L'AUTOMOBILE

Form of recognition (extension) in accordance with Appendix J to the International Sporting Code

Manufacturer SAAB AKTIEBOLAG Model SAAB SEDAN V4
 Serial No. inaugurating this extension Chassis 420001
 Manufacturing date of the first vehicle constructed with the modifications 1.8 19.66
 Commercial denomination of modified model SAAB SEDAN V4 (Group 2)
 This extension of recognition is considered: variation - normal development of original vehicle type
 Recognition is valid from *1st Nov.* .../... 19*66* List *15/1*

Descriptions of modifications:

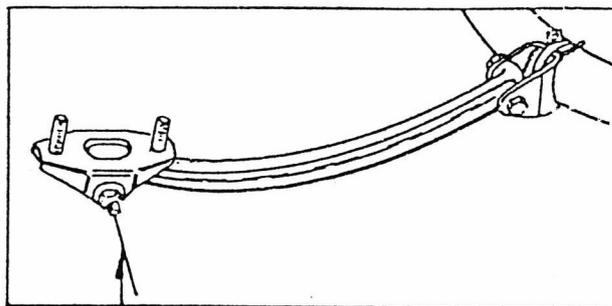
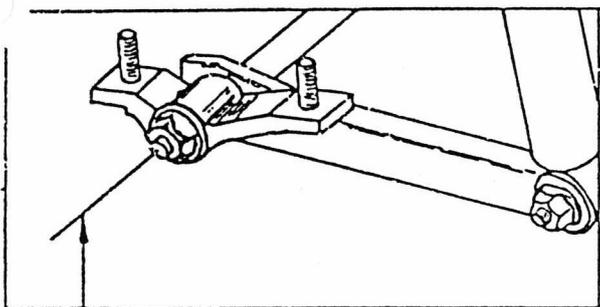
Optional equipment:

Final drive ratio 5,71:1 (7-40)
 Final drive ratio 5,43:1 (7-38)
 Rims 4½ Jx15" Bolted to drux, weight 7 kg, dia. 381 mm
 70 liter fuel tank width 114 mm

Not valid when car entered in group 1

-"-
 -"-
 -"-

with 4½ inch rims - track: 1270 mm



Front: Distance from ground to fixed pivot of lower swinging arm 235 mm

Rear: Distance from ground to fixed pivot of rear link 238 mm

Signature and stamp of the National Sporting Authority:

Signature and stamp of the F.I.A.:



[Handwritten signature]



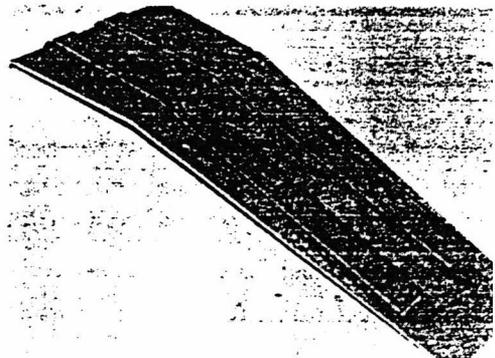
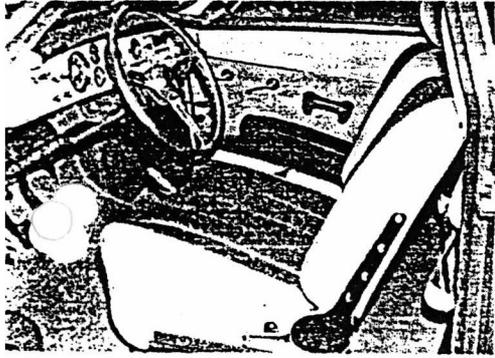
FEDERATION INTERNATIONALE DE L'AUTOMOBILE

Form of recognition (extension) in accordance with Appendix J to the International Sporting Code

Manufacturer ...SAAB..... Model ..Sedan V4.....
 Serial No. inaugurating this extension Chassis .420001.....
 Engine ...101.....
 Manufacturing date of the first vehicle constructed with the modifications1:4:..... 19 .67..
 This extension of recognition is considered: variation - normal development of original vehicle type
 Recognition is valid from 14.7. 19 67. List .16/4.....

Descriptions of modifications:

Rear ventilation quarter lights
 Seats and upholstery de luxe Type: Cloth and galon, weight of front seat: 19
 Dash board with revcounter
 Woodrimmed steering wheel



Front springs (see picture)
 Protection plate (see picture) Length: 108 (112) cm. Width: 21/40 cm.

↙ Group 2 only

Final drive ratio 5,83:1 (6 - 35) Not valid when car entered in group 1

Signature and stamp of the National Sporting Authority:

W. Müller

Signature and stamp of the F.I.A.

Hubert...

5/1E

FEDERATION INTERNATIONALE DE L'AUTOMOBILE

Form of recognition (extension) in accordance with Appendix J to the International Sporting Code

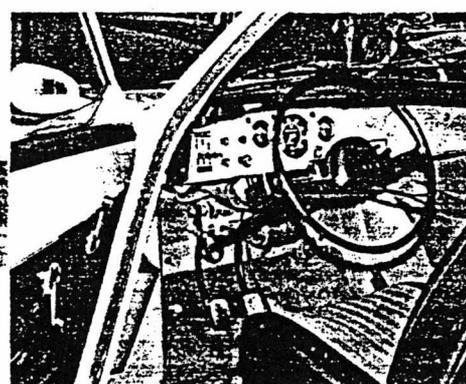
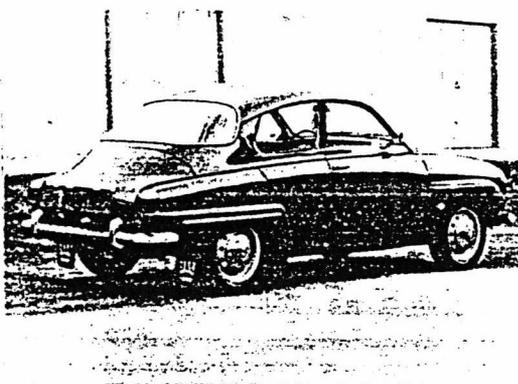
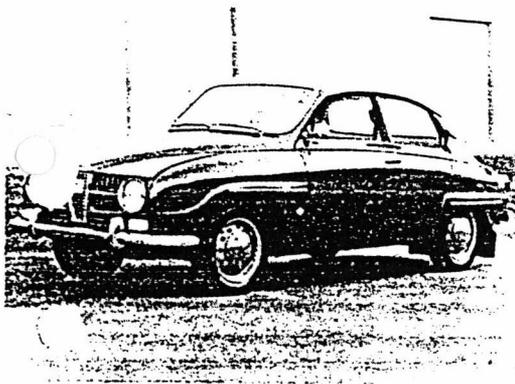
Manufacturer SAAB Model Sedan V4
Serial No. inaugurating this extension Chassis 470001
Manufacturing date of the first vehicle constructed with the modifications 1/8 19.67.
Commercial denomination of modified model SAAB Sedan V4

This extension of recognition is considered: variation - normal development of original vehicle type

Recognition is valid from 1st Jan 1968 List 1968/1

Descriptions of modifications:

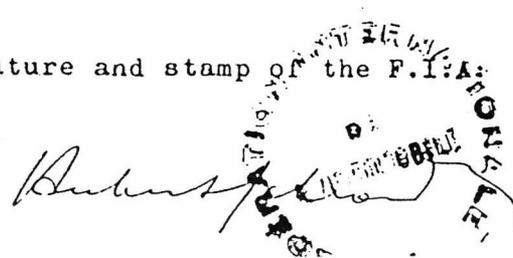
- Higher windscreen Material: Laminated glass (see photo)
Higher rear window Material: Glass (" ")
Interior coachwork (" ")



Signature and stamp of the National Sporting Authority:



Signature and stamp of the F.I.A.:



4/4V

FEDERATION INTERNATIONALE DE L'AUTOMOBILE

Form of recognition (extension) in accordance with Appendix J to the International Sporting Code

Manufacturer SAAB Model Sedan V4

Serial No. inaugurating this extension Chassis 420001

..... Engine 101

Manufacturing date of the first vehicle constructed with the modifications 1/8 19. 67

Commercial denomination of modified model SAAB Sedan V4 (Group 2)

This extension of recognition is considered: variation - normal development of original vehicle type

Recognition is valid from 18. Jan 1968. List .. 1968/1

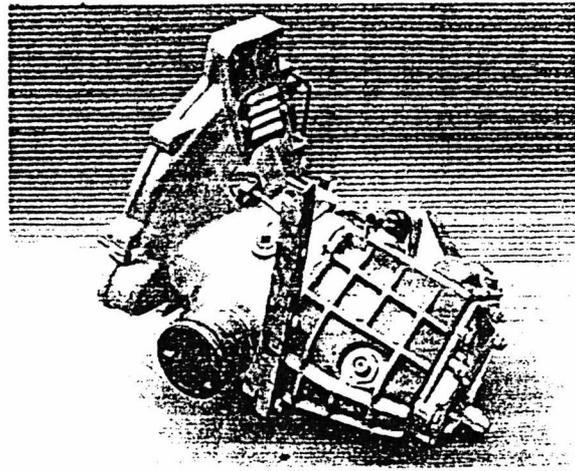
Descriptions of modifications:

Limited slip differential. Type: Cam and pawl princip
Gear box housing (see photo).

Gear set:

Manual

	Ratio	No. of teeth
1	2,64	31-26-33-21-38-27
2	1.60	34-37-30-38-27
3	1,19	31-26
4	0,92	34-37
Reverse	2,08	31-21-38-27

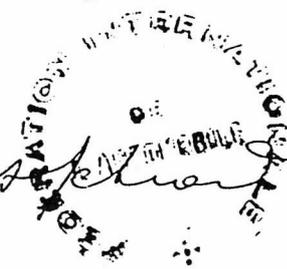


The above only valid when car entered in group 2.

Signature and stamp of the National Sporting Authority:




Signature and stamp of the F.I.A.:




FEDERATION INTERNATIONALE DE L'AUTOMOBILE

Form of recognition (extension) in accordance with Appendix J to the International Sporting Code

Manufacturer SAAB Model Sedan V4
 Serial No. inaugurating this extension Chassis 420001
 Engine 101
 Manufacturing date of the first vehicle constructed with the modifications 1/8 19. 67
 Commercial denomination of modified model SAAB Sedan V4 (Group 2)

This extension of recognition is considered: variation - normal development of original vehicle type

Recognition is valid from .14. Jan 1968. List .. 1968/1

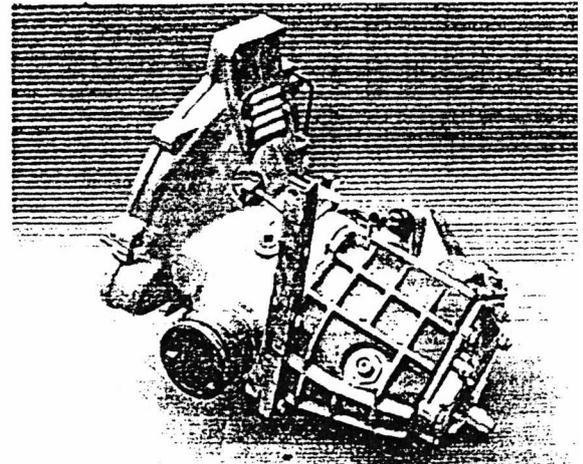
Descriptions of modifications:

Limited slip differential. Type: Cam and pawl princip
 Gear box housing (see photo).

Gear set:

Manual

	Ratio	No. of teeth
1	2,64	31-26-33-21-38-27
2	1.60	34-37-30-38-27
3	1,19	31-26
4	0,92	34-37
Reverse	2,08	31-21-38-27



The above only valid when car entered in group 2.

Signature and stamp of the National Sporting Authority:

Signature and stamp of the F.I.A.:

5/1E

FEDERATION INTERNATIONALE DE L'AUTOMOBILE

Form of recognition (extension) in accordance with Appendix J to the International Sporting Code

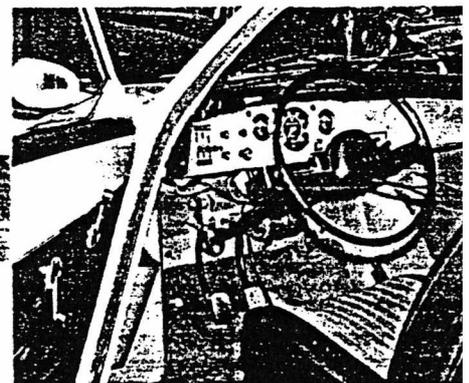
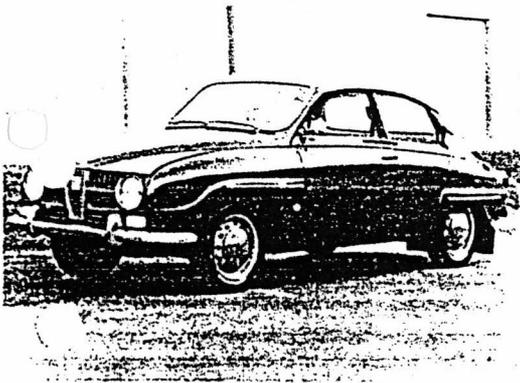
Manufacturer SAAB Model Sedan V4
Serial No. inaugurating this extension Chassis 470001
Manufacturing date of the first vehicle constructed with the modifications 1/8 19.67.
Commercial denomination of modified model SAAB Sedan V4

This extension of recognition is considered: variation - normal development of original vehicle type

Recognition is valid from 1st Jan 1968 List 1968/1

Descriptions of modifications:

- Higher windscreen Material: Laminated glass (see photo)
Higher rear window Material: Glass (" ")
Interior coachwork (" ")



Signature and stamp of the National Sporting Authority:



Signature and stamp of the F.I.A.:

Handwritten signature and circular stamp of the F.I.A. with text 'FEDERATION INTERNATIONALE DE L'AUTOMOBILE'.

FEDERATION INTERNATIONALE DE L'AUTOMOBILE

Form of recognition (extension) in accordance with Appendix J to the International Sporting Code

Manufacturer..... SAAB Model..... SEDAN V4

..... Chassis..... 520001

Serial No. inaugurating this extension Engine..... 101

Manufacturing date of the first vehicle constructed with the modification 1/8 19. 68

Commercial denomination of modified model..... SAAB V4

This extension of recognition is considered: variation - normal development of original vehicle type

Recognition is valid from... *14. / Nov. 19. 68.* List... *19. 68. / 10*

Descriptions of modifications:

New front. See photo.

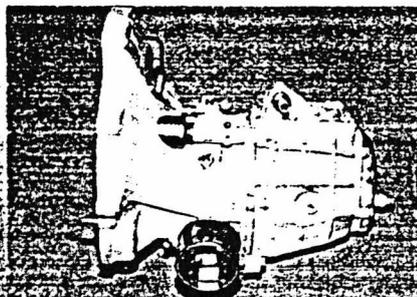
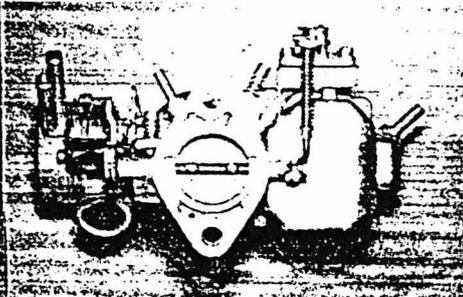
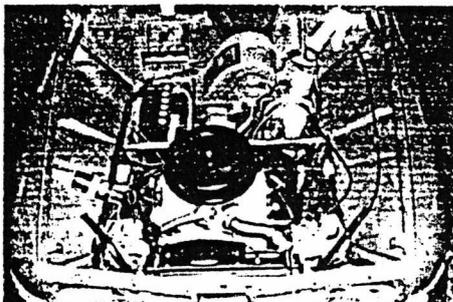
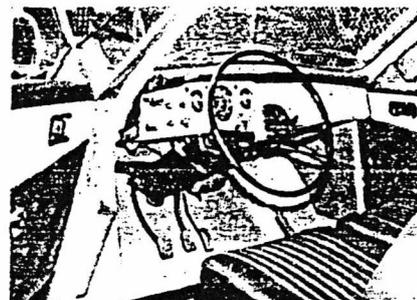
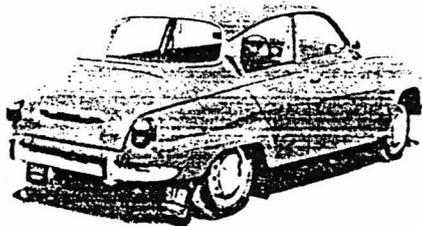
Number of turns of steering wheel from lock to lock: 2 3/4.

Brakes: Servo assistance. Type: Lockheed type 38.

Carburettor make: Autolite. Model: C8GH-9510-G.

Radiator, capacity: 7 litres.

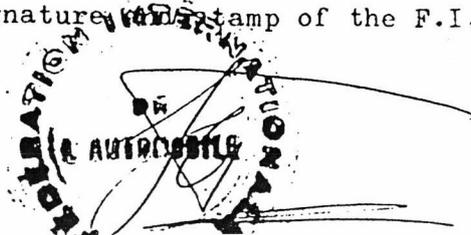
Gear box- and clutch housing. See photo.



Signature and stamp of the National Sporting Authority:



Signature and stamp of the F.I.A.:



FEDERATION INTERNATIONALE DE L'AUTOMOBILE

Form of recognition (extension) in accordance with Appendix J to the International Sporting Code

Manufacturer..... SAAB Model..... SEDAN V4
 Chassis..... 420001
 Serial No. inaugurating this extension Engine..... 101
 Manufacturing date of the first vehicle constructed with the modifications 1/8 19. 68
 Commercial denomination of modified model SAAB V4
 This extension of recognition is considered: variation - normal development of original vehicle type
 Recognition is valid from.. 14. / Nov. 19. 68. List.... 68/10.....

Descriptions of modifications:

Wheel 4 1/2". Track 1233 mm + 10 mm. Weight 7 kgs. Diameter 381 mm. Width 114 mm.

Signature and stamp of the National Sporting Authority:



[Handwritten signature]

Signature and stamp of the F.I.A.:



FEDERATION INTERNATIONALE DE L'AUTOMOBILE

Form of recognition (extension) in accordance with Appendix J to the International Sporting Code

Manufacturer.....SAAB..... Model.....SEDAN V4.....
 Serial No. inaugurating this extension Chassis.....420001.....
 Engine.....101.....
 Manufacturing date of the first vehicle constructed with the modifications1/11.....19.68...
 Commercial denomination of modified modelSAAB V4.....
 This extension of recognition is considered: variation - normal development of original vehicle type
 Recognition is valid from 1st. Jan. 19.69 List...1969/1.....

Descriptions of modifications:

Limited slip differential. Type: Borg - Warner spin resistant differential

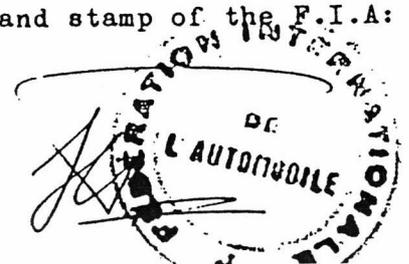
The above only valid when car entered in group 2

Signature and stamp of the National Sporting Authority:



[Handwritten signature]

Signature and stamp of the F.I.A.:



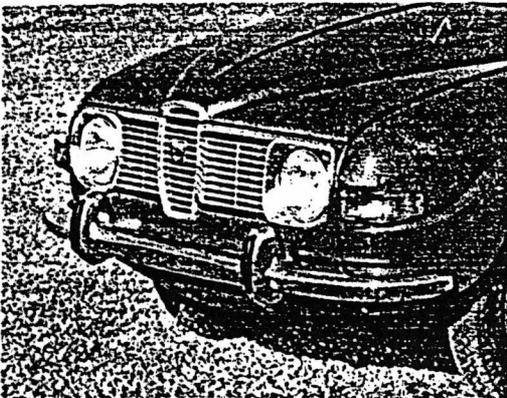
FEDERATION INTERNATIONALE DE L'AUTOMOBILE

Form of recognition (extension) in accordance with Appendix J to the International Sporting Code

Manufacturer..... SAAB Model..... Sedan V4
 Serial No. inaugurating this extension Chassis..... 420001
 Engine..... 101
 Manufacturing date of the first vehicle constructed with the modifications 19.....
 Commercial denomination of modified model SAAB V4
 This extension of recognition is considered: variation - normal development of original vehicle type
 Recognition is valid from... 1./..4..1969 List..... 69/2

Descriptions of modifications:

- Rear wheel brake cylinders , bore 19.05 mm 718072
- Round head lamps (see photo)



Signature and stamp of the National Sporting Authority:
VENSKA BILSPORTFÖRBUNDET
 THE SWEDISH AUTOMOBILE-SPORT FEDERATION

[Handwritten signature]

Signature and stamp of the F.I.A.:

[Handwritten signature]
 F.I.A. stamp: INTERNATIONAL FEDERATION OF AUTOMOBILE SPORTS

FEDERATION INTERNATIONALE DE L'AUTOMOBILE

Form of recognition (extension) in accordance with
Appendix J to the International Sporting Code

Manufacturer SAAB Model Sedan V4
Chassis
Serial No. inaugurating this extension Engine

Manufacturing date of the first vehicle constructed with the modifications 1.8 19. 69

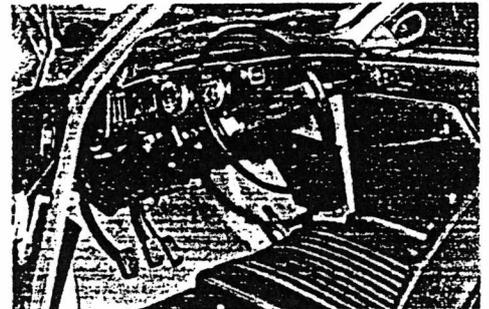
Commercial denomination of modified model SAAB V4

This extension of recognition is considered: variation - normal development of original vehicle type

Recognition is valid from ..A./10./1969.. List 62/7.....-

Descriptions of modifications:

New interior coachwork (dash board, steering wheel etc.) See photo.



Signature and stamp of the National Sporting Authority.

Signature and stamp of the F.I.A.

SVENSKA BILSPORTFÖRBUNDET
THE SWEDISH AUTOMOBILE-SPORT FEDERATION

[Handwritten signature]
[Handwritten signature]

GII

FEDERATION INTERNATIONALE DE L'AUTOMOBILE

Form of recognition (extension) in accordance with Appendix J to the International Sporting Code

Manufacturer SAAB Model Sedan V4
Serial No. inaugurating this extension Chassis
Engine
Manufacturing date of the first vehicle constructed with the modifications 19...
Commercial denomination of modified model SAAB V4

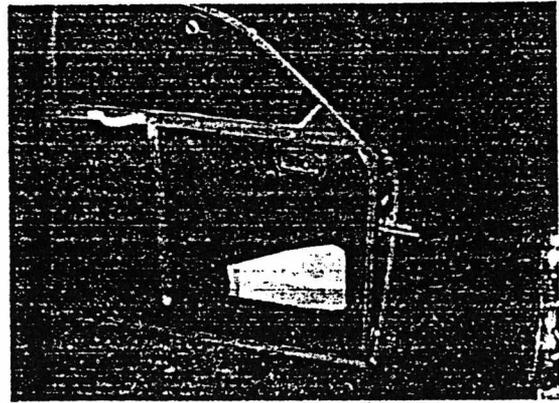
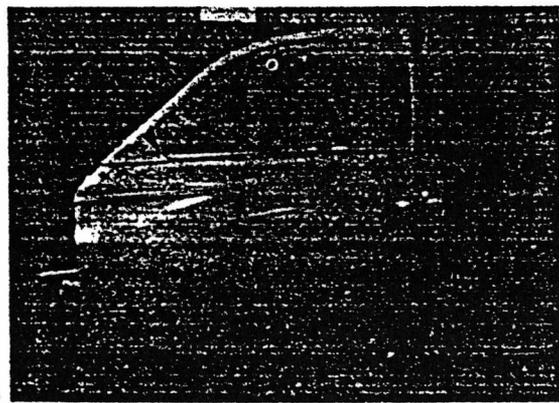
This extension of recognition is considered: variation - normal development of original vehicle type

Recognition is valid from 1./1.19.79 List 70/1

Descriptions of modifications:

NOT VALID FOR GROUP 1

- Light weight doors complete. (steel)
Plexi glass windows (door, quarter light and rear).
Radiator (length 620 mm, height 360 mm, max. width 68 mm. Capacity of cooling system 7,55 litres).
Clutch diaphragm type (dia. of clutch plates 20,2 cm)
(dia. of linings, inside 13,0 cm)
(dia. of linings, outside 20,0 cm)

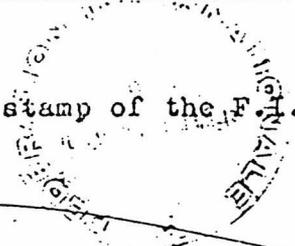


Signature and stamp of the National Sporting Authority:

SVENSKA BILSPORTFÖRBUNDET THE SWEDISH AUTOMOBILE-SPORT FEDERATION

Handwritten signature of the National Sporting Authority.

Signature and stamp of the F.I.A.:



Handwritten signature of the F.I.A. official.

FEDERATION INTERNATIONALE DE L'AUTOMOBILE

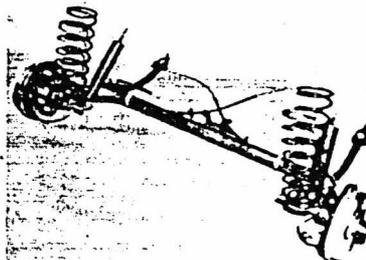
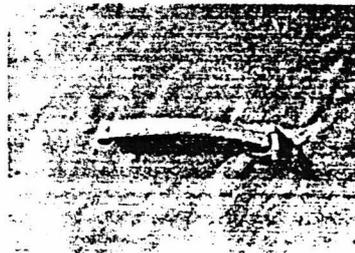
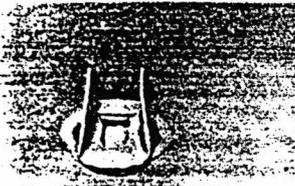
Form of recognition (extension) in accordance with Appendix J to the International Sporting Code

Manufacturer SAAB Model Sedan V4
 Serial No. inaugurating this extension Chassis
 Engine
 Manufacturing date of the first vehicle constructed with the modifications 19
 Commercial denomination of modified model SAAB V4
 This extension of recognition is considered: variation - normal development of original vehicle type
 Recognition is valid from 1/7 1970 List 70/7

Descriptions of modifications:

NOT VALID FOR GROUP 1

Strengthened spring supports	801346
Strengthened link arms	801348
Strengthened swinging arms	801347
Strengthened rear axle (tube dimensions 48 x 5 mm)	801341
Wing extensions	801394



Signature and stamp of the National Sporting Authority:

Signature and stamp of the F.I.A.:

FEDERATION INTERNATIONALE DE L'AUTOMOBILE

Form of recognition (extension) in accordance with Appendix J to the International Sporting Code

Manufacturer.....SAAB-SCANIA..... Model....Sedan V4.....

Serial No.inaugurating this extension..... Chassis.....

Engine.....

Manufacturing date of the first vehicle constructed with the modifications.....1.8.....19⁷⁰...

Commercial denomination of modified model....SAAB V4.....

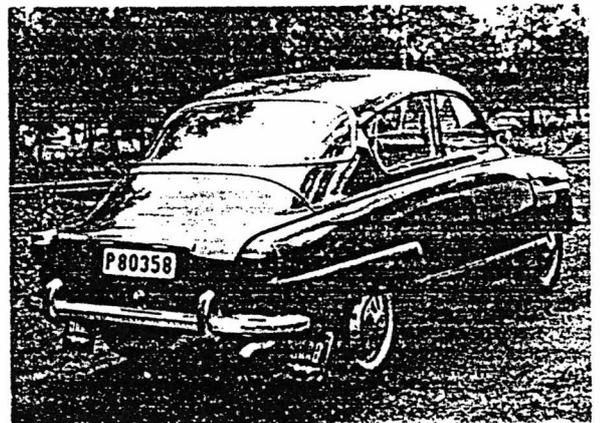
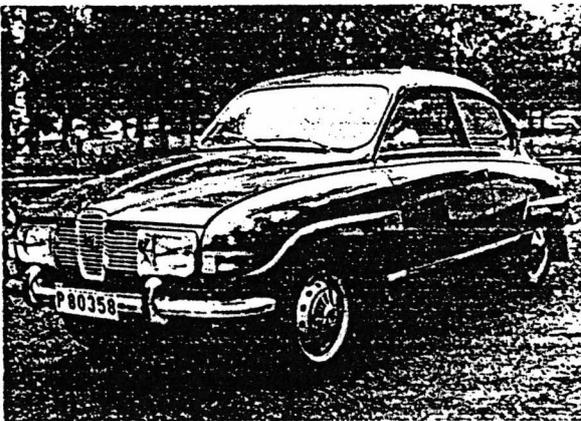
This extension of recognition is considered: variation - normal development of original vehicle type

Recognition is valid from...1/10...1970. List. 79/10.....

Descriptions of modifications:

New exterior decoration lists

Headlight, wiper and washer 881552



Signature and stamp of the National Sporting Authority:

SVENSKA BILSPORTEÖRBUNDET
THE SWEDISH AUTOMOBILE-SPORT FEDERATION

[Handwritten signature]

Signature and stamp of the F.I.A.

[Handwritten signature]

FEDERATION INTERNATIONALE DE L'AUTOMOBILE

Form of recognition (extension) in accordance with Appendix J to the International Sporting Code

Manufacturer..... SAAB-SCANIA Model..... V4

Serial No. inaugurating this extension Chassis.....

Engine.....

Manufacturing date of the first vehicle constructed with the modifications..... 1/8.1970.

Commercial denomination of modified model... SAAB V4

This extension of recognition is considered: variation - normal development of original vehicle type

Recognition is valid from..... 1/4.1971 List. 7/4.....

Descriptions of modifications:

BRAKES: SERVO ASSISTANCE TYPE: ATE T51

Signature and stamp of the National Sporting Authority:

SVENSKA BILLAGIFÖRENINGEN
THE SWEDISH ASSOCIATION OF MOTORISTS

Signature and stamp of the F.I.A.

FEDERATION INTERNATIONALE DE L'AUTOMOBILE

Form of recognition (extension) in accordance
with Appendix J to the International Sporting
Code

Manufacturer SAAB-SCANIA AKTIEBOLAG Model Sedan V4

Serial No. inaugurating this extension Chassis

Engine

Manufacturing date of the first vehicle
constructed with the modifications 1.7.1971

Commercial denomination of modified model SAAB V4

This extension of recognition is considered: variation - normal
development of original
vehicle type

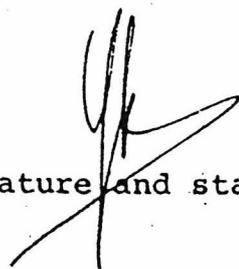
Recognition is valid from 1./10.1972 List.... 1972/10.....

Description of modifications:

- Carburettor Autolite type 71 TW-9510
- Carburettor Autolite type 72 TF-9510

Signature and stamp of the
National Sporting Authority:

Signature and stamp of the F.I.A.:



SVENSKA BILSPORTFÖRBUNDET
THE SWEDISH AUTOMOBILE-SPORT FEDERATION

M. Metslov

F.I.A. Recognition No. 1608
 Group 2 - Tourisme Spécial

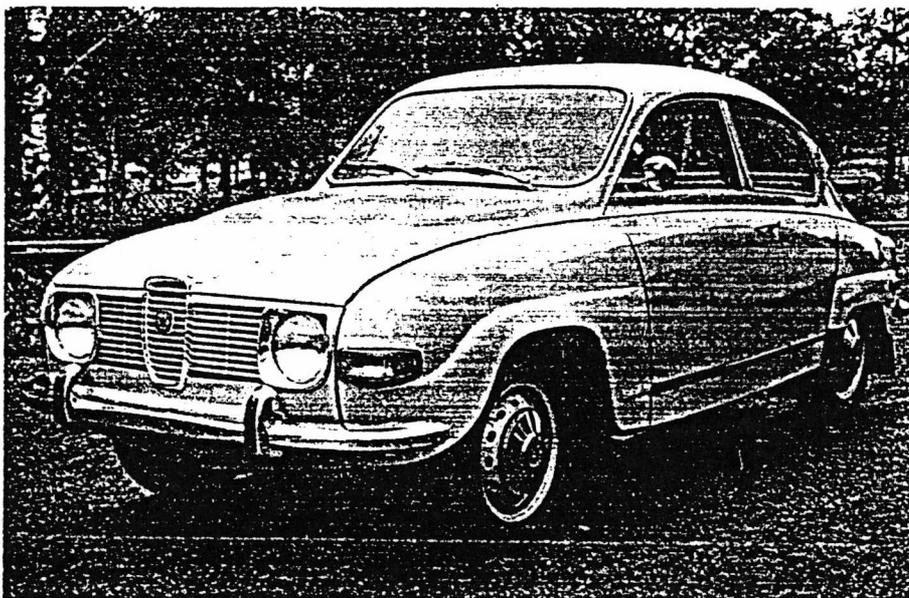
FEDERATION INTERNATIONALE DE L'AUTOMOBILE

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

Manufacturer SAAB-SCANIA AUTOMOTIVE GROUP Cylinder capacity 1698 cm³ 103.6 i
 Model SAAB 96 V4
 Serial No of chassis 96600001 Manufacturer SAAB-SCANIA AUTOMOTIVE GROUP
 engine 174400 Manufacturer Ford Company
 Recognition is valid from 1st Jan. 1971 List 1971/1

The manufacturing of the model described in this recognition form was
 started on 1.7.1970 and the minimum production of 1000 identical cars
 in accordance with the specifications of this form was reached on 30.9.1970.

Photograph A, 3/4 view of car from front



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

Variants

on 1/1 1971 rec.No 1/1V-1/4V List 1971/1
 on19...rec.No.....List.....
 on19...rec.No.....List.....
 on19...rec.No.....List.....
 on19...rec.No.....List.....

Normal evolution of the type

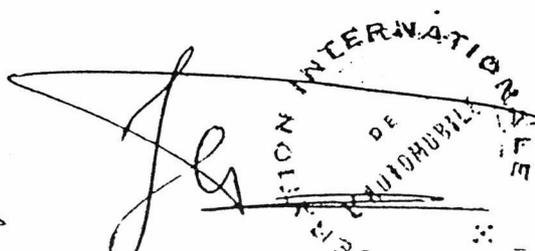
on19...rec.No.....List.....
 on19...rec.No.....List.....
 on19...rec.No.....List.....
 on19...rec.No.....List.....
 on19...rec.No.....List.....

Stamp and signature of the
 National Sporting Authority:

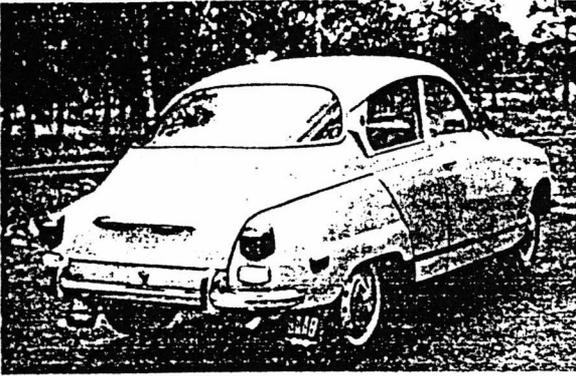
Stamp and signature of the F.I.A.

SVENSKA BILSPORTFÖRBUNDET
 THE SWEDISH AUTOMOBILE-SPORT FEDERATION

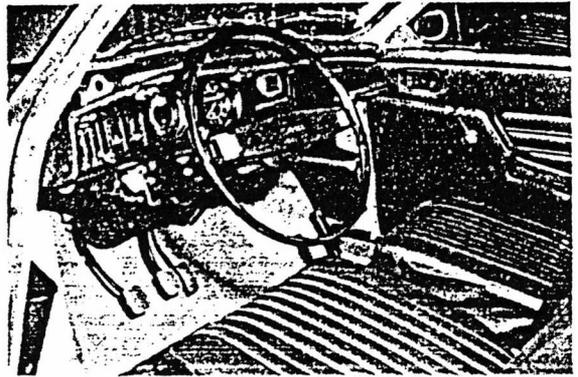
[Handwritten signature]



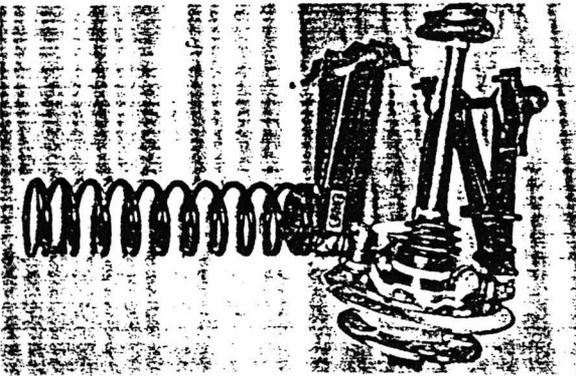
Photograph B



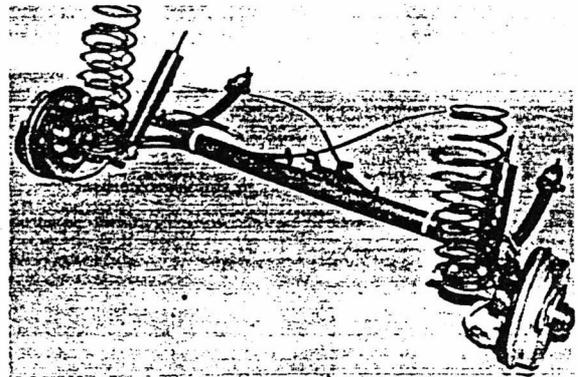
Photograph C



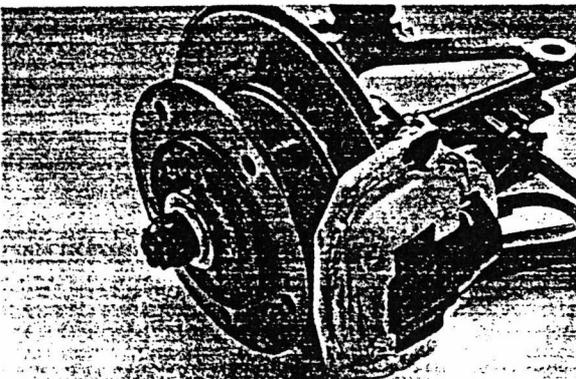
Photograph D



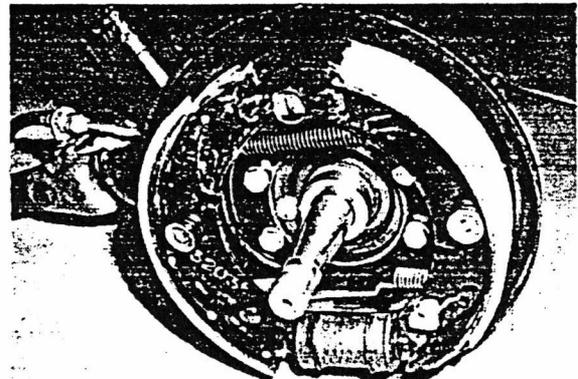
Photograph E



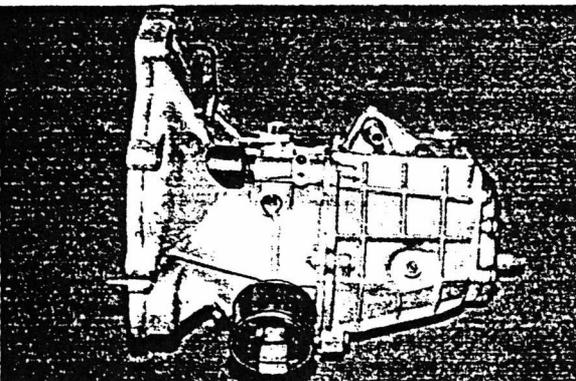
Photograph F



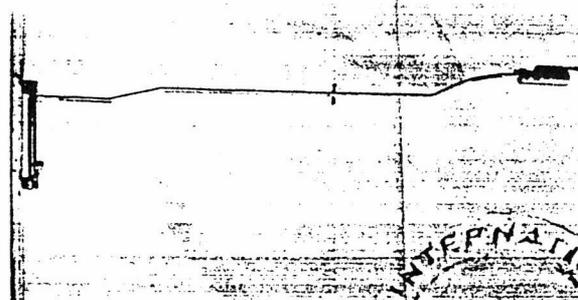
Photograph G



Photograph H

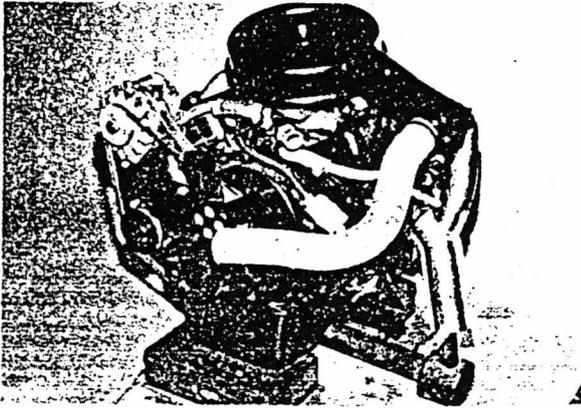


Photograph I



INVESTIGATION
FEDERAL BUREAU OF
INVESTIGATION
U.S. DEPARTMENT OF JUSTICE

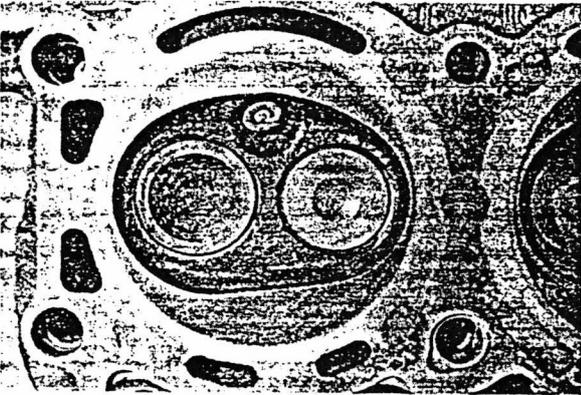
Photograph J



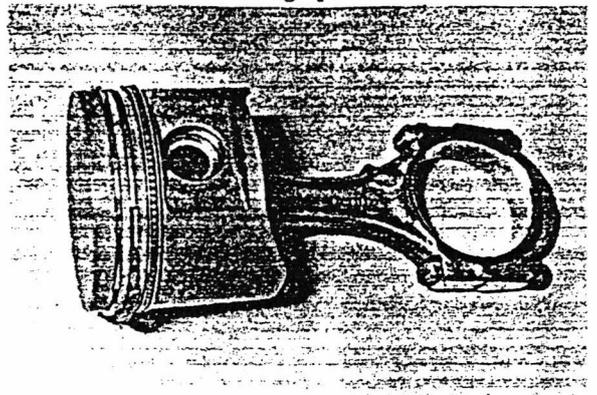
Photograph K



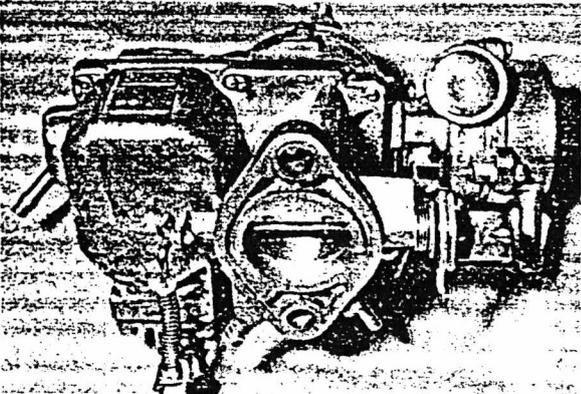
Photograph L



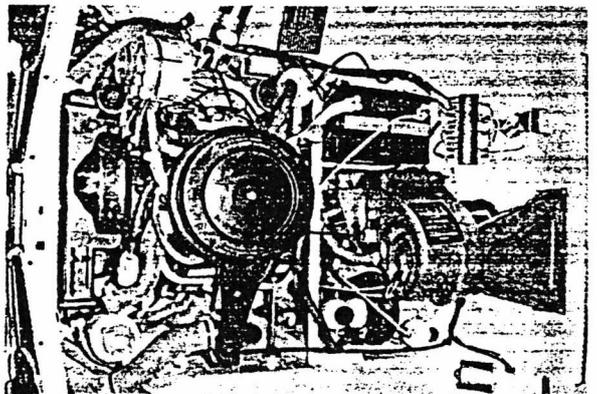
Photograph M



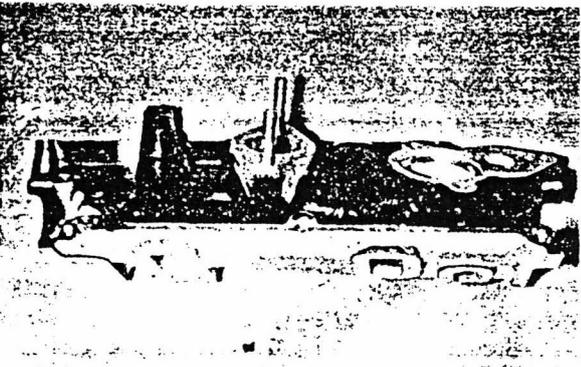
Photograph N



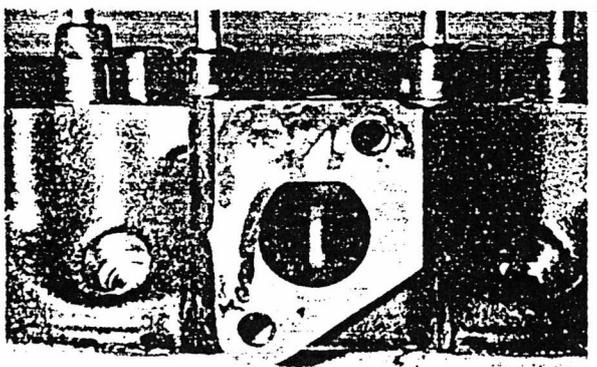
Photograph O



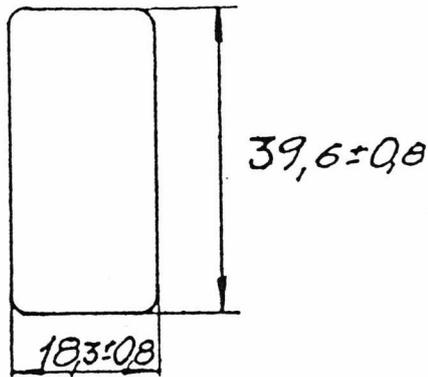
Photograph P



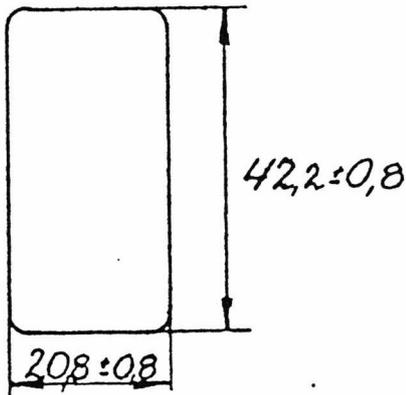
(Photograph Q)



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



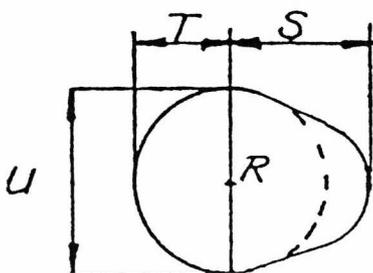
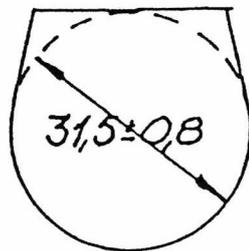
Drawing of entrance to inlet port of cylinder-head. Indicate scale or dimensions and manufacturing tolerance.



Drawing exhaust manifold ports, side of cylinderhead. Indicate scale or dimensions and manufacturing tolerance.

INTEGRAL WITH HEAD

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



R = center of camshaft.

Inlet cam

S = 20,16 - 20,43 mm 0,79 - 0,80 inches

T = 13,77 - 13,84 mm 0,54 - 0,55 inches

U = 27,72 - 27,86 mm 1,09 - 1,10 inches

Exhaust cam

S = 20,16 - 20,43 mm 0,79 - 0,80 inches

T = 13,77 - 13,84 mm 0,54 - 0,55 inches

U = 27,72 - 27,86 mm 1,09 - 1,10 inches

CHASSIS AND COACHWORK (Photographs A, B and C)

20. Chassis/body construction: separate/unitary construction

21. Unitary construction, material(s) PRESSED STEEL SHEET
 Separate construction

22. Material(s) of chassis

23. Material(s) of coachwork PRESSED STEEL SHEET

24. Number of doors 2 Material(s) PRESSED STEEL SHEET

25. Material(s) of bonnet PRESSED STEEL SHEET

26. Material(s) of boot lid PRESSED STEEL SHEET

27. Material(s) of rear-window GLASS

28. Material(s) of windscreen GLASS

29. Material(s) of front-door windows GLASS

30. Material(s) of rear-door windows

31. Sliding system of door windows WHEEL AND TYRE MECHANISM

32. Material(s) of rear-quarter light GLASS

ACCESSORIES AND UPHOLSTERY

38. Interior heating: yes - no

39. Air-conditioning: yes - no

40. Ventilation: yes - no

41. Front seats, type of upholstery CLOTH AND GALON

42. Weight of front seat(s), complete with supports and rails, out of the car: 10 kg lbs

43. Rear seats, type of upholstery CLOTH AND GALON

44. Front bumper, material(s) STEEL Weight 5,2 kg lbs

45. Rear bumper, material(s) STEEL Weight 5,4 kg lbs

WHEELS

50. Type DISC

51. Weight (per wheel, without tyre) 6 kg lbs

52. Method of attachment BOLTED TO DRUM

53. Rim diameter 381 mm 15 inches

54. Rim width 101,6 mm 4 inches

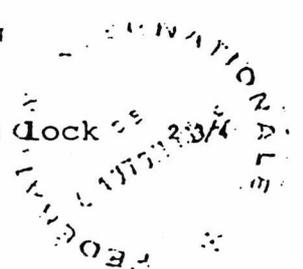
STEERING

60. Type RACK AND PINION

61. Servo-assistance: yes - no

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

63. In case of servo-assistance



SUSPENSION

- 70. Front suspension (photograph D), type INDEPENDENT
- 71. Type of spring COIL SPRING
- 72. Stabiliser (if fitted)
- 73. Number of shockabsorbers 2
- 74. Type TELESCOPIC
- 78. Rear suspension (photograph E), type U-SHAPED RIGID BACK AXLE
- 79. Type of spring COIL SPRING
- 80. Stabiliser (if fitted)
- 81. Number of shockabsorbers 2
- 82. Type TELESCOPIC

BRAKES (Photographs F and G)

- 90. Method of operation HYDRAULIC SYSTEM
- 91. Servo-assistance (if fitted), type ATE T 51
- 92. Number of hydraulic master cylinders 1 TANDEM TYPE

		FRONT		REAR	
93. Number of cylinders per wheel		1		1	
94. Bore of wheel cylinder(s)	50,8 mm	in.		15,9 mm	in.
Drum brakes					
95. Inside diameter	mm	in.		203 mm	in.
96. Length of brake linings	mm	in.		196 mm	in.
97. Width of brake linings	mm	in.		37 mm	in.
98. Number of shoes per brake				2	
99. Total area per brake	mm ²	sq.in.		14700 mm ²	sq.in.
Disc brakes					
100. Outside diameter	267 mm	in.		mm	in.
101. Thickness of disc	9,6 mm	in.		mm	in.
102. Length of brake linings	93 mm	in.		mm	in.
103. Width of brake linings	42 mm	in.		mm	in.
104. Number of pads per brake		2			
105. Total area per brake	6500 mm ²	sq.in.		mm ²	sq.in.



ENGINE (Photographs J and K)

- 130. Cycle FOUR STROKE
- 131. Numbers of cylinders 4
- 132. Cylinder arrangement V-FORM
- 133. Bore 90,0 mm 3,54 in.
- 134. Stroke 66,8 mm 2,63 in.
- 135. Capacity per cylinder 425 cm³ 25,9 cu.in.
- 136. Total cylinder capacity 1698 cm³ 103,6 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 2
- 140. Number of inlet ports 4
- 141. Number of exhaust ports 2
- 142. Compression ratio 7,8 - 8,6:1
- 143. Volume of one combustion chamber 40,22 - 38,22 cm³ cu.in.
- 144. Piston, material ALUMINIUM ALLOY
- 145. Number of rings 3
- 146. Distance from gudgeon pin centre line to highest point of piston crown 39,0 ± 0,1 mm inches
- 147. Crankshaft: moulded/stamped
- 148. Type of crankshaft: integrated/cast with balance weights
- 149. Number of crankshaft main bearings 3
- 150. Material of bearing cap CAST IRON.
- 151. System of lubrication: dry sump/oil in sump
- 152. Capacity, lubricant 3,3 ltrs pts quarts US WAT
- 153. Oil cooler: yes - no
- 154. Method of engine cooling COOL
- 155. Capacity of cooling system 7,0 ltrs pints quarts US
- 156. Cooling fan (if fitted), dia 35,6 cm inches
- 157. Number of blades of cooling fan 5

Bearings

- 158. Crankshaft main, type SHELL BEARING Dia. 57,0 mm in.
- 159. Connecting rod, big end, type SHELL BEARING Dia. 54,0 mm in.

Weights

- 160. Flywheel (clean) 6,5 - 7,3 kgs lbs
 - 161. Flywheel with clutch (all turning parts) 10,2 - 11,1 kgs lbs
 - 162. Crankshaft 11,2 ± 0,5 kgs lbs
 - 163. Connecting rod 164 kgs lbs
 - 164. Piston with rings and pin 1,14 ± 0,05 kgs, lbs
- INCLUDING GEAR
- INCLUDING CONNECTING ROD



Make... SAAB

Model... 36 V4

F.I.A. Rec. No... 1608

FOUR STROKE ENGINES

- 170. Number of camshafts 1
- 171. Location IN V-CENTER
- 172. Type of camshaft drive WHEEL GEAR
- 173. Type of valve operation PUSH ROD
- INLET (see page 4) X
- 180. Material(s) of inlet manifold ALUMINIUM ALLOY
- 181. Diameter of valves 37,1 - 37,5 mm 1,46 - 1,48 inches
- 182. Max. valve lift 9,77 mm 0,38 in.
- 183. Number of valve springs 1
- 184. Type of spring COIL SPRING
- 185. Number of valves/cyl. 1
- 186. Tappet clearance for checking timing (cold) 0,40 - 0,45mm in.
- 187. Valves open at (with tolerance for tappet clearance indicated) 21° B.T.D.
- 188. Valves close at (with tolerance for tappet clearance indicated) 82° A.B.
- 189. Air filter type DRY FILTER CARTRIDGE

EXHAUST (see page 4)

- 195. Material(s) of exhaust manifold INTEGRAL WITH HEAD
- 196. Diameter of valves 32,0 - 32,4 mm 1,26 - 1,28 inches
- 197. Max. valve lift 9,77 mm 0,38 in.
- 198. Number of valve springs 1
- 199. Type of spring COIL SPRING
- 200. Number of valves/cyl. 1
- 201. Tappet clearance for checking timing (cold) 0,40 - 0,45mm in.
- 202. Valves open at (with tolerance for tappet clearance indicated) 63° B.B.D.
- 203. Valves close at (with tolerance for tappet clearance indicated) 40° A.T.

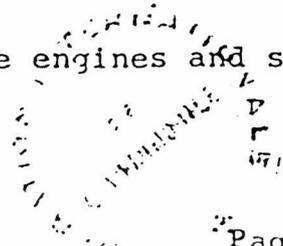
CARBURETION (photograph N)

- 210. Number of carburettors fitted 1
- 211. Type DOWN DRAUGHT
- 212. Make AUTOLITE
- 213. Model 71 TW - 9510 - LA
- 214. Number of mixture passages per carburettor 1
- 215. Flange hole diameter of exit port(s) of carburettor 32 mm 1,26 in.
- 216. Minimum diameter of venturi/minimum diameter with piston at max. height 25,5 mm 1,0 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

X for additional information concerning two-stroke engines and super-charged engines see page 13.



ENGINE ACCESSORIES

- | | | |
|---|---|---|
| 230. Fuel pump: mechanical mechanical /or electric | 231. Number fitted | 1 |
| 232. Type of ignition system COIL DISTRIBUTOR | 233. Number of distributors | 1 |
| 234. Number of ignition coils 1 | 235. Number of spark plugs per cylinder | 1 |
| ALTERNATOR | | |
| 236. Generator, number fitted 1 | 237. Method of drive V-BELT | |
| 238. Voltage of generator 12 volts | 239. Battery, number | 1 |
| 240. Location ENGINE COMPARTMENT | | |
| 241. Voltage of battery 12 volts | | |

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

- | | | |
|-------------------------------|----------------------------|---------------|
| 250. Max. engine output 65 | (type of horsepower: DIN) | at 4700 rpm |
| 251. Max. rpm 5500 | output at that figure | 61 |
| 252. Max. torque 11,7 KPM | at 2500 rpm | |
| 253. Max speed of the car 146 | km/hour | 91 miles/hour |



Make..... SAAB

Model..... 96 V4

F.I.A.Rec.No...1608.....

DRIVE TRAIN

CLUTCH

- 260. Type of clutch DRY PLATE
- 261. Number of plates 1
- 262. Dia. of clutch plates 19,0 cm inches
- 263. Dia. of linings inside 12,5 cm in. outside 18-19 cm 1)
- 264. Method of operating clutch HYDRAULIC

GEAR BOX (photograph H)

- 270. Manual type, make SAAB-SCANIA
- 271. Number of gear box ratios forward 4
- 272. Synchronized forward ratios
- 273. Location of gear shift ON STEERING COLUMN
- 274. Automatic, make type
- 275. Number 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	3,48	05 - 27 - 31 - 21 - 40 - 22			3,14	35 - 27 - 31 - 21 - 41 - 25		
2	2,09	01 - 37 - 27 - 40 - 22			1,86	31 - 37 - 30 - 41 - 25		
3	1,30	35 - 27			1,30	35 - 27		
4	0,84	31 - 37			0,92	34 - 37		
5								
6								
reverse	3,18	35 - 20 - 40 - 22			2,87	35 - 20 - 41 - 25		

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

FINAL DRIVE

- 290. Type of final drive BEVEL GEAR (PINION - CROWN WHEEL)
- 291. Type of differential DIFFERENTIAL BEVEL GEAR
- 292. Type of limited slip differential (if fitted)
- 293. Final drive ratio 5,43:1 4,88:1
- Number of teeth 7:38 8:39

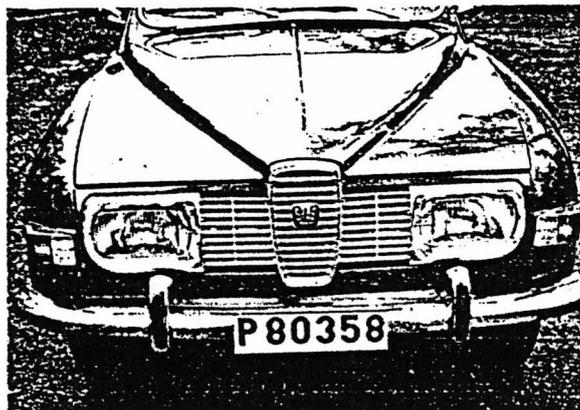
IMPORTANT - The conformity of the car with the following items of the present recognition form is to be disregarded during the scrutineering, when the vehicle has been entered in group 2 (Touring cars) or 3 (Grand Touring cars): 41, 72, 80, 91, 142, 143, 144, 145, 146, 153, 156, 157, 160, 161, 162, 163, 164, 182, 184, 186, 187, 188, 189, 199, 201, 202, 203, 212, 213, 215, 216, 222, 225, 230, 250, 251, 252, 253, and photographs I, M, and N.

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

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

- (72) TRANSVERSE TORSION BAR STABILIZER 707638
- (94) REAR WHEEL BRAKE CYLINDER BORE 19,05 mm 718072

SQUARE HEAD LIGHTS WITH WIPERS AND WASHER (SEE PHOTO) 881552



INTERNATIONAL
 MOTORSPORTS
 COMMMISSION

Make..... SAAB

Model..... 96 V4

F.I.A.Rec.No...1608.....

TWO STROKE ENGINES

- 300. System of cylinder scavenging
- 301. Type of lubrication
- 302. Inlet ports, length measured around cylinder wall mm inches
- 303. Height inlet port mm in. 304. Area mm² sq.in.
- 305. Exhaust ports, length measured around cylinder wall mm inches
- 306. Height exhaust port mm in. 307. Area mm² sq.in.
- 308. Transfer port, length measured around cylinder wall mm inches
- 309. Height transfer port mm in. 310. Area mm² sq.in.
- 311. Piston ports, length measured around piston mm inches
- 312. Height piston port mm in. 313. Area mm² sq.in.
- 314. Method of precompression 315. Precompression cyl.: yes-no
- 316. Bore mm in. 317. Stroke mm inches
- 318. Distance from top of cyl. block to highest point of exhaust port:
 mm inches
- 319. Distance from top of cyl.block to lowest point of inlet port:
 mm inches
- 320. Distance from top of cyl.block to highest point of transfer port:
 mm inches
- 321. Drawing of cylinder ports

330. Supercharging - state full details hereafter



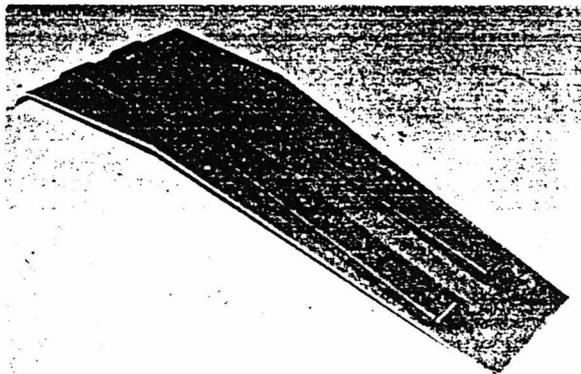
FEDERATION INTERNATIONALE DE L'AUTOMOBILE

Form of recognition (extension) in accordance with Appendix J to the International Sporting Code

Manufacturer..... SAAB-SCANIA AUTOMOTIVE GROUP Model..... SAAB 96 V4
 Serial No. inaugurating this extension Chassis..... 96600001
 Engine..... 174400
 Manufacturing date of the first vehicle constructed with the modifications 1.7 1970
 Commercial denomination of modified model..... SAAB 96 V4
 This extension of recognition is considered: variation - normal development of original vehicle type
 Recognition is valid from..... 1/1 1971 List..... 1971/1

Descriptions of modifications:

- FUEL TANK 881327 CAPACITY 70 LITRES (15,4 IMP.GALLONS)
- PROTECTION PLATE 881362 (SEE PICTURE) LENGTH 108(112) cm
WIDTH 21/40 cm
- RADIATOR 881324 LENGTH 620 mm
HEIGHT 360 mm
MAX.WIDTH 68 mm
CAPACITY OF COOLING SYSTEM 7,55 LITRES



Signature and stamp of the National Sporting Authority:

Signature and stamp of the F.I.A.:

SVENSKA BILSPORTFÖREUNDET
THE SWEDISH AUTOMOBILE-SPORT FEDERATION

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[Handwritten signature]
FEDERATION INTERNATIONALE DE L'AUTOMOBILE

FEDERATION INTERNATIONALE DE L'AUTOMOBILE

Form of recognition (extension) in accordance with Appendix J to the International Sporting Code

Manufacturer..... SAAB-SCANIA AUTOMOTIVE GROUP Model..... SAAB 96 V4

Serial No. inaugurating this extension Chassis..... 96600001

Engine..... 174400

Manufacturing date of the first vehicle constructed with the modifications 1.7 1970

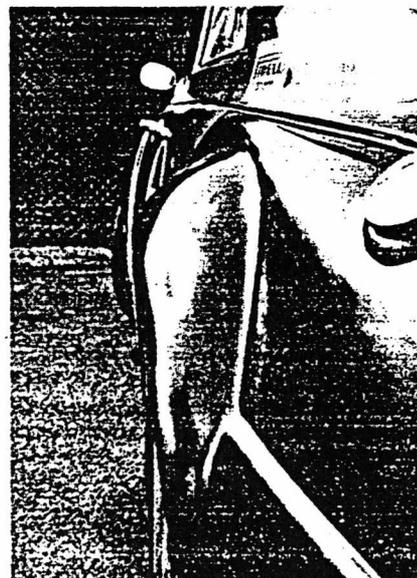
Commercial denomination of modified model..... SAAB 96 V4

This extension of recognition is considered: variation - normal development of original vehicle type

Recognition is valid from.... 1/1 1971 .. List. 1971/1

Descriptions of modifications:

CLUTCH DIAPHRAGM TYPE	881335	(DIA OF CLUTCH PLATES 20,2 cm) (DIA OF LININGS, INSIDE 13,0 cm) (DIA OF LININGS, OUTSIDE 20,0 cm)
PLEXIGLASS WINDOWS	881396	(DOOR, QUARTER LIGHT, REAR)
WING EXTENSIONS	881394	



Signature and stamp of the National Sporting Authority:

Signature and stamp of the F.I.A.:

SVENSKA BILSPORTFÖRBUNDET
THE SWEDISH AUTOMOBILE-SPORT FEDERATION

FEDERATION INTERNATIONALE DE L'AUTOMOBILE

Form of recognition (extension) in accordance with Appendix J to the International Sporting Code

Manufacturer SAAB-SCANIA AUTOMOTIVE GROUP Model SAAB 96 V4
Serial No. inaugurating this extension Chassis 96600001
Engine 174400

Manufacturing date of the first vehicle constructed with the modifications 1.7 1970

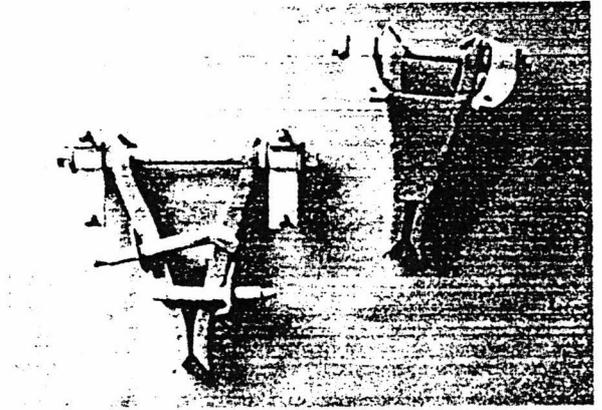
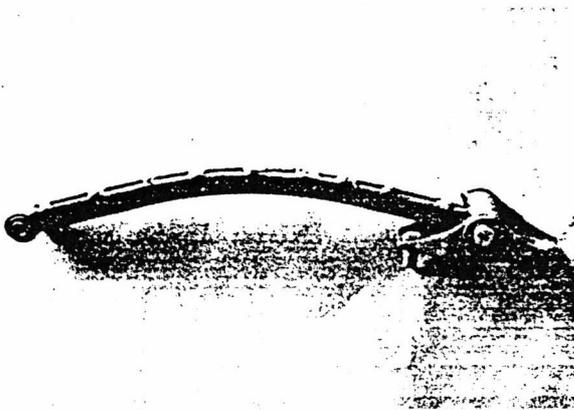
Commercial denomination of modified model SAAB 96 V4

This extension of recognition is considered: variation - normal development of original vehicle type

Recognition is valid from 1/1 1971 List 1971/1

Descriptions of modifications:

- STRENGTHENED LINK ARMS 881348
STRENGTHENED SWINGING ARMS 881347
STRENGTHENED REAR AXLE (TUBE DIMENSIONS 48 x 5mm) 881341



Signature and stamp of the National Sporting Authority:

SVENSKA BILSPORTFÖRBUNDET THE SWEDISH AUTOMOBILESPORT FEDERATION

Handwritten signature of the National Sporting Authority.

Signature and stamp of the F.I.A.:

Handwritten signature and circular stamp of the F.I.A.

FEDERATION INTERNATIONALE DE L'AUTOMOBILE

Form of recognition (extension) in accordance with Appendix J to the International Sporting Code

Manufacturer..... SAAB-SCANIA AUTOMOTIVE GROUP..... Model..... SAAB 96 V4

Serial No. inaugurating this extension..... Chassis..... 96600001

..... Engine..... 174400

Manufacturing date of the first vehicle..... 1.7..... 1970

constructed with the modifications

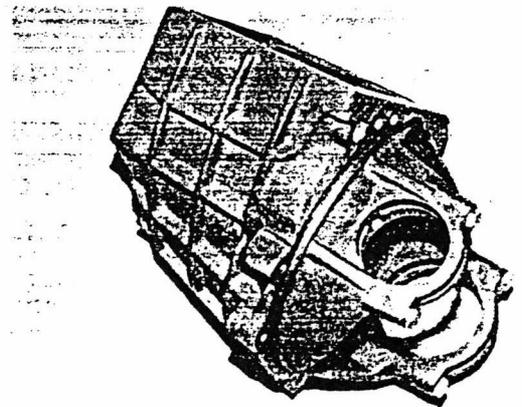
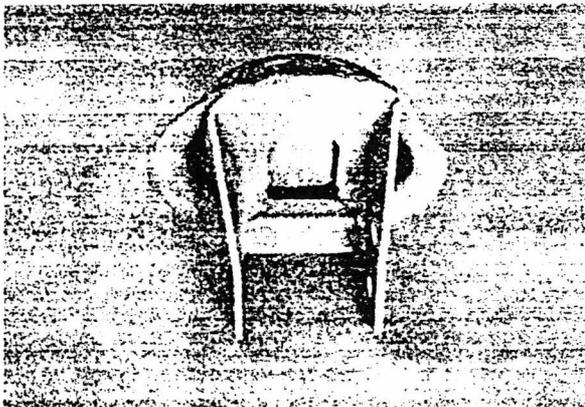
Commercial denomination of modified model..... SAAB 96 V4

This extension of recognition is considered: variation - normal development of original vehicle type

Recognition is valid from... 1/1..... 1971. List..... 1971/1

Descriptions of modifications:

- STRENGTHENED SPRING SUPPORTS 881346
- STRENGTHENED GEAR BOX HOUSING(MATERIAL: CAST IRON) 880923



Signature and stamp of the National Sporting Authority:

Signature and stamp of the F.I.A.

SVENSKA BILSPORTFÖRBUNDET
THE SWEDISH AUTOMOBILE-SPORT FEDERATION

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[Handwritten signature]
FEDERATION INTERNATIONALE DE L'AUTOMOBILE

FEDERATION INTERNATIONALE DE L'AUTOMOBILE

Form of recognition (extension) in accordance with Appendix J to the International Sporting Code

Manufacturer SAAB-SCANIA AKTIEBOLAG Model SAAB 96 V4

Serial No. inaugurating this extension Chassis

Engine

Manufacturing date of the first vehicle constructed with the modifications1.7.....1972

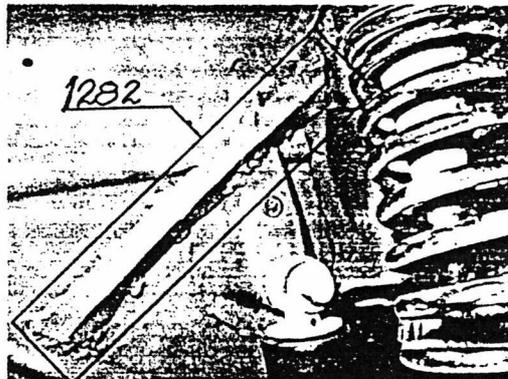
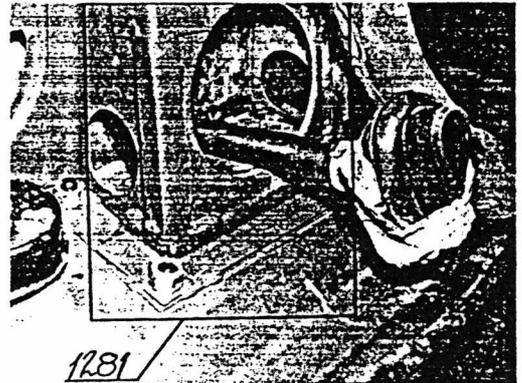
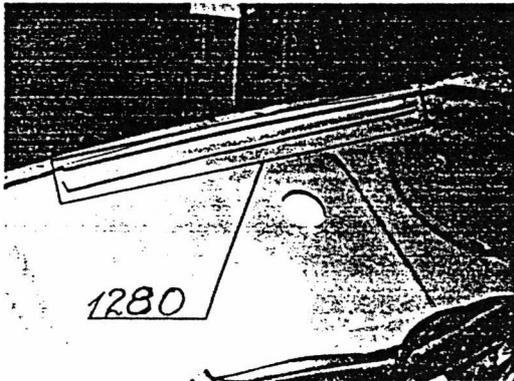
Commercial denomination of modified model SAAB 96 V4

This extension of recognition is considered: variation - normal development of original vehicle type

Recognition is valid from 1.../10...1972 List...1972/10.....

Description of modifications:

- Reinforcement of wheel housing upper No 1280
- Reinforcement of wheel housing console No 1281
- Reinforcement of shock absorber support upper No 1282



Signature and stamp of the National Sporting Authority:

Mail Mebler

Signature and stamp of the F.I.A.

FEDERATION INTERNATIONALE DE L'AUTOMOBILE

Form of recognition (extension) in accordance with Appendix J to the International Sporting Code

Manufacturer SAAB-SCANIA AKTIEBOLAG Model SAAB 96 V 4

Serial No inaugurating this extension chassis

Engine

Manufacturing date of the first vehicle constructed with the modifications 1.7.1972

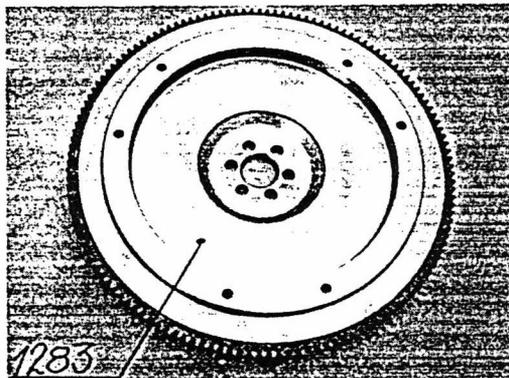
Commercial denomination of modified model SAAB 96 V4

This extension of recognition is considered: variation - normal development of original vehicle type

Recognition is valid from 1.10.1972 List 1972/10

Description of modifications:

Flywheel, material steel BSEN 47 No 1283
weight 7,5 kgs
diameter 277,4 mm



Signature and stamp of the National Sporting Authority:

SVENSKA BILSPORTFÖREBUNDET
THE SWEDISH AUTOMOBILE SPORT FEDERATION

Matt Moberg

Signature and stamp of the F.I.A.:

COMMISSION SPORTIVE
 00178 11.5.73
 INTERNATIONALE

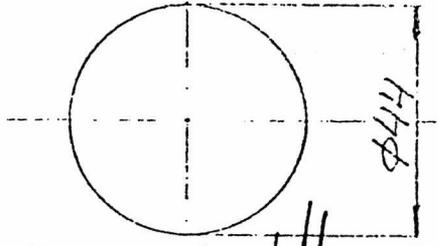
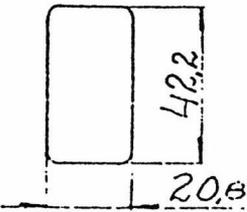
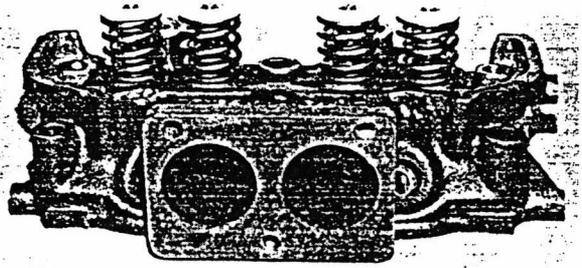
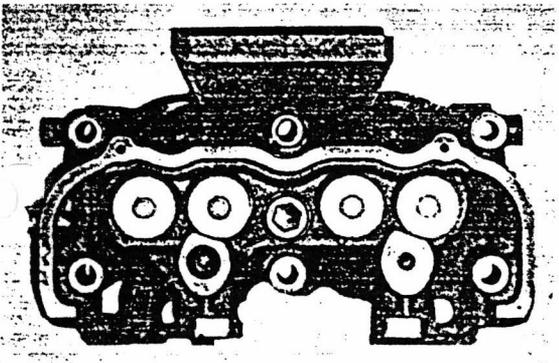
FEDERATION INTERNATIONALE DE L'AUTOMOBILE

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

Manufacturer	SAAB-SCANIA AKTIEBOLAG	Model	SAAB 96 V4
Serial No. inaugurating this extension		Chassis	
Manufacturing date of the first vehicle constructed with the modifications		Engine	1.1.1973
Commercial denomination of modified model			SAAB V4
This extension of recognition is considered:			variation - normal development of original vehicle type
Recognition is valid from	1.7.73	List	

Description of modifications:

Cylinder head	No 1422
Material	Cast iron
Number of inlet ports	2
Number of exhaust ports	2
Compression ratio	9:1
Volume of one combustion chamber	40,22 - 38,22 cm ³



Signature and stamp of the
 National Sporting Authority:
SVENSKA BILSPORTFÖRBUNDET
 THE SWEDISH AUTOMOBILE-SPORT FEDERATION
Matt Mellan

Signature and stamp of the F.I.A.:

COMMISSION SPORTIVE
 00178 11.5.73
 INTERNATIONALE

FEDERATION INTERNATIONALE DE L'AUTOMOBILE

Form of recognition (extension) in accordance with Appendix J to the international Sporting Code.

Manufacturer	SAAB-SCANIA AKTIEBOLAG	Model	SAAB 96 V4
Serial No. inaugurating this extension		Chassis	
Manufacturing date of the first vehicle constructed with the modifications		Engine	
Commercial denomination of modified model			1.1.1973
This extension of recognition is considered:			SAAB V4
		variation - normal development of original vehicle type	
Recognition is valid from	1.8.73	List	73.8

Description of modifications:

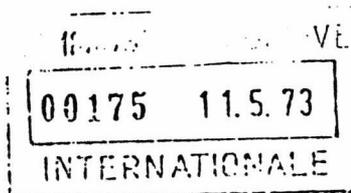
Connecting rod	No. 1314
Polished and shot peened	
Weight including bearing cap, bolts and bearings.	550 gr

Signature and stamp of the National Sporting Authority:

SVENSKA BILSPORTFÖRBUNDET
 THE SWEDISH AUTOMOBILE-SPORT FEDERATION
Mårt Mebler

Signature and stamp of the F.I.A.:

[Handwritten signature]



FEDERATION INTERNATIONALE DE L'AUTOMOBILE

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

Manufacturer	SAAB-SCANIA AKTIEBOLAG	Model	SAAB 96 V4
Serial No. inaugurating this extension		Chassis	
Manufacturing date of the first vehicle constructed with the modifications		Engine	1.1.1973
Commercial denomination of modified model			SAAB V4
This extension of recognition is considered:		variation - normal	
		development of original	
		vehicle type	
Recognition is valid from	1.8.73	List	73.8

Description of modifications:

Crankshaft	No 1370
Moulded	
Type	Cast with balance weights
Number of main bearings	3
Surface treatment	Tenifer treated
Stroke	66,8 mm
Main bearing diameter	57,0 mm
Connecting rod, big end bearing dia.	54,0 mm
Weight	11,3 kgs + 0,7 - 0,3

Signature and stamp of the
National Sporting Authority:

SVENSKA BILSPORTFÖRBUNDET
THE SWEDISH AUTOMOBILE-SPORT FEDERATION

Mart Madsen

Signature and stamp of the F.I.A.:

E. de J...

CONFIDENTIAL SPORTING
01271 00557
SAAB-SCANIA

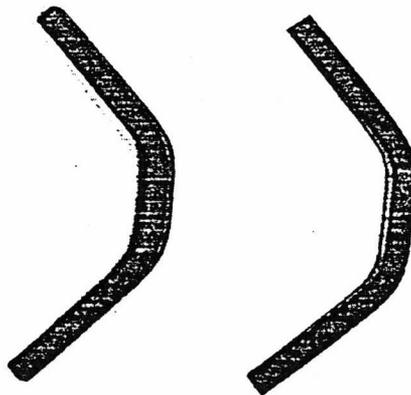
FEDERATION INTERNATIONALE DE L'AUTOMOBILE

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

Manufacturer	SAAB-SCANIA AKTIEBOLAG	Model	SAAB 96 V4
		Chassis	
Serial No. inaugurating this extension		Engine	
Manufacturing date of the first vehicle constructed with the modifications			1.1.1974
Commercial denomination of modified model			SAAB V4
This extension of recognition is considered:		variation - normal	
		development of original vehicle type	
Recognition is valid from	1.7.74	List	

Description of modifications:

Strengthening kit for steering knuckle housing No 15289



Signature and stamp of the National Sporting Authority:

ENSKA BILSPORTFÖRBUNDET
THE SWEDISH AUTOMOBILE SPORT FEDERATION

[Handwritten signature]

Signature and stamp of the F.I.A.:

[Handwritten signature]