

THE SAAB CLUB

COMPACT
FRONTWHEEL
DRIVE CLUB
of AMERICA

JUN. 1981

DEDICATED TO SMALL
ENGINEERED SMALL CARS &
ENERGY CONSERVATION

SAAB Clubs of North America Publisher: Jeff Delahorne, 5805 Oneida Street, Duluth, MN 55804 (218) 525-3253

Consultants: Dick Grossman, Rick Sanders, Jack Ashcraft, Merle Young, Carolanne Curtis

MEMBERSHIP/SUBSCRIPTION

Newsletter #94, our 77th multipaged monthly. Dues for membership/subscription are \$10 for the first year, including two back copies, 12+ tech sheets and emblem. Renewal dues: \$8.00. Renewal notification will be stamped on the open rectangle at the top of this page. A treasurer's report will be made three times a year. This is a non-profit organization.

Or: a three-ringed binder with a collection of back articles and tech sheets is available for \$6.00 postpaid. Or, 30¢ one issue.

Always specify: 96, 97, 99 or 900 and year, for appropriate sheets.

LOCAL CLUB NEWS

ROCKY MOUNTAIN SAAB CLUB-- will next meet on 21 June, Sunday, 2 pm at Chautauqua Park in Boulder for the club picnic and parts swap. The club will provide free beer, soft drinks, and barbeque supplies. Lunches and snacks are BYO. The next monthly meeting will be 29 July, Wednesday at 7:30 pm, location yet to be determined.

Saturday, 2 August at 8 am will be the Saab Club Denver-Area Scenic Tour through Cripple Creek, Victor, and Phantom Canyon Road. 21 August will be the Saab Club mass entry in the local Friday night Amateur Rallye Series. For more information on any of these activities, contact Rick Tibbs at 978-1564, or Barry Nash at 377-9529, or write 1217 Quebec, Denver, CO 80220.

MINNESOTA SAAB CLUB-- will next meet on 22 June 8 pm at the Shakey's at Snelling and Larpenteur. Everyone at the 18 May meeting got "first-hand" experience at taking a 99 gear box apart. The chunks missing from the reverse gear showed what happens if you shift into reverse without letting the car stop completely. Best to turn off the ignition, then shift to reverse before removing the key. For more information on the Minn. Saab Club, contact Gary Zaidenweber at 644-7396.

MINNESOTA SONETT CLUB-- plans to meet at Brainerd International Raceway for the 7 Up SCCA Nationals. This is the best chance to see Saabs racing in Minn. You can either go for the weekend of racing and camping or go just for Sunday and meet Steve Wales at 10:00 am in the infield behind the main grandstand for instructions and track passes for the parade lap at 12:30.

SAAB CLUB NATIONAL CAPITAL AREA-- meets the first Wednesday of every month at the Silver Spring Public Library on Colesville Rd. The parking lot meeting begins at 7:30 pm with the formal meeting at 8 pm. For more information, contact Bruce Williams at 301-891-2812.

SAAB CLUB OF SOUTHERN CALIFORNIA-- had about 30 members attend the Western Regional Saab-Scania warehouse. Andy Aiello, the regional warehouse manager, explained a few points that might be of interest to members. All three warehouses handle fast moving parts with the eastern warehouse managing the slow parts. All parts warehouses are hooked up via sputnik for instant computer feedback on what parts are where. SAS now handles the parts shipments on a regular basis to eliminate the old days of one slow boat for one small part that most members most likely remember all too well. Most parts can be had the next day via airline, but as with all rules this one is not exact as other members are sure to report.

The star of the evening had to be the silver 900 that was rolled over for the now almost famous TV commercial. There it sat with the dirt still on it and a sunroof that still opened and closed.

For more information about SCSC activities, contact Paul Florance at 213-438-3257. All Saab Club members are invited to a simple TSD (time-speed-distance) Rally on 28 June at 8:15 am. Start at intersection of I-10 and Rosemead at Security Pacific Bank. No dirt roads, no freeways, no dirty tricks involved. Rallymaster is Ted Wedel at 714-735-8916.

7th ANNUAL WESTERN PENN. SAAB PICNIC-- on 28 June at Ligonier, PA. Any Saab enthusiast may attend. Contact Dennis Sweeney, 412-238-4556 or Rich Simpson, 412-795-3037, for directions and more information.

CENTRAL ILLIANA SAAB CLUB-- met 24 May at Margrit Adler's house and cured a non-starting EMS (corroded plug wires) and a rough idling Turbo. The next meeting will be 21 June, Sunday, at 2 pm at 1507 W. University in Champaign. Tuneups, brakes, problem solving, and inspection are planned.

MARGRIT ADLER/CENTRAL ILLIANA CLUB TIPS: Remember to bleed the heater after changing engine coolant on V-4s and 99s. For those with no outside visible bleeding nipples, the bleeder is located near the thermostat valve control, left side of motor, up against the dash side on top of the highest rising hose from the rear of the engine.

The clutch and brake fluids should be changed at least every two years. They pick up a lot of moisture which can damage seals and impair function.

Periodically check bolts on valve covers. They tend to loosen up from vibration causing air leaks and oil loss. Use a Posi-drive if you have one, or a Phillips if you don't. Do not overtighten--just secure.

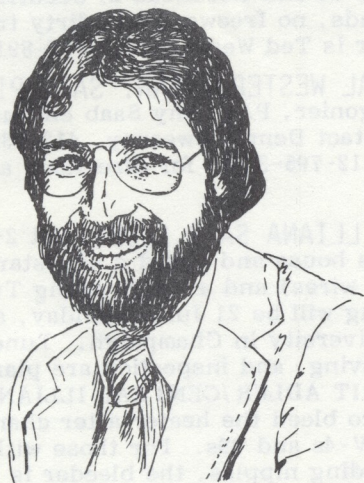
SAAB PARADE AT BRAINERD, MN RACES-- All Club members in the upper Midwest are encouraged to come to the 11-12 July races at Brainerd. See the Minn. Sonett Club announcement on this page or call Jeff Delahorne, 218-525-3253, for further details.

EDITOR/PUBLISHER'S REPORT---JUNE 1981

For May we mailed out 2905 newsletters and received about 400 pieces of mail with 74 new members and 188 renewals. Our costs now run like this: printing for monthly newsletter: \$500; postage for mailing newsletter: \$505; clerical and folding help: \$300; editor's salary: \$700. In addition there is postage for mailing new member packs and sample issues, costs for reprinting tech' sheets, office supplies, and some car expenses to keep the 99 running to the Post office, printer, xerox shop, etc. Our bank balance is now about \$2500, which serves as a small cushion to insure the newsletter will come out every month. Anyone who would like a more detailed accounting of finances can receive one upon request.

GROWTH: One member wrote in saying he wasn't sure that "bigger is necessarily better." I agree that bigger isn't necessarily better, but it can be, and in the case of the Newsletter, more members insures continued existence, a constant supply of good tech' tips, and a larger financial base to possibly enlarge the newsletter and make it even more useful to the membership.

To help recruit new members we will continue to advertise in Road & Track every couple months, and we also have flyers available to members who want to hand them out to Saab drivers they meet. We also can send out a few spare copies of back issues for samples, just write us. We also encourage members to put Saab Club emblems on their cars, either on the rear window, side window, or bumper. It might help get better treatment from a mechanic or dealer by identifying you as someone intelligent and caring about Saabs.



Dick Grossman encouraged me to include a picture of myself, and even made this line drawing on me for the Newsletter. I was afraid my likeness might scare off readers, but I figured if my readers liked the funny looks of Saabs, they wouldn't mind me.

Jeff Delahorne, editor

PARRformance Enterprises

FOR SALE: BILSTEINS for 99s; Set of four: \$197.00 including shipping. Limited quantities. PARRformance Ent., 1463 Dridge Hill Rd., Lititz, PA 17543, 717-626-1773.

MISCELLANEOUS V-4 TIPS BY ERIC KILLINGER

The Capri brake master cylinder rebuild kit mentioned as fitting a '71-on V-4 (p/n D7RY 2004A) contains only seals. It does not contain the white plastic guide bushing that usually has to be drilled out in order to disassemble the cylinder, nor does it contain seal guides and washers, not to mention the pistons that the ATE kit contains. For these reasons, I recommend only the original equipment ATE repair kit. I have not looked at the NAPA kit (p/n 670) that has been mentioned in the Newsletter as working but I suspect it has similar deficiencies. The Girling repair kit at my local Beck-Arnley distributor is quite complete except for the all important plastic bushing. The master cylinder can be disassembled sometimes by pushing in the piston and releasing it quickly, but this may not work, especially on the older ones. Then the bushing needs to be drilled out with a small drill bit. (Ed. note: I heat up two small ring-shank nails and melt them into the plastic and then pull with two pairs of pliers. If you drill, take care not to score the piston with the chuck of the drill motor.)

One last work on brake master cylinders is that at least on the ATE ones ('71-on), one seal on the primary piston (I think) is nearly impossible to install on the new or old piston without breaking it. It can be done very carefully with small screwdrivers/fingers, but it is no fun. The problem is that it has to go over two rather high ridges on the piston. VW makes some cone-shaped seal installing tools for their master cylinders, but none of them will fit the SAAB pistons--either too small or too large. All this goes to say that you are best off keeping your brake fluid clean (flush/bleed at least every 30,000 miles) and when the master cylinder starts leaking, just save yourself some agony and buy a complete new one, though they are not cheap.

A replacement for the Saab brake hose that goes from the wheel well to the front brake caliper on V-4s is available from Beck-Arnley. These hoses crack after 75,000 miles or less and should be replaced before the break works its way through the inside lining of the hose. The Saab part (7395254) is close to \$20 now and this universal type hose from B-A (p/n 073-0143) is only about \$10.

When replacing the clutch or experiencing shifting problems or clutch free-play adjustment problems, check the adjustment screw. The new ones presently available from Saab are a few mm's longer than most of the ones that I have found on V-4's. I have installed new clutches and then not been able to get the proper free-play until I installed one of these replacement screws. It saves having to jury-rig the slave cylinder with shims. One of these new screws is 31 mm long, compared to the 28mm I found on my car. The screw is p/n 8809550; your old lock nut will work.

Eric Killinger, Boulder, CO

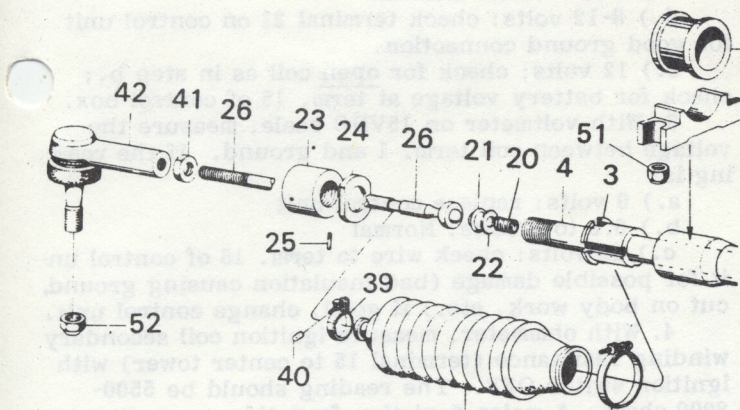
VICTOR SAAB

1135 Easton Road - Abington, PA 19001

We'll ship any part - anywhere in the USA. We have one of the largest parts departments on the East Coast. Complete stock of V4 parts and what is still available in 2 cycle parts. Call Dan Stella - (215) 886-8660.

SAAB
CLUB
JUN. '81

2 11



WORN STEERING TIE ROD ENDS FIXED ON '71 99

Immediately after buying four new Kleber tires for my 1971 99, I took the car to a garage for a front end alignment. The mechanic discovered 3/8" of side to side play in the right front wheel and said he could not do a satisfactory job with that amount of play. Not wanting to wear out my new tires, I investigated the cause.

Grabbing the tire at three and nine o'clock positions and shaking, I determined that the play was not in the ball joint, but within the steering rack. The tie rod moved in and out of the rubber boot as I wiggled the wheel. I consulted my manuals and talked with the folks at Performance Cars in Newport News, VA and learned that there is a ball and socket joint on the inboard side of the tie rod where it connects to the steering rack. My model has adjustable bearing cups while the earlier 99s used shims for adjustment.

Disassembly involves removing the rack, which comes out through the left wheel well. It takes a lot of maneuvering to get it through the access hole. I discovered the bearing surfaces on both the tie rod end and bearing cup were ridged and polished. Apparently the play had been present for some time to cause the wear. I ordered the replacement parts from Performance Cars (very good service and advice) and repacked the rack with a mixture of half chassis grease and half 90 wt. oil.

Later, I talked to Rick Rosati of Clews Saab in Malvern, PA who indicated that it was much more common for the right side rather than the left to wear. The reason is that the right side travels on the worst part of the road. Anyone with an older 99 (mine has 120,000 miles) would be smart to check for play in the steering rack the next time the front end is jacked up. It might save your front tires.

Jim Egelston, Harrisburg, PA

POINTS FOR EARLY 99'S AT BAP/GEON

The last time I bought points for my '69 99 I had trouble finding them in stock, but the parts man found a pair listed for a Fiat that were a perfect fit. The BAP/GEON part number is 2720HDV. I appreciated the information on 75 wt. oil for 99 transaxles. I had to buy 15 gal. to get any (the local dealer only carries 80-90 wt. now), but the old Saab sure runs and shifts better with it.

Jesse Strack, Independence, OR

TWO-STROKE OIL INJECTED CHANGE TO GAS MIX?

Can a two-stroke engine with the oil reservoir and pump system be safely lubricated by putting the oil in the gas tank instead? You can answer it in the Newsletter if you know, or maybe a fellow member knows.

Robert T. Garber, Elyria, OH

Ed. Reply: I don't see any reason why you could not change an oil injected over to an oil-in-gas arrangement. Just bolt down a plate to the oil pump hole in the block with a gasket for a good seal. You'll want to add some oil through that hole every once in a while to keep the distributor drive gear from going dry since there's no source of oil there now, and no grease fitting like in the oil-mix blocks. The oil pump normally pumps a small amount into this front chamber with the distributor drive gear; so you have to make up for that somehow.

UNLEADED GAS IN A TWO-STROKE--Does anyone know the effects of using unleaded gas in a two-stroke engine?

Eric Schweitzer, Stony Brook, NY

Ed. Reply: I've used Amoco unleaded premium in my '65 Monte Carlo 850, and it didn't seem to do it any harm, though I did not use it exclusively. The reason cars needed the lead was, as the last Newsletter pointed out, because it prevents rapid valve seat wear. A two-stroke doesn't have any valves, of course, so that problem isn't there. The only problem I can see is that the 9:1 compression ratio in the Monte Carlo's might be a little high for the really low octane unleaded regular. If anyone else has any experiences or thoughts, write in.

SAAB

Service Information

ODOMETER OF 85 mph 900 SPEEDOMETER: If the odometer reading seems to be increasing faster than the actual miles travelled, verify this with a road test. Drive the car at least one mile or until the odometer begins to index. The odometer may be observed to continue indexing one mile for every tenth registered on the tripmeter, particularly if road speed is above about 40 mph. If so, the fault may not be in the speedometer/odometer unit. To check where the fault lies, remove the left radio speaker and disconnect the maintenance reminder mileage counter drive cable from the back of the speedometer unit. Repeat the road test. If the odometer registration is normal, the fault is not internal to the unit. Reinstall the counter drive cable carefully and check the connection at the counter located behind the knee panel to the left of the steering column. If the cable is installed correctly at both ends and the fault remains, the cable may project too far from one end fitting. Replace the cable.

IMPORTANT: The exhaust system maintenance reminder lamp is required by Federal law. Do not leave the counter disconnected more than a few miles.

RECOMMENDED MECHANIC: Alex Fowler, Circle and Square, Port Townsend, WA.

RECOMMENDED MECHANIC: Chuck Parker, Parker Automotive, Mountain View, CA.

EFI INJECTOR HOSE RECALL STILL VALID--SAAB SERVICE INFORMATION REPRINTS AVAILABLE

In your March newsletter you mentioned that the EFI injector hose recall expired in 1979. This is not so. Under Federal law, automobile manufacturers are required to perform recall modifications at no charge unless the affected vehicle was retailed more than eight years prior to the repair date. The EFI recall, which affects 1970-late 1973 fuel injected 99's, is still operational. Although we are out of stock of the injector hose kit (0294116) we still carry hose in one meter lengths (0204206) and correct clamps (7968290).

Daniel L. David, Manager
Technical Services Department
SAAB-Scania of America

Ed. Note: Mr. David also reports that a reprint of all valid 99 and 900 Service Information bulletins is now available through Saab dealers. It is called: SAAB Service Information Supplement No. 1, 1/71--10/79, 99 & 900. It is part no. 0290957. Also available is a reprint of Saab service recalls, part no. 02-90833, which includes all Recall Service Informations issued from 1/72 to 1/80 and which affected 1972 and later model vehicles.

A second Service Information Supplement No. 2 will be issued in October and will cover all 99 and 900 S.I.'s issued from 11/79 through 9/81.

TEST PROCEDURE FOR ELECTRONIC IGN. '78 & ON

In response to a letter from R. Tiede, Granville, OH in the May '81 Newsletter, here is a test procedure for Bosch electronic ignition systems used on all Saabs, 1978 and later. The distributor and control box are both expensive, and being electrical parts, are non-returnable to dealers if you guess wrong, so this should be useful to any Saab owner who can competently use electronic test meters.

Necessary tools: dwell meter with four-cylinder 90° scale; voltmeter with 15 VDC and 5VAC scales; and an ohmmeter with 0-5 ohm scale and full scale zero to infinite ohm.

NOTE: If engine runs, but runs poorly, the fault is most likely not in the electronic ignition components but in the fuel system or the secondary ignition system (distributor cap, rotor, ignition cables, spark plugs).

If engine cranks, but will not start: Remove high tension lead from center tower of the dist. cap and hold it $\frac{1}{4}$ to $\frac{1}{2}$ inch from a good ground. Crank engine. If a good spark is present, check secondary ignition system. If no spark is present then continue test sequence in order.

1. Switch on ignition (battery should be fully charged).

2. With voltmeter on 15VDC scale, measure the voltage between coil terminal 15 and ground. If the reading is:

a.) 0 volts: check 0.4 ohm compensating resistor for open circuit; check for battery voltage at single terminal on 0.4 ohm resistor. If no voltage, check terminal 15 on ignition switch and related wiring.

b.) less than 6 volts: check for shorted primary winding in the ignition coil; disconnect wires from terminal #1 and #15 of the coil. On 0-5 ohm scale of ohmmeter, check resistance from term. 1 to 15. It should be 0.95--1.4 ohm. (this spec. if for Bosch coil only, 1.0--2.0 ohm is common)

c.) 6 to 8 volts: Normal.
d.) 8-12 volts: check terminal 31 on control unit for good ground connection.
e.) 12 volts: check for open coil as in step b.; check for battery voltage at term. 15 of control box.
3. With voltmeter on 15VDC scale, measure the voltage between coil term. 1 and ground. If the reading is:

a.) 0 volts: replace control unit

b.) 0.5 to 2 volts: Normal

c.) 12 volts: check wire to term. 16 of control unit for possible damage (bad insulation causing ground, cut on body work, etc.) if good, change control unit.

4. With ohmmeter, measure ignition coil secondary winding resistance (terminal 15 to center tower) with ignition switch OFF. The reading should be 5500-8000 ohms. A major deviation from this spec. or an infinite reading, then replace coil.

5. Connect dwell meter and crank engine

a.) dwell 65°--90°: Normal

b.) no reading or off scale, then disconnect wire harness at control unit. Connect 5VAC meter across terminal 7 and 31d of harness. Crank engine. A minimum reading of 1 volt AC should result. If low or no voltage, then disconnect cable at distributor and repeat test at two pins of connector in the side of the distributor. Connect ohmmeter across the same two pins and you should obtain a reading of 750-1500 ohms. If voltmeter and ohmmeter readings are not obtained, replace impulse transmitter in the distributor or replace the distributor complete. If voltmeter and ohmmeter readings are proper, then replace the control unit.

Michael Owens, Katy, TX

NEWSLETTER HELPS MEMBER FIX 99 ALTERNATOR

I would like to compliment you on the Newsletter. I have especially appreciated the service tips and have found them useful. I have two 99's: a '73 EMS and a '78 EMS. The '78 at 43,000 miles has been trouble free, but the '73 at 90,000 miles has had a few problems where the service tips have saved some bucks.

In one case a non-charging alternator was diagnosed as a faulty alternator. I refused to buy a new alternator, deciding to do some additional checking on my own. I discovered in the electrical circuit diagram that the discharge indicator light is in the regulator circuit and that my problem could be fixed with a new light bulb.

In another case a severe vibration in the drive train was diagnosed as a faulty driver. A new driver was recommended by one Saab dealer, but fortunately was not in stock. I called another Saab dealer who recommended reversing drivers from side to side, thus reversing direction of rotation of the shafts. This logical solution saved the cost of new parts. The car runs smoothly again, and I expect no further problem as long as I do not drive in reverse gear at speeds above 40 mph.

Charles F. Coe, Los Altos, CA

MORE SOUTHERN CALIFORNIA CLUB NEWS-- The So. Cal. Saab Club will hold a three-banger tune up clinic in July, sometime after the 15th. Call Paul Florance for details 213-438-3257 or mail SASE to Paul at 54-62nd Place, Long Beach, CA 90803. If any So. Calif. members would like to sponsor a clinic on some area of their knowledge pertaining to Saabs, please call Paul F.

MISCELLANEOUS 99 TIPS: EFI HOSES, WIPERS

The following applies to my '73 99LEA, 112,000 miles. When the crimped-on rubber hoses on the fuel injectors aged and were leaking gas, the fix was to snip away and remove the old parts and replace with new hose and clamp. No need to buy new injectors.

Instead of buying a new, made in England oil pressure switch from Saab which would cost \$12+, I purchased a replacement from an auto parts house for \$1.69. The threads were either 27 or 28 per inch I was told, and that there is a difference of one thread per inch. I used pipe tape on the new unit, so as long as I stay with this unit I should be okay. The part is made by General Automotive Specialty Co., part no. 2302. Saab's spec's call for the oil light to come on at 4.2-7.1 psi. (Ed. Note: you can of course choose a higher threshold for the sender unit, say 15 psi, which would give added insurance in case of a drop in oil pressure)

Pulling off the proper wire (grey) from the windshield wiper motor permits parking or stopping the blades anywhere on the windshield. However, you will not have automatic parking if this is done. I did it to prevent the wiper on the driver's side from taking a "set" over the curved windshield.

Recently I experienced a jerking motion in the steering wheel at slow city speeds, but none at highway speeds. The jerking would move the wheel into a left turn. The trouble disappeared after I replaced a bald right front tire.

One of the exhaust manifold mounting holes was stripped. The repair was to tap to the next larger bolt size with a bottoming tap and install the appropriate bolt. I was lucky in that the stripped hole was a close fit to the tap and the hole in the manifold was big enough to pass the tap. I did not need to take anything off the engine to do this.

Bob Hom, Foster City, CA

TURBO TECH TIP--CHECK VALVE CLEARANCES

Check valve clearance per schedule or after 30,000 miles and every 15,000 miles thereafter, even though removing valve cover from A/C equipped cars is a pain. The reason is that valve seats are being "pounded" into the aluminum head (according to discussions with independent mechanics and dealer service personnel). The results are, that if not adjusted, the closing tolerance leads to burned valves and associated head problems.

Allan Rae, Farmington, CT

Last Minute Arrival....

FOR SALE: 1973 96, excellent condition, 1700cc V-4, white with green interior; new Uniroyal 180s, new clutch, paint, trans. bearings, valve grind; 82,000; fog lights, am/fm cassette with 4 speakers and power amp.: \$2300 firm. Paul Florance, 54-62nd Place, Long Beach, CA 90803, 213-438-3257. Also, Wanted: Rear tailgate lock for 95, with key: \$10 plus ship.

FOR SALE: 1974 99LE, silver with brown interior, 110,000 miles, runs good, no rust, new exhaust: \$1200. Mike Brauer, 282 Mt. Zion Rd., Union, KY (15 mi. So. of Cinc., OH) 41091, 606-384-3516.

WANTED: for 1979 99 GL, one steel wheel, up to \$20; gas can that fits in spare wheel: \$7.50. Glen Rhoades 41 Marshall St., Leonardo, NJ 07737, 201-872-9324.

TURBO UNIT OILER AND OTHER TURBO CHANGES

I have a few suggestions some Turbo owners might be interested in. First, an alternative to letting the car idle until the cooling fan comes on to cool the turbocharger, is to install a turbo oiler. It is a one quart aluminum bottle with a check valve and connecting hose. The check valve installs in the turbo's oil supply line and provides the connection for the bottle. When the engine is running, the bottle fills and holds a quart of oil under pressure. When the engine is shut off, it empties through the turbocharger bearing (the check valve will only let oil go to the bearing and not back to the oil pump). This can take a couple minutes and will prevent oil from coming to rest in the turbo while it is hot. Also it is a good safeguard to prevent damage to the turbo should you ever lose oil pressure momentarily. The oiler has no moving parts and once installed, there is nothing left to do. I got mine from Auto World in Scanton, PA for about \$65.

I wired a Saab lighted dash switch into my cooling fan relay and turn this on the last minute or two of driving before shutting the engine off and leave it on a minute or so after, as well as any time I'm in stop and go traffic on a warm day. This is good for any Saab and I have the same thing on my '72 99E.

If you are really interested in saving your engine with good lubrication, you might consider a pre-oiler. I read that McDonald-Douglas engineers demonstrated that 90% of all engine wear occurs during the first 10 seconds after a cold start. The pre-oiler has a one quart bottle like the turbo oiler, except it has a release valve on it. It charges with a quart of oil under pressure while the engine is running and holds it until you release it before your next start. It also minimizes the wear done when starting the engine after an oil change. I simply installed the oil line to the pre-oiler into a "tee" on the oil pressure sender. This lets the anti-drain valve on the oil filter act as a check valve so the oil is discharged only into the engine. It also makes it easy to install a pre-oiler on any Saab.

Each of these lubrication systems adds a quart of oil to the total engine capacity which can lengthen the interval between oil changes, but since you are leaving one quart in the pre-oiler and 1/2 quart in the turbo oiler when changing, do not let it get too dirty. Clean oil is important for long engine life.

Andy Buc said in the Nov. Newsletter article on Turbos not to use ester alcohol-based oils in Turbos. From what I can find out, this would be polyol ester oils and not diester oils such as Amsoil. If anyone knows any different, let me know.

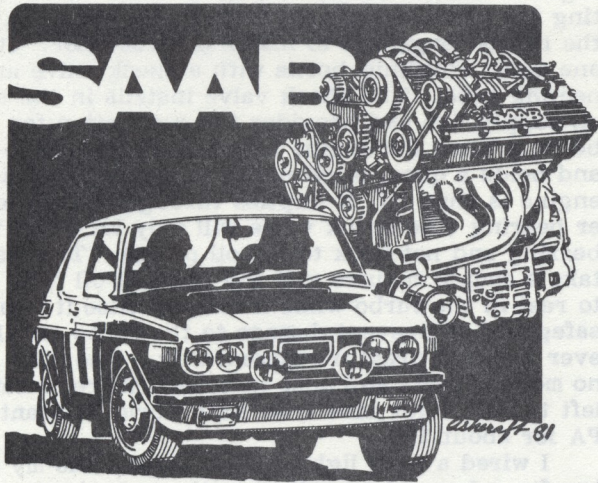
If anyone wants more info on these ideas, I'll help or write another article.

Duane Burtner, 224 W. Airport Rd.,
Butler, PA 16001

HAYNES MANUALS AVAILABLE FOR 99 and V-4

The Club now has available a limited supply of repair manuals by J.H. Haynes for the '67-'75 95/96 V-4, and the '69-'76 99. We bought 50 of them to get a special price, so the cost is \$10.00 including postage. Write the Saab Club for one and please specify either V-4 or 99.

WANTED: Sport steering wheel (leather) for late model 99 EMS: \$50 or ? Bruce Coleman, 3940 Fordham Rd., Washington, DC 20016, 202-362-2566.



NO. 1 OF A SERIES OF ARTICLES
DEALING WITH IMPROVING THE
PERFORMANCE OF THE SAAB V4
MODELS 95/96/97.

PERFORMANCE POINTERS

by Jack Ashcraft

BOLT-ON PERFORMANCE (AND MAYBE MILEAGE) PARTS

In the August 1975 Saab Newsletter I wrote an article on performance improvements for the Saab V4. An update seems appropriate, given changes in technology and in parts available. The 1975 article is still very accurate for a complete engine job except for prices--it costs about three times as much to make the improvements now as it did then. That's inflation for you.

In this article, I deal with purely bolt-on equipment rather than a complete re-work of the entire engine. I assume that your engine is in good condition, with compression even in all four cylinders and above 150 psi in all four. If you have a low cylinder or two, include the repairs necessary to overcome that problem in your estimate. Adding performance parts to a sick engine is like whipping a lame horse, and about as satisfactory.

On the outside of the engine you have three main areas available to you: Ignition, Intake system, and exhaust system. We will investigate each of these areas in turn. If you do the individual changes one at a time, a small performance increase will be noted for each change, but given all three are done together, the V4 will run a good bit better, perform in a much more lively fashion, and, driven lightly, will produce better fuel economy than when stock.

THE IGNITION SYSTEM

It doesn't really matter which distributor you have on your car. Unless its a 1967-69 version you'll have to modify it anyhow, and even if it is an early unit, it is probably ready for a complete overhaul. Check it first for shaft run-out by rotating the engine until one of the distributor cam lobes opens the points. Then push against the shaft with your thumb and see how much MORE the points open. If they open more than an additional .002-.003", the bottom of the distributor must be bushed (see my tech article in the April 1976 Newsletter and use Echlin/NAPA generator bushing No. 5293). Once the bushing job is done the advance curve must be matched to that of the 1969 unit (Bosche Distributor 0-231-146-073) by changing the advance springs. Curves can be found in the Saab V4 Service Manual, Section 3, Page 342-11, or in my tech article on Saab 99 distributors in the Newsletter for June 1978. The important thing to note is that the full mechanical advance of 14-15 degrees must be realized at about 1400 distributor (2800 engine) RPM. If you have a late car with vacuum advance and retard diaphragms, that unit will have to be exchanged for an early advance-only unit. A Capacitive Discharge ignition system can

PERFORMANCE POINTERS Continued

be added if you wish. These CD units do extend the life of the points and plugs but I can't say they add any power. Put in new points (set to .016") and condensor, set the dwell to 50 degrees, set the timing to 6 degrees before top dead center. And change the spark plug wires to a solid conductor wire. I recommend Packard 440 available from our friends at J.C. Whitney. Contrary to popular belief, the solid wire doesn't even add static to your radio.

INTAKE SYSTEM:

It is necessary to spend a few bucks on this one. The one barrel carburetor has to go and nobody makes a one barrel that even remotely approaches the performance or mileage capability of a good Weber two barrel. So the manifold has to be replaced with the FoMoCo 2-BBL unit (Ford No. 448614) available from a Ford Industrial Power Plant dealer. Cost is about \$125. Buy a BAP/GEON or a REPCO intake manifold gasket as either source is about 60% the cost of the same thing from Saab. Use Saab Atmosit or Gasketcinch and torque the manifold exactly according to the Saab specifications. Then retorque again at about 250 miles and again at about 1000 miles to avoid blowing the gasket. Now for the carburetor. There are some possibilities that were not around in 1975. The Weber 28/36 DCD series is still very good but the popular Weber 28/32 DGV is a good choice and costs about \$125 new. An alternate that you can find in junk yards is the Holley/Weber 5200 as used on Pintos, Vegas, and the Omni/Horizon 1700 engine. These are built under license by Holley and are essentially a "typical" Weber progressive two barrel with a vacuum controlled power (Ford calls it an Economiser) valve added in the base of the float chamber. Price is usually somewhere around \$40-50 used. Figure on a rebuild kit for around \$12 and a new base gasket and you're just about in business. You can use the water heated choke that's on the carburetor or remove it and hook up a manual control (which is my preference on any carburetor). If your unit is off a Pinto or Vega, you may have to jet it slightly leaner (2 or 3 steps on the main jets) and if it's off the Omni/Horizon it may be just about right as it is or have to go slightly richer with the main jets. Late model cars run awfully lean!

I recommend spending another \$4 or \$5 for a ball joint throttle link to replace that abomination that Saab uses from the rotating throttle rod to the carburetor itself. The ball joint linkage will eliminate 98% of the slop from the linkage.

EXHAUST SYSTEM:

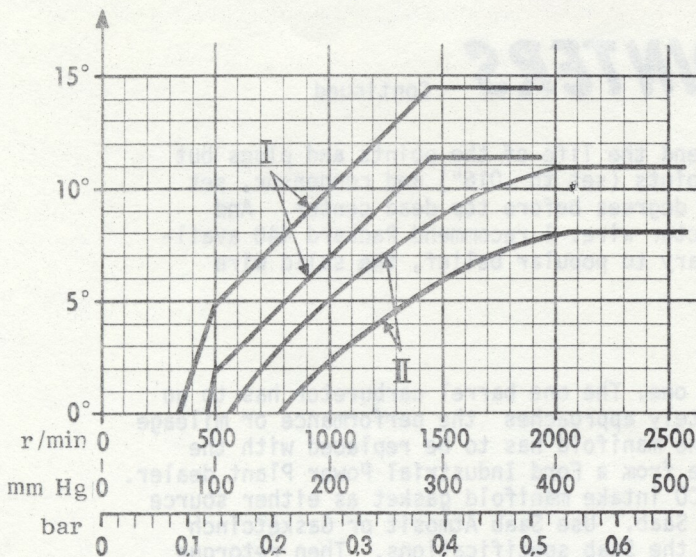
An extractor system is mandatory for any engine performance improvements. These are tuned length systems designed to scavenge the burned gases at the exhaust port so the cylinders empty more completely, thus improving the engines efficiency. See my tech article in the September 1975 Newsletter for details, but basically you chop out the front muffler, and weld on the same or slightly larger pipes where the old pipes protrude through the engine bay floor, arranging the two pipes so they come to a "Y" just at the back edge of the transmission drain plug hole in the bottom of the car. You want about 51" length from the valve seat to the collector and this arrangement is very close to that measurement. Now run the two pipes neatly into a 2" exhaust pipe with a 30" or 36" glasspack muffler in it, right out the center of the car at the rear. This system is deep toned and works well with any engine modifications. Cost of the complete system installed should be about \$85-\$100. Shop around.

THE RESULTS:

You should have about 15 more horsepower at the wheels once everything is set right. Performance will be significantly improved and since you've made the engine more efficient, your mileage--driving moderately--should improve 2-3 mpg. Drive it hard and you'll lose about that much too. The car IS a lot more fun to drive now! Enjoy.

EDITOR'S NOTE: *The distributor advance specifications Jack mentions are in the diagram on page 8 of this issue. The other articles regarding rebushing the distributor, and the extractor exhaust are in the Club's 95/96/97 Reprint. This Reprint contains 20 pages of articles taken from '75-'78 Newsletters and is available for \$2.00, postage included.*

1969 V-4 DISTRIBUTOR ADVANCE SPECIFICATIONS


**CENTRIFUGAL AND VACUUM ADVANCE
DISTRIBUTOR 0 231 146 073**
Dwell angle $50 \pm 2^\circ$

Contact pressure 3,9–5,2 N (14–19 oz, 400–530 p)

I = Centrifugal advance r/min = Distributor rev./min

II = Vacuum advance mmHg = Underpressure

SAAB SERVICE TIPS

ENGINE COOLANT: The ethylene glycol and water mixture is a coolant solution as well as an antifreeze solution. With a 15 lb. pressure cap plain water would boil at 250°F. A coolant mixture with 50% glycol gives boiling protection to 265°F and 70% raises it to 276°F. For summer protection against boil over, do not use plain water.

Note: Ethylene glycol should be mixed with distilled or mineral-free water (especially important in "hard water" areas) and changed according to manufacturer's recommended frequency for maximum aluminum corrosion protection. When the cooling system is flushed, take care to bleed as much air as possible from the system when replenishing the coolant.

TURBO OIL RETURN LINE: Tools for removing the turbo oil return line:

a.) The nuts securing the oil return line flange to the turbo housing on M81 cars can be difficult to remove. Use of a 13mm distributor wrench for the Ford 2.8 liter engine makes the job easier. The tool is available from MATCO under p/n SPW12M and should be available from other tool suppliers also. This tool will be useful on all Turbos from M78. Note on M78 through M80 the return line flange is secured by bolts rather than the nuts and studs as from M81.

b.) The tool ("780620") listed in Section 2 of the 900 Service Manual for removal of the weatherhead type retaining nut on the engine end of the turbo oil return line is not available. You can purchase a similar crow foot wrench from your local tool distributor. Ask for it in 1-7/16" or 36mm with the preference on the 36mm dimension.

900 SPEED CONTROL: There is a troubleshooting guide for speed control in 1979-81 Section 9, Accessory section of the 900 Service Manual. It covers all troubleshooting of the electronic speed control used on Saabs.

HORN AND POWER WINDOW FUSE: The fuse for the horn and power windows on 1981 Turbo sedans was changed to 16 amps from start of production. As from VIN serial no. -B1006759 all models have the 16 amp fuse. (8 amp is actually ok on models without power windows). If the fuse blows when operating power windows, check the switch(es) and wiring. Do not change to the 25 amp fuse listed in the Owner's Manual.

AUTOMATIC TRANSMISSION: To pinpoint automatic transmission problems look to the road test and fault diagnosis charts in Section 4 of the Service Manuals (p. 440-24 in M75-80 99 Manual, p. 440-38 in M79-80 900 Manual). In the first chart, next to the particular fault noted in the road test, there is a list of numbered checks in the "Action" column. Perform these checks in order, left to right. The check key is on the facing page. There is also a quick reference fault diagnosis chart with faults grouped by transmission function. When using this chart investigate the applicable faults listed on the facing page in the numbered order given in the chart.

MARCH 1981 SAAB SERVICE TIPS....

CO ANALYZER: While using an exhaust CO analyzer for checking/adjusting idle air fuel mixture on all Saab Turbos and normally aspirated Saabs with Lambda Control (catalyst-equipped) ALWAYS DISCONNECT THE OXYGEN SENSOR WIRE PLUG! Reconnect the sensor after setting and check that the Lambda system is functioning.

Failure to disconnect the oxygen sensor will cause excessively rich mixtures along with high emissions, poor fuel economy, oil dilution and possible long term durability problems.

ATF IN POWER STEERING: Inspection of Saab 900 Saginaw power steering racks returned under warranty has revealed some units showing signs of ATF (automatic transmission fluid) being used in place of GM power steering fluid. Use of ATF is not recommended and is actually detrimental to the 900 unit. In the future any 900 unit that shows evidence of ATF will be returned and the warranty claim refused. "Power Steering Fluid" is specified in your Shop Manual and the Owner's Manual.

99 POWER STEERING BELT CHANGE: Changing a power steering belt on a 99 can be made easier if the replacement belt is first placed over the pump pulley and then placed over the crank pulley by reaching up from under the car. The inner groove of the crankshaft pulley is difficult to see from above (especially for eyeglass wearers) and guiding the belt into it from under the car assures getting the belt into place easily and quickly.

REMOVING HEAVY OXIDE FROM PAINT: When faced with the necessity of removing heavy oxide from the paint (example: white oxide on horizontal surfaces of a Dorado Brown car) it is important to remember that the oxide must be completely REMOVED from the paint with a fast cutting compound. Polishing

merely camouflages the oxide by rubbing most of it back into the finish.

The best procedure is:

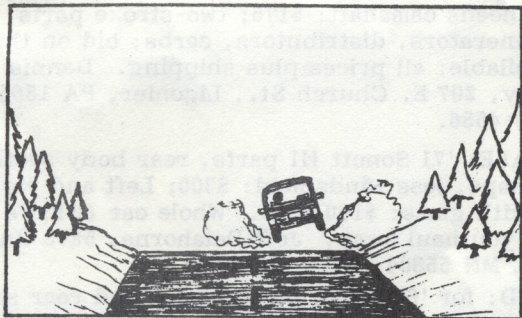
1. Hand or machine rub using a fast cutting compound. (Be careful around the edges!)
2. Polish the clean finish using fine, soft-abrasive polish.
3. If desired, wax the surface.

NOTE: The Technical Services Dept. removed heavy white oxide from a Dorado Brown car by machine with coarse compound. The car was then left to weather with no polishing or wax. After six months the paint, although low in gloss, is still brown, indicating the advantage of removing all the oxide by the above method.

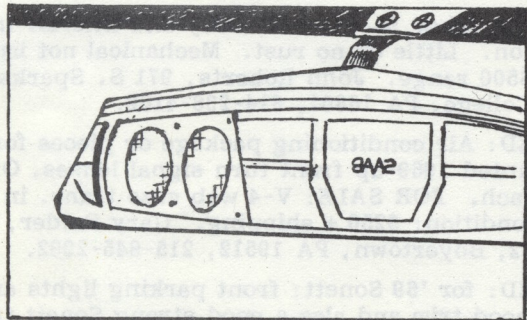
LOOSE REAR WHEEL BEARINGS: Rear wheel bearings that have loosened with the accumulation of mileage can be the source of a variety of strange noises and can contribute to a tendency to wander in highway driving. To determine if the bearings are loose, jack up the rear of the car. Grasp the tire at the 12 and six o'clock positions and attempt to wiggle the wheel. If noticeable freeplay exists, repack the bearings and adjust to specifications.

Seat rear bearings by torquing the lock nut to 36 ft. lbs., while rotating the wheel. Loose the lock nut until free. Without rotating the wheel, re-torque the nut to 2 to 3 ft. lbs. (max. of 36 inch lbs.).

"View of SAABs" Series, Installment No. 2 by Andy Saksa



Highway Patrol's view of SAABs



Sunday driver's view of SAABs

900 HEATER FAN SQUEAL--SILICONE LUBE WORKS

I have apparently answered my own question concerning the squeaky '80 900 heater fan motor. (May, page 4) It turns out that the fan motor is forced air cooled via a hose from the duct system behind the dash to a port on the rear of the motor. By removing the driver's side top dash access panel it is possible to reach the 3/4" diameter black hose and disconnect it from the ductwork. By pulling the loose end up, fitting an extension hose inside and spraying a liberal dose of silicone lube followed by a blast of compressed air, the squeak was eliminated. This fix sure beats pulling the dash to remove the motor! Apparently this type of motor cooling arrangement is not uncommon in aircraft, so I should not have been surprised to find it in a SAAB.

Bob Swinehart, St. Paul, MN

MEMBER FIXES BROKEN CLUTCH FORK ON '74 99

The clutch fork on my '74 99 broke recently. It appeared that the clutch shaft must be removed to allow installing a new clutch fork. However, since my clutch pressure plate and throw-out bearing were all in good shape, I was reluctant to do all that work.

The clutch fork must be installed with its small end extended through a hole in the bell housing. I found that, by filing this hole a little larger, that I could maneuver the fork into place without removing the clutch shaft. Do the filing by hand since only a small amount of metal needs to be removed. The boot which fits into this hole will still fit.

I had the broken clutch fork welded back together. I had a little trouble finding a welder who would work on cast iron, but it appears that he did a good job.

John Younker, Lilburn, GA

TURBO MISFIRES, LEAKS OIL FROM VALVE COVER

I have two chronic problems with my '79 900 Turbo. The first is a tendency to misfire, or run on one or two cylinders. It does this independent of engine temperature and has created a safety hazard, as I cannot count on being able to pull out into traffic. I have tried several cans of Pennray Gum Solve, Isopropyl gas drier, and even changing fuel filters, all to no avail. It has been suggested that I replace the fuel distributor (\$195 part).

The second problem involves chronic oil leaks. The worst seems to be off the lower right edge of the valve cover. The oil will drip down onto the catalytic converter, and burn off. I have tried replacing gaskets and I regularly tighten the valve cover screws (they always seem to be loose). It has been suggested that I try and locate an aluminum valve cover for the engine. Does anyone know if such an animal exists? Would it help? There are also chronic leaks from the front and rear main seals.

If anyone has had any experience with either of these problems, I would be most appreciative of a reply or suggestion.

Fred Katz, Middleton, WI

Ed. Reply: You do not say what kind of oil you use in your Turbo. Reports seem to indicate that synthetic oil is more prone to leaks than mineral oils. So if you are using synthetic oil, maybe a change to mineral based oil is worth a try.

CLASSIFIED AD RATES

Ads offering parts or Saabs for sale or wanted at prices *under \$200* are FREE to members and non-members. 25-word limit, plus name and address. Ads listing prices of \$201 to \$900, enclose \$2. Ads listing prices \$901 to \$2000, enclose \$5. \$2001 and up, enclose \$10. All ads without a price listed, enclose \$10.

Commercial ads, \$10 per column inch, two inch maximum. We will delete all unnecessary superlatives and abbreviate where possible. Please enclose sufficient funds with ad copy, we will NOT bill.

FOR SALE: 1968 Sonett V-4; 50,000 miles, near new condition, no rust, white with very good original black interior. Five good Pirelli's; completely maintained, never hit; photo available: \$3400. Frank E. Goddard, 2861 Santa Anita Ave, Altadena, CA 91001 213-798-2089 anytime.

FOR SALE: 1971 Sonett III; body, interior and mechanicals good; 75,000 miles. Includes am/fm and new tires, Have two Sonetts and must sell one. Will deliver within 1000 miles; \$2550. Barry Nash, 1217 Quebec, Denver, CO 80220; 303-377-9529.

FOR SALE: 1974 Sonett III, 56,000 miles, A/C, Blaupunkt CR-2000, sunroof, P-3's, new battery and exhaust, car cover; engine, transmission, and body all very good: \$3475. Ed DePersio, 46 Lakeview Dr., Galveston, TX 77551, 713-744-8089.

FOR SALE: 1974 Sonett III; rebuilt motor and trans.; never wrecked, new brakes, overall very good condition: \$3400 or best offer. Richard Johnson, 4734 River Ct., Duluth, GA 30136, 404-448-5351.

FOR SALE: 1966 96, very good condition; rust-free Southern car; 30 mpg: \$1200 or best offer. Martin Cornman, PO Box 241, Ashfield, MA 01330, 413-628-3866.

FOR SALE: 1966 two-stroke 95 station wagon; sunroof, disc brakes, radial tires, am/fm stereo, good mechanical condition: \$1500. orig. owner, Mark Euchner, 552 Grove St., Monterey, CA 93940, 408-649-8352.

FOR SALE: 1966 96 two-stroke, very good original condition, 44,000 miles, sport model, minor surface rust: \$2000 or offer. Also for sale: '71 95 less engine and trans., body fair: \$200; other 95 and 96 parts, seats, glass, wheels, axles, etc. Wanted: complete running engine for '60 93. Also need grille bars and parking light for 93. Robert T. Garber, 41841 Lawrence Ct., Elyria, OH 44035, 216-324-5507.

FOR SALE: 1972 96, needs transmission and minor body work, driveable; good for restoration: \$500 or best offer. Rob Lever, 536 W. Grant Pl., Chicago, IL 60614, 312-871-4635.

FOR SALE: 1970 96; very good condition, many spare parts. \$1550 or trade for Citroen. Other trades considered. Mark Anagnostopoulos, 515 N. Estey St., Apt. 24, Luverne, MN 56156, 507-283-9780.

FOR SALE: Parting out '71 Sonett, front shell damaged, rear axle supports rotted out. Rear shell intact, pass. door: \$80, windshield: \$75, or whole car, less power train: \$250 or best offer. Bob Naylor, PO Box 12, Adams, MA 01220, 413-743-9591 eves.

FOR SALE: 1958 93 radiator in very good condition: \$32; also many other 93 parts; V-4 starter: \$25; 3-cyl

generator: \$20; many other 95/96 parts, send SASE for a list or call eves or early morn. Roger S. Harris Box 47, Ashfield, MA 01330, 413-628-4435.

FOR SALE: 1964 radiator: \$10; wiper motor: \$5; speedo cable and housing: \$5; trans. mount: \$2.50; also some free parts, come and haul away. Larry Bean, 2873 Grosvenor Dr., Cincinnati, OH 45239, 513-851-2460.

FOR SALE: 1969 Sonett V-4 parts: very good dog-house: \$300; windshield: \$100; right door w/glass: \$95; left door: \$75, many others, will consider all offers. Mike Hamilton, 527 Harlan St., Plainfield, IN 46168, 317-839-5445.

FOR SALE: Sonett Parts; '71 doors with hardware: \$150 each; visors with rear view mirror: \$15; gas tank: \$20; tach and fuel/temp gauge: \$25 each; left rear side glass: \$15; heater core: \$10; radiator filler: \$7.50; '73 frame with rust free rockers and floor pan: \$75; complete headlight linkage: \$25. you pay ship. Will trade for Nikon or other prof. camera equip. Bibb T. Gault, 5302 Aurora Drive, Austin, TX 78756

FOR SALE: Sonett III parts: '72 frame in very good condition, 18,000 miles, no rust: \$450; complete rear section with no rear glass: \$350. 96 engine and trans. with 30,000, Solex carb and web case trans.: \$500 together or \$325 trans. and \$250 engine. Other 95/96 parts. Nick Hayden, 3385 W. 86, Cleveland, OH 44102, 216-281-9823 or 431-9413, or 521-8019.

FOR SALE: You build-it V-4 transmission, enough parts for one complete trans.: \$125; 95 interiors, blue, black, or tan: \$75; 99 two-door carpet sets, red, rust, or tan: \$75; Mercedes 190 diesel engine & trans. needs camshaft: \$175; two-stroke parts, starters, generators, distributors, carbs; bid on the lot, list available; all prices plus shipping. Dennis Sweeney, 207 E. Church St., Ligonier, PA 15658, 412-238-4556.

FOR SALE: '71 Sonett III parts, rear body section in good shape, less windshield: \$300; Left and right doors with glass: \$100 each. Whole car (what's left) \$400 if you haul away. Jeff Delahorne, 5805 Oneida, Duluth, MN 55804, 218-525-3253.

WANTED: for '67 Monte Carlo: front and rear seats: \$75?; wood steering wheel: \$35?; fender chrome pieces and fender Monte Carlo logo: \$10?; glove box door insert with Monte Carlo logo: \$5. I will pay shipping. Bill Raymoure, 1277 8th Ave. #205, San Francisco, CA 94122, 415-564-1862.

WANTED: 95 or 96 V-4 with body and interior in good condition. Little or no rust. Mechanical not important. \$500 range. John Roberts, 971 S. Sparks St., State College, PA 16801, 814-238-4102.

WANTED: Air conditioning package or pieces for V-4. also wanted 1969-up front turn signal lenses. Offer to \$8 each. FOR SALE: V-4 web case trans. in very good condition: \$250 + shipping. Gary Reider, RD#4 Box 232, Boyertown, PA 19512, 215-845-2982.

WANTED: for '69 Sonett: front parking lights and other hood trim and also a good strong Sonett trans. Tom DeRose, 1022 Sherman, Madison, WI 53703, 608-251-7539.

FOR SALE: 1976 99GLE four-door sedan, auto, air, sunroof and extras, 46,000 miles: \$3,350. Herbert Olander, 10210 Moody Park Dr., Overland Park, KS 66212, 913-888-5411 eves.

FOR SALE: 1981 Turbo four-door, only 7,000 miles. Blaupunkt 2001 w/equalizer, four speakers, cruise control, fog lights, center consol. List \$16,500, make realistic offer. Must sell. Jack Mlyn, 378 West End Rd, So. Orange, NJ 07079, 201-763-2286 or bus. 9-5 at 212-924-9181.

FOR SALE: 1976 99 GLE, 66,000 miles, Castrol GTX every 2,500, four-door, AT/PS, A/C, am/fm stereo, speed control, fog lamps, tach/clock, extra VDO gauges, polyglycoat; fine condition: \$4,600 includes extra service tools and manuals. David Vanell, 2250 Coppersmith Square, Reston, VA 22091, 703-860-0299 eves.

FOR SALE: Grille for '74 99LE, very good condition: \$30 shipped. WANTED: Air cond. system for '79 900, complete. Bob Panella, 1139 Taylor Ave., New Kensington, PA 15068 412-578-3377 or 337-6118.

FOR SALE: 1976-77 complete motor and automatic trans. from 99LE wreck, 39,000 miles. Motor: \$500, Trans.: \$350 or both for \$750. Will deliver within 300 miles. Also For Sale: '71 99L, needs headwork, good four-speed trans, body good: \$150. Wanted: Headliner for '73 to '76 99 EMS or two-door 99. Also need front bumper for '73-'74 Sonett. Tom Nola, PO Box 627, Wurtsboro, NY 12790, after 7 pm, 914-888-2246.

FOR SALE: Marchal alternator, 55 amp: \$45; regulator: \$7; two-inch Stewart-Warner mech. oil pressure gauge, new: \$10. Gary Thomas, 113 Irving Place, Ithaca, NY 14850, 607-277-0501.

FOR SALE: original equipment foam rear spoiler from 1980 Turbo, very good condition: \$150. Joe Lucca, 78 Pell Terrace, Garden City, NY 11530, 516-248-3920

FOR SALE: VDO quartz clock, used only 3 months, in box: \$20; pair of outside mirrors, housings repainted black: \$15. All from '77 99, postpaid. John Betsill, 3809 White Settlement Rd, Weatherford, TX 76086, 817-441-8583.

FOR SALE: Bilstein shocks, two front, two rear, 48,000 miles, from '76 EMS, still in good condition; all four: \$50 incl. shipping. Lawrence. H. Mazurek, 10660 Saratoga, Oak Park, MI 48237, 313-545-2533.

FOR SALE: Complete dealer installed under-dash air conditioning uit from '74 99LE; Sanyo compressor: \$325. Need help taking it off my car. Brian Sullivan 3155 N. 93rd, Milwaukee, WI 53222, 414-442-2476 eve.

WANTED: New or used air conditioning unit to fit '78 99 Turbo. Peter DiMaggio, 90 Beacon St., Boston, MA 02108, 617-367-9031 day or night.

WANTED: Used CB radio that works. Will pay \$25-30 more if SSB. Don Kaap, 1120 Williams, Apt. A6, Westmont, IL 60559.

WANTED: Engine Head for 1974 99L Carb. model. Will disassemble and/or pick up. Call collect, Joe Brinkmann, 203-888-0660. Oxford, CT.

WANTED: For '75 99LE Wagonback: front grille, two wheel covers, two window handles (inside), two rear fender rim moldings, back left slider fro shelf. Call collect, 617-255-6922, Judy Gwaltney, N. Eastham, MA

WANTED: For '78 99, power steering pump. Vincent J. Sanzotti, 130 West Muntz Ave., Butler, PA 16001.

WANTED: Gasoline filler pipe (from fender hole to gasoline tank) to fit '76 99. Also want glove box hinges and locking gas cap for screw type filler cap. Kenneth Wyle, 251 W. State St., Waverly, IL 62692, 217-435-9777.

WANTED: For '72 99, three for four small hubcaps, (9 inch size). Also two rear taillight assemblies for '79 or '80 99GL sedan. John Patterson, 9891 Chance, Huntington Beach, CA 92646, 714-968-4536.

WANTED: Head or engine, 99LE 2 liter. John Frisk, 2442 N. Utah, Arlington, VA 22207, 703-524-1459, or 202-842-8600.

Late Arrival.....

FOR SALE: 1967 96 Two-stroke; engine needs help; has good seats, prefer to sell complete: \$200. Mrs. John Sinnott, 60 Rustic Terrace, Little Silver, NJ 07739, 201-842-1293.

FOR SALE: 1972 99E four-door, automatic trans., 1.85 l., working a/c, good body with recent paint; trailer hitch; trans. bad and fuel injection needs help: \$600 or best offer. Steve Hewitt, Cedar Rapids IA, 1-800-553-8411, ext. 677 days.

FOR SALE: Two V-4 1968 Sonett II's; one in restoration --could run; second is boxed up and labelled. Includes an interior in excellent condition and a complete set of glass: \$1200. Karl Riedel, 318 Boyd Ave. Takoma Park, MD 20012, 301-270-2886.

SCANDINAVIAN IMPORT SERVICENTER--MARYLAND

FOR SALE: 1972 96, new clutch, exhaust, paint, etc. car is restored to excellent cond., never rusted, 75,000 miles, sold with MD inspection and warranty: \$1950. Scandinavian Import Servicenter, 301-340-SAAB.

FOR SALE: 1973 96, overhauled trans., new clutch, new paint, new brake rotors & pads, interior perfect, never rusted; sold with MD inspection and warranty: \$2350. We also have lots of new and used SAAB parts and buy Saabs. Scandinavian Import Servicenter, 7404A Westmore Road, Rockville, MD 20850, 301-340-SAAB.

GESCH
ENTERPRISES



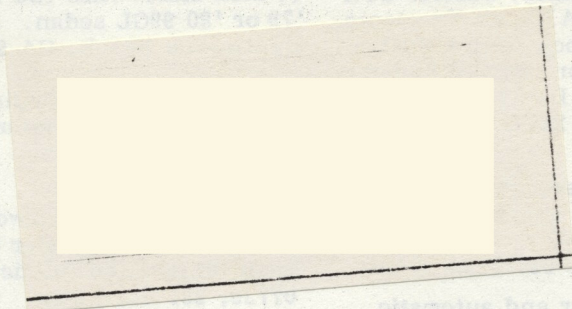
MANY USED AND NEW PARTS

1979 TURBO
ENGINE, TRANS. AND ALL RELATED PIECES!
WE SPECIALIZE IN SAABS ONLY
CALL FOR PRICES AND OTHER INFORMATION
Engines & Transmissions Rebuilt
5825 W. Center, Milwaukee, Wis. 53210
Entrance N.E. corner 59 & Lisbon
414-873-8634 or 414-284-5887

K-MART OIL FILTER--K-Mart offers an OEM spec. oil filter under their own brand for Saabs, 96s, 99s, etc. Filter K-20 sells for \$1.68 here in L.A.
Joseph A. Smith, Reseda, CA

Please use knife/letter opener

JUN. 1981



FIRST CLASS

RETURN POSTAGE GUARANTEED

c/o Jeff Delaborme
5805 Oneida Street
Duluth, MN 55804

FIRST-CLASS MAIL
U.S. POSTAGE
PAID 18¢
PERMIT NO. 1909



Page 12

VINYL DASH COVER ON 99 REGLUED WITH ELMERS

A small, but annoying problem occurs on the 99 when the vinyl on the top of the dash pulls out from the interior gasket of the windshield. It seems that the summer sun, intensified by the glass, causes the black plastic to swell and pull back.

Where the vinyl is completely pulled out, a liberal application of Elmer's to about 1/2 inch back on the dash under the plastic is necessary. In places where the vinyl has not completely separated, a moderate amount of the glue should coat the crack between gasket and dash. Then pennies are used as a sort of clamp to allow a good bond to form between the glue and the vinyl. They are inserted at 5" intervals in

the crack across the entire windshield. Care must be taken to smooth the vinyl, especially in the areas where it had pulled out completely. When tension on the vinyl is even, use more pennies to fill the intervals and insure a smooth tight bond. After one week or so, remove the pennies; loosen them by rolling them back and forth.

Caution: Remove the pennies early and the vinyl will not hold. But leave them in too long and they will add to the intrinsic value of your auto. Extensive pulling with needle-nose pliers will get them out.

Bill Buckles/Brenda Christner,
Mt. Prospect, IL