#114

APR. '83

DEDICATED TO SMALL-ENGINED SMALL CARS & ENERGY CONSERVATION

Saab Clubs of North America Editor and publisher: Jeff Delahorne, 5805 Oneida St., Duluth, MN 55804 (218) 525-3253 9 a.m.-8 p.m. except Sunday Consultants: Dick Grossman, Jack Ashcraft, Carolanne Curtis, Andy Buc, Ted Tucker

#### MEMBERSHIP/SUBSCRIPTION

Dues for membership/subscription are as follows:

First year, third-class	r	na	il				.\$1	1.00	
First year, first-class							.\$1	2.00	
Renewal, third-class							.\$	8.00	
Renewal, first-class							.\$	9.00	

First-year membership includes two back-issue newsletters, Club tech sheets and emblem. 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 nonprofit organization.

A collection of 15+ back issues with Club tech sheets punched for your 3-ring binder is available for \$8.00 postpaid. Individual back issues: 75¢ each.

Always specify: 96, 97, or 99/900 for appropriate tech sheets.

ROCKY MOUNTAIN SAAB CLUB- is alive and well. Anyone interested is invited to attend our meetings held on the second Tuesday of the even months. All meetings start at 7:30 pm and most meetings are at Deane Buick-SAAB in Denver.

Future meetings will be on June 14, August 9, October 11, and December 10. Call Stan Beitscher, 303-424-4876 or 497-2680 or Denny Reul 303-759-3880 for more info.

SONETT CLUB OF SO. CAL, --meets the second Thursday of each month, 8 pm at Villa Rose's Restaurant, 15663 Brookhurst St, Fountain Valley, CA For more info, contact Phil Zarrow, 714-892-9639.

CENTRAL ILLIANA SAAB CLUB--May 22nd meeting will be a hands-on problems solving session. Bring your ailing Saab to Margrit Adler's at 1507 W. University, Champaign, 217-356-9244.

GREATER NEW YORK SAAB CLUB-- holds their regular monthly meetings on the third Sunday of each month. On May 15th there will be a picnic at Alpine Park. For details contact Marc Frank, 212-438-2022

SAAB CLUB OF SOUTHERN CALIFORNIA--will hold a clinic on CIS fuel injection, April 24th, 11:00 am at Masada Motors, 9027 Sepulveda Blvd in Sepulveda. Call Paul Florance, 213-438-3257 for more information, or Jerry at Masada(891-8519) for work on your car. There will be a \$2 per person charge for the clinic to boost the club treasury.

PORTLAND, MAINE SAAB CLUB--Anyone interested in helping form a local club in the Portland, Maine area, contact David Ziegler, 705 Congress St. #3, Portland, ME 04102. SAAB CLUB NATIONAL CAPITAL AREA--will revive the "Charter Night" installation of new officers on the May 11 meeting. The meeting will be at the Georgetown Diamond Head restaurant, Waterfront Center Building, 1010 Wisc. Ave NW. For reservations or more information, contact Ed Tonat, 301-229-3597.

PUGET SOUND SONETT CLUB--A Sonett club has formed in the Puget Sound area, listing 24 members already. Their second meeting is to be held April 24, 12 noon, at the Chateau Ste. Michelle Winery in Woodenville (probably past-tense by the time this Newsletter reaches you). For more information on upcoming meetings, contact Ken Rone, Jr., 18135 6th Pl. SW, Seattle, WA 98166, 206-241-0161 or Mike Quirk, PO Box 60012, Richmond Beach, WA 98160, 206-542-7913.

PORTLAND RALLY-- The Portland & District Motor Club, Portland, OR will hold a semi-pro; 250 mile May Day Road Rally on April 30. Entries must be received by April 22, or in person at rally seminar April 23. Also holding mini rally series. For more info contact Rick Besoin, 503-761-6026.

MONTREAL CLUB--will have held a spring tune-up session and rallyette on 17 April. A meeting is also planned for May. For more info, call Peter McLoughlin, 451-5165, or Jean Robert Derome, 731-4876.

SAAB-SCANIA MIDWEST OPEN HOUSE -- had a turnout of about 130 people at the Schiller Park Central Region office of Saab-Scania. Many of the Saab staff came in on their day off to spend six hours of conducting tours, explaining their areas of responsibility, and answering questions. There were refreshments, films, and several new Saabs on display. Saab-Scania's Public Relations Manager Len Lonnegren flew in from Connecticut just for the open house, and revealed tidbits of Saab's new twin-cam turbo (story elsewhere in this issue). The Club is indebted to Regional Manager Howard Smith and event organizer Arsey Miller for their work and interest in Saab enthusiasts. Thanks also to Chicago Club member Andy Federowski who did much of the advance work for the Club and answered many phone calls for information.

Hopefull the impressive turnout at the Open House will be a good omen for the National Meeting in August. Saabers drove from as far away as Ann Arbor, MI, Minneapolis, and Cedar Rapids, IA for the Open House.

MORE CLUB NEWS ON PAGE TWO

#### SOURCES FOR 95/96/97 EXHAUST & LENS PARTS

Midas muffler shops carry most Saab exhaust parts, even for Sonetts! Their prices are very goodand they are life time guaranteed and installation, if desired, is free. Sonett III pipes from front assembly to rear mufflers, including the small "bullet" resonators are \$109.90 including tax, free installation and one year warranty. In my case it took eight days for the parts.

Also do not overlook J.C. Whitney. They recently started listing Saab tail light and directional lenses and assemblies for most models. Those hardto-find 95/96'69-on front turn signal lenses are under \$12 each. J.C. Whitney also has muffler parts for even less than Midas, i.e. V-4 front headpipe

for \$35.

Can other members help me solve a problem I have with a V-4 speedometer. It surges when utilizing freewheel and changes as much as 12 mph between coasting and power.

I would like to hear from other members who have collections or interest in Saab literature. Hopefully we can establish some trading and completing of sets.

Robert Allen, 114 Kimberly Rd. Hamden, CT 06518

#### CURING CARB HESITATION IN V-4 SOLEX CARB

I've been running my V-4 Sonett in Solo events now for a couple of years and the only big problem has been a hesitation when making hard right turns, especially those following braking. The cause was evidently that the fuel was being thrown away from the main jet area of the float bowl.

Normally, raising the float level will cure this. But raising the float level on the Solex carb normally results in the float hitting the bowl vent boss in the carb top. However, if you grind away part of the boss (stop before getting into the vent passage)

you can raise the float level significantly.

I did this and the hesitation has not occurred in the two events I've run since making this change. The car also seems to pull stronger from low rpm than it did before with none of the slight hesitation I sometimes felt.

Steve Parsons, Washington, IL

#### CLUB NEWS, CONTINUED FROM PAGE ONE

CENTRAL WASHINGTON SAAB CLUB-- will have it's fourth annual meeting/get together on Sunday June 12th. We will meet at Alan BMW/SAAB in Edmonds on Highway 99, between 9-11 am. We are planning a parts swap/sale and then a drive to a picnic spot. More details will be available as the date approaches. Call: Bob Eddy, 206-486-9257 Seattle area; Shawn Irelan 509-548-7279, Wenatchee area; John Baird 509-653-2067 Yakima area.

NEW ENGLAND SONETT CLUB- held their last meeting March 6th in Amherst, MA. For more information concerning upcoming meetings/events, contact the NESC at PO Box 4362, Manchester, NH 03108.

MINNESOTA SAAB CLUB-meets the first Thursday of every month, 8 pm at the Shakey's at Snelling and Larpenteur in St. Paul.

#### SAAB UNVEILS TWIN-CAM, 16-VALVE TURBO

At the Geneva Auto Show last month, Saab showed their third-generation Turbo, a twin-cam, four valve per cylinder design that boasts a 10 per cent increase in horsepower as well as a 10 per cent increase in fuel economy.

The engine is in prototype stage now, but gleaning details from the British magazine, Autosport and other sources, it looks like Saab is determined to stay in the forefront of developing turbo-

charged engines.

In it's European version, the engine should develop 160 hp with an additional 20 hp available with an intercooler added. With the APC system and an intercooler, peak horsepower can reach 200 hp momentarily before the combustion chamber temperature rises enough to cause the APC to lower boost.

Other significant changes are hydraulically operated tappets, eliminating the need for valve adjustments, and the switch to Bosch LH electronic

fuel injection.

While the twin-cam layout has traditionally been used for competition purposes, as with Saab's earlier twin-cam head (which has nothing in common with this one), the four valve per cylinder layout lends itself readily to a more efficient hemispherical combustion chamber with central spark plug placement.

Apparently the next step is to build a run of test cars before going into production next year. It looks like we will see the twin-cam here in the U. S. as an '85 model, in late '84 at the earliest.

Jeff Delahorne, editor

#### NIPPONDENSO PLUGS WORK WELL IN TWO-STROKE

In response to Wally Freece's question about Nippondenso spark plugs (Feb. '83, p. 3), I have used them and find that they do not foul as badly as Champion K-9's in my '67 deluxe. I use the ND M-22.

Adam J. Ross, Westlake, OH



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#### TIPS ON TROUBLESHOOTING ELEC. WINDOW GRID

Although we haven't had much use of our rear window defroster this winter, here are some problems that might occur.

1). Defroster functions, but not well. A dirty window is sometimes the cause. Be careful when cleaning the window to avoid damaging the grid as it is laminated on the inside of the window.

2). Defroster functions, but leaves a strip of condensation on the window at one of the grid lines. This signals a break in the grid line, which causes the circuit in that line to remain open, or not heating. Sometimes you can see the break, but if not, a 12-volt test light or voltmeter should be used. Ground the negative prove to the car, and touch the positive probe to the damaged grid about one foot from the right hand side of the window. Ignition must be on along with the defroster switch. Touching the different grid lines in the area, you will see the open grid because you will have no reading at all. When the open grid is located, starting from the left hand side of the window, touch the probe to the grid at one inch intervals until you get a reading. Note this section of the grid for repair work. A test light will not light at all while a voltmeter gets a reading of 0. Normal is to get a four volt readout if the grid is working.

3). Grid doesn't work at all. Check fuse.

Margrit Adler, Champaign, IL

#### VW BUG CARB REBUILD KIT FITS '67-'68 SOLEX

The Solex needle and seat that comes in the VW Beetle Kit (Borg Warner 10272C) does fit in the '67 and '68 V-4 Solex carbs. The cost of the VW kit is only \$10 compared to \$62 for a carb rebuild kit listed for the Saab at a local foreign parts house.

Marsh Terry, Bainbridge Is., WA



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#### WIND NOISE AROUND A-PILLAR CURED IN 900

In the Nov/Dec. Newsletter (p. 2) you mentioned wind noise around the driver's rear view mirror. I also had this problem with my '81 900S after the dealer replaced my mirror under warranty. I found the solution to be adjusting the gasket behind the mirror and the two screws that hold the mirror on. I had to change the screws from cheap phillips to hex heads.

David N. Dodd, Stow, OH

#### 900 SEAT HEATERS MODIFIED TO WORK MANUALLY

I installed a passenger seat heater kit on our '79 900 Turbo since my wife felt she should also get the benefit of lumbar comfort. So we waited, and waited, and waited for the seat heaters to come on, and they never did, both in California and Tennessee.

I guessed that the temperature inside the car never dropped to the thermostat's pre-set "start" temperature, although we always were very cold until the car was warmed enough to use the air heater. Thinking that the seat heaters were deffective, I tested them by spraying from on the thermostats with the engine on. Surprise! They worked.

The next step was to make them work on command. My solution was to bypass the sleepy thermostats with an on-off switch which I mounted below the other existing switch for the interior lights on the center console. I cut the thermostats off the wiring and soldered both wires together. Now the systems were direct. The positive (yellow) wire coming from the fuse box was re-routed to the switch's "hot" terminal (using female spades) and from the switch's second terminal both heater hot wires were powered, using a double female spade connector, one wire going to each heater. (Be sure to use a switch with enough current handling capability to take the 65 watt load of each heater. A 15 amp-rated switch should be sufficient.)

Now I turn on the engine on cold mornings and the seat heaters are powered by the switch, on command. They provide heat almost instantaneously, and in less than five minutes we are both very comfortable, sometimes even forgetting to use the air heater. Of course these heaters get very hot, so it is wise to use them only until you can use the air heating system.

Ideally, it would be nice to be able to turn them on when you need them, but still retain the thermostat's cut-off feature. But that's too complicated a wiring design for me at this point.

Josie Maymon, Nashville, TN



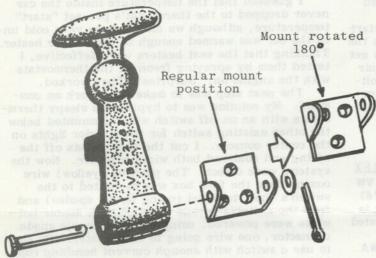
Performance and appearance products for Swedish automobiles.

## **SWEDISH** interprises

European Headlights for 900's: \$250 pair + \$6 sh. Headlight Wipers for Euro Headlights or Stock Headlights w/covers: \$189 + \$3 ship. Headlight Covers for Euro or Stock 900 headlights: clear: \$35; smoke: \$37 + \$2.50 ship. Inquire if interested in Turbo Intercoolers Joe Caparosa, Jr., 80 Hansen Ave, Lyndora, PA 16045, 412-283-6171.

### LOW COST SONETT II HOOD LATCHES

The rubber hood latches on my plastic wonder car once again fell victim to the ravages of sun, ozone, smog, and old age, and had to be replaced. They are an abominable piece of design in the first place—I mean who in their right mind would attempt to secure the entire front end of a car with a rubber band? And to add insult to injury, Saab seems to think they should be worth something like \$40. Not to me they aint.



A tour of the local VW off-road parts house turned up a set, distributed by some Southern California outfit called Bug Pak (part no. 6028) that retails for \$6. Now that more like it.

The new latches are about 3/4" shorter than the originals, but if you take out the two bottom screws of the mount bracket and rotate it 180° about the top screw, then drill holes and install the two screws in the new holes, it fits just fine. I put a pair of pan head screws in the old holes with a bit of silicon seal under the heads, touched them up with some paint, and the job is done, at a saving of about 35 bucks in the process.





"Shiftin' Gears" is appropriate for me this month. The high cost of Saab parts finally got to me. The inevitability of lunching a transaxle in competition—sooner or later—and the concomittant unrealistic repair costs have caused me to retire the Sonett from racing.

I first started this madness—auto-crosses, hillclimbs, and rallies—back in 1962, and a room full of trophies proves that Saabs were a good choice for the job. I'm sure there will be times ahead when I'll long for the rorty snarl of that gutsy V4 engine and the precise track placement possible with the taut Sonett chassis. Hopefully, the new car will be as satisfying.

The newcomer has good credentials. These cars were SCCA small bore winners in the early 70s, and were good autocross performers. Stock, the cars weigh 1609 pounds and have 70 horsepower, pretty close to the figures quoted for the 1st Sonett V4s. Performance and handling equipment abounds for the car, and its stock weight distribution is near to 50-50. It IS Japanese, has REAR drive, and thin tin. But when an overhaul gasket set costs 12 bucks and a clutch disc goes for 10, I get interested.

It's a '72 Datsun 1200 fastback coupe, currently undergoing the demon tweaks necessary to make it a race car. Don't know if it will last for 20 years of racing or not but at least I'll be able to afford more entry fees with it.

See you at the checkered flag!

#### CATALYTIC CONVERTER REWELD & OTHER 900 TIPS

Some 900's, particularly Turbos, develop a weakening of the weld on the flange connecting the catalytic converter to the exhaust down pipe from the manifold. This weakening can lead to the separation of the catalytic converter from the exhaust down pipe at that point. This happened to my 1981 900 Turbo with about 17,000 miles.

To repair it, the flange and the catalytic converter were removed to have the flange rewelded to the converter. The extra heat generated by Turbos may make these models more susceptible to this

problem.

Speakers: 900 three and five-door hatchbacks use 4"x4" stereo speakers in the rear, which are standard equipment on some S, GLE, EMS and Turbo models, depending on year of manufacture. However, these standard speakers, which are available as optional equipment on other models are of moderate quality at best. As replacement speakers I recommend a pair of Alpine 6202"s, which retail for

These speakers outperform more expensive 4x4 speakers from other manufacturers and are easily installed in the spaces provided behind the right and left back corners of the rear seat. These speakers require a minimum of 10 watts (RMS per channel) of power and will work with up to 20 watts. Therefore, they make a perfect match to the rear amplifier from Sony that is standard equipment on the 900 Turbo. To significantly improve the quality of the sound from the rear of the car one would have to install larger speakers in the rear deck and perhaps an additional amplifier at considerable additional expense and effort.

Rear window louvers: The metal rear window louvers for the 900 three and five-doors can scratch the window and occasionally rattle. A simple and inexpensive solution to these problems is to purchase some 1/8" black (to match the louvers) weatherstripping with adhesive on one side. Apply the weatherstripping to those edges of the window which come into contact with the edges of the louvers.

Lloyd Treinish, Bethesda, MD

SPECIAL THIS MONTH FOR THE DO IT YOURSELFER 99 B&B Clutch Plate, B&B Clutch Disc, & SKF Release bearing (state year) original Reg. \$125.00, this month \$98.50

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#### ALT. BRUSHES CAUSE HARD-TO-FIND EFI TROUBLE

My 1974 99 with EFI had an intermittant problem in which the engine would momentarily shut off, with no warning, while just driving along. The trigger points were replaced as was the pressure sensor (both needed it anyway), but the problem persisted. The brain was exchanged with a known good one, but still no luck. I cleaned all electrical grounds with no result. Finally I had the alternator checked and this turned out to be the culprit. Apparently worn brushes were working intermittantly, resulting in occasional voltage drops and surges to the brain. With new brushes in the alternator, the problem has not returned. My alternator was original and untouched in 132,000 miles.

Tony Buffa, Los Osos, CA

#### LOW-COST HEATER VALVE REPLACEMENT FOR 99's

Ford makes a heater control valve that with a little fabrication makes an inexpensive replacement for 1974-80 99's. The Saab valve is thermostatically controlled by the air-stream temperature as well as the position of the heater control knob and costs about \$85. The Ford valve is mechanical only, but only costs about \$16. The part number is C3UZ-18495-A and fits a '64 Ford pickup.

You'll also need three 90° elbows of 1/2" copper tubing to correctly route the fittings to the new valve. I have found that the original Saab valves when old, did not always provide full water flow to the heater core, and the car would be low on heat. Replacement with the inexpensive Ford valve provided full heat again.

Tom Wydeven, Menasha, WI

#### SWEDISH EXPRESS

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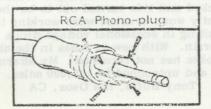


#### FEBRUARY SERVICE TIPS FROM SAAB-SCANIA

When a poor cold start and/or poor cold driveability complaint is encountered, do a CIS pressure test before doing any guessing or shotgun replacement of components. There is a great deal of info available from the results of the pressure test.

Installation of an ignition noise suppressor on an '82-83 900 Turbo with the Sony XR-75 radio will not overcome ignition noise caused by a loose ground or loose connection in the shielded audio signal cables (RCA cables).

If a noise persists, check the tightness of the RCA phono-jack connectors at the amplifiers and at the radio head. These connections must be tight, meaning the ears (shield continuity) as well as the pin (signal continuity) must both have tight contact with the jack. If necessary bend the ears toward the pin slightly.



#### FUEL ODOR FROM 900 FUEL LEVEL SENDER CURED

I have found another source of fuel odors in 900's -- leaks around the electrical terminals in the top of the plastic fuel level sensor assembly. You can check if your fuel odor comes from this source by driving the car until pressure is built up in the tank (about 10 miles?). Then remove the trunk floor boards (unhook the two rubber straps holding the hinged board, then pull the other board rearward and remove) and the rubber grommet over the sensor. Now listen for a hiss. A little water poured over the area will confirm if a leak exists here.

I "fixed" the leak by covering the base of the terminals and the surrounding area with a two-part epoxy glue/sealer. This can be done with the sensor in or out of the tank. If done in the tank, release the pressure in the tank by loosening the filler cap and leaving it loose until curing of the epoxy is complete. If you remove the sensor, don't drop anything in the tank and beware of the fire danger!

In either case, the top of the sensor should be cleaned with lacquer thinner. Placing a lighted trouble light over the curing epoxy will help the epoxy flow nicely into place and cure faster due to the heat of the bulb. Do not let the epoxy glue the hold down nut in place!

Let the epoxy cure overnight before pressurizing the tank. Also, check for leaks again after the epoxy has cured, because the epoxy tends to leave air bubbles as it cures and these may have to be sealed over again with more epoxy. Also be sure to make good mechanical and electrical connections at the terminals or you may end up with an intermittant fuel gauge.

Steve Parsons, Washington, IL

#### WATER LEAKAGE AT POWER ANTENNA MOUNTING

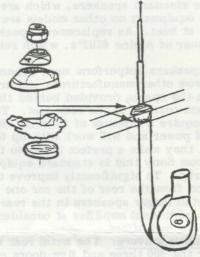
Saab Service Info: Water can enter the luggage compartment at two locations when the vehicle is equipped with a power antenna:

The fender opening under the bezel/grommet

assembly

The drain hose from the bottom of the antenna drum.

1. If leakage is detected at the fender opening, remove the cap nut, bezel and grommet. Run a bead of silicone sealer between the mast housing and the fender. Reinstall the trim and cap nut while the sealer is soft. NOTE: As from about 11/82 production, sealant has been applied here on all factory installed Nippon antennas.



2. Ensure that the drain hose is connected to the antenna and is routed to a drain hose in the left side of the tool well. The hose must not be pinched under the spare tire. NOTE: On Factory installed Nippon antennas the drain hose extends to the left front corner of the tool well floor. There is a small rearward-facing slit in the floor sheet here. On earlier cars a drain tube extension was routed to the large grommeted drain hole under the spare, or, in the case of sedan models, was spliced into the left rear sunroof drain tube behind the upholstery.

The Saab Club thanks Mr. Daniel L. David, Manager of the Technical Services Dept. at Saab-Scania, and Mr. Robert J. Sinclair, President of Saab-Scania of America, for their continued assistance in providing Saab Service Bulletins to the Club.

#### HELP IN KEEPING WHEEL WEIGHTS ON EMS MAGS

A possible solution for the chap wanting to find a way to keep wheel weights on is the one I use. Clean the area around the attached weight and cover the weight with a strip of racer's tape (duct tape) or filament packaging tape. This way the weight is less expose to the elements.

Lou Dollinger, Williamsport, MD





KNOCK IN REVERSE, FRONT WHEEL BRAKES, 1983

Saab Service Info: Movement of the front brake caliper during brake application in reverse can cause an audible knock or clunk that may be objectionable to some drivers.

The procedure outlined here will lessen movement of the caliper and also aid in reducing caliper rattle

on certain types of road surfaces.

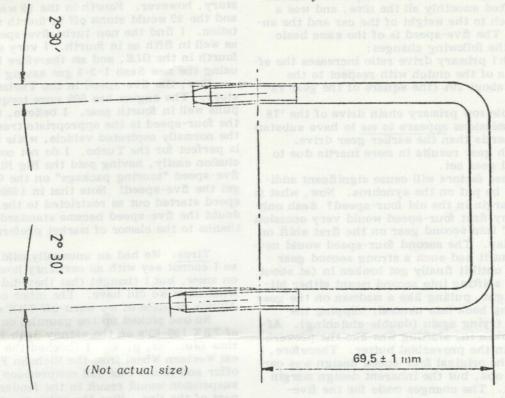
1. Remove the wheel

2. Remove the U-pin holding the brake pads

3. Bend the U-pin so that it poins downward when installed

4. Reinstall the U-pin and wheel

NOTE: If the bend in the U-pin exceeds the angle shown in the drawing it will straighten itself to the correct angle when reinstalling in the brake assembly.



#### OILING IS CURE FOR NOISY 900 HEATER FAN

The fan on my '79 900 started whining during the first 1000 miles. The dealer oiled it under warranty. A year later (also in the winter) it started making the same noise. So I investigated and discovered that there is a one inch diameter cover plate with a retaining screw on the end of the fan. This is visible with the right hand speaker grill removed. One side of the plate had been pried up so that oil could be injected. The first time, I was fancy about it and removed the screw part way to gain better access. This is probably more trouble than it is worth. Just pry it up and oil. I used a light grade of refrigeration oil, probably equivalent to a 10 wt. This quieted the beast for one year.

The next winter, when things got cold again, the noise appeared again. This time I figured there was already enough oil in there to suffice and that it was too stiff. So I gave it a dose of WD-40. The fan has now been quiet for better than a year.

Look at it this way: the fan costs megabucks and to replace it the dash must come out -- another big expense. And if the oil fails to help you can still pay the mechanic to replace the fan.

Steve Young, Lagrangeville, NY

#### IMPACT WRENCH STRIPS 99 WHEEL STUD THREADS

Anybody besides me run afoul of a hotshot with an impact wrench who screwed up the wheel mounting studs on a 99? The local service manager was muttering about pulling the brake rotor and replacing the stud, with that expensive smile we all know and love. However, the stud is a U.S., not a metric thread- $-\frac{1}{2}$ x20, also called  $\frac{1}{2}$ NF (for National Fine).

My friendly hardware store sold me a die for under three dollars that cleaned up the mangled threads just fine. I just used a crescent wrench to turn the die.

Lug nuts this size are available from parts stores but the outside doesn't fit the Saab wrench, so l invested in a new Saab lug nut. I put a little antiseize on the beginning threads of the studs, since they are unprotected in our salty road climate. I have maybe half of the original thread depth on the damaged stud now, but the lug nut is 1/3 deeper than a standard nut so I'm not expecting it to tear out. Actually, they tell me that Saab wheels are safely mounted with only three lug nuts (in an emergency).

Now, can anybody tell me why my '77 99 is a bear to steer in cold weather, but much lighter and easier in warmer weather and really light if the undercarriage is wet?

George Wilcox, Mentor, OH

STIFF SHIFTING FIVE-SPEED TRANS. DISCUSSED

I would like to say a few words about the shifting behavior of a normal Saab five-speed transmission. I have owned two previous four-speed 99's and I currently own a 1980 GLE five-speed and a 1982 Turbo. I have also driven briefly a 1981 900 with five-speed.

The four-speed transmission with a gear type primary drive (pre-'78) was a honey of a transmission. It shifted smoothly all the time, and was a fantastic match to the weight of the car and the engine power. The five-speed is of the same basic design with the following changes:

The .89:1 primary drive ratio increases the effective inertia of the clutch with respect to the synchros by about 20% (the square of the gear ra-

tio).

The triple row primary chain drive of the '78 and up transmissions appears to me to have substan tially more inertia than the earlier gear drive.

The fifth gear results in more inertia due to

the additional gear set.

All of these factors will cause significant additional load to be put on the synchros. Now, what is the design margin in the old four-speed? Saab only knows, but my first four-speed would very occasion ally "crunch" into second gear on the first shift on a very cold day. The second four-speed would never do this, but it had such a strong second gear synchro that until it finally got broken in (at about 10,000 miles) shifting into second meant either hitting it just right, pulling like a madman on the gear lever, or going back into neutral, blipping the throttle, and trying again (double-clutching). After it was broken in, shifting was like the proverbial hot knife in the proverbial butter. Therefore, I assume that the original four-speed design was certainly a good one, but the inherent design margin was not great. The changes made for the fivespeed are all in the wrong direction as far as the synchros are concerned, hence the common stiff shifting for the five-speeds.

Now, why would a sane, rational, and conceientious auto company like Saab do this to us, and what else could they have done? The original gear drive primary would not have had the strength to handle the turbo, and so redesign was inevitable. The use of gears makes changing the primary drive ratio difficult. To have different primary ratios, for different markets with different fuel economy and emission standards, or for both four- and five-speeds with the same differential and primary drive case requires chains, not gears. The alternative of a fourth gear direct and a fifth gear overdrive would give lower real-world mileage while allowing easier shifting by reducing the effective clutch inertia. Another alternative is using a "softer" synchro material to give smoother shifting at the expense of long life. We all buy Saabs because Saab would not

Thus, it seems that the degraded cold shifting into second is the result of the change to the fivespeed within the contraints of the current design. The other drawback, noted by Mr. Parsons in the February Newsletter (p. 5) is the matching between the five-speed and the normally aspirated engine. When the GLE was the "new" Saab and the fourspeed 99 was the old, I felt that the performance was much worse than the five lost horsepower would

cause. After a good break-in period, I began a program of informal performance checks on a known road. I came to the conclusion that the 900 seemed a lot slower because it didn't make as much noise. Objectively, first, second, and third pulled almost as well in the 900 as in the 99, though about 100 pounds of air-conditioner, sunroof, and power steering, plus five fewer horsepower had their effect, but it was within reason. Fourth is another story, however. Fourth in the 99 was direct (1:1) and the 99 would storm off in fourth without a hesitation. I find the non-turbo five-speed pulls about as well in fifth as in fourth. I very seldom use fourth in the GLE, and am therefore half way to using the new Saab 1-3-5 gas saving technique.

Now, the five-speed in the Turbo is a different story. The engine has 50% more torque, and so pulls well in fourth gear. I believe, therefore, that the four-speed is the appropriate transmission for the normally aspirated vehicle, while the five-speed is perfect for the Turbo. I do not come to this conclusion easily, having paid the Big Nickel for the five-speed "touring package" on the GLE, mainly to get the five-speed! Note that in 1980, the fivespeed started out as restricted to the Turbo and no doubt the five-speed became standard in the U.S. thanks to the clamor of market preference.

Tires: We had an unusually mild winter in Ohio, so I cannot say with all certainty how the P-8's do on snow, but I thought that they did quite well on what snow we did have. The other car had Metzler Alpin's in place of my worn-off TRX's.

No one picked up the gauntlet on my question of TRX 190-65's on the skinny Saab 135mm-wide rims (Jul. '82, p. 4). I checked the fit of the closest Western Wheel from the Michelin Package Special offer and found that full compression in the rear suspension would result in the fender "biting" off part of the tire. Plus the extra track width made the Saab look a little silly. With the 180-65's becoming scarce, I took a chance on both our spring weather and the Saab rims (with an encouraging word from the Saab district rep') and had 190-65 TRX's put onto the Saab wheels. I am happy to report that the 190 TRX works just fine. The first time I tried to thread the maze of Ohio potholes I actually frightened myself with the "quickness" of the TRX relative to the P-8. And the P-8 is, in my opinion, a very good handling tire. It is easily the second best handling tire of any I have ever tried on a Saab, and probably the best wearing. With 14,000 miles on mine, they still have the little molding nubs between some of the tread blocks.

#### Stephen Goldberger, N. Canton, OH

#### STRONGER SPRINGS FOR 99 GEAR SHIFT DETENT

I had a problem with a weak gear selector detent spring on my '73 99 4 speed. I found a Saab service update that advised using a stove bolt for a spacer (1/8 to 5/16) to increase tension. This seemed strange to me so I wound up using two Ford springs, p/n c6TZ 7219-C. They are the same outside diameter and wire gauge, but with more coils per inch, stacked 1" higher than my old spring--2" vs. 1½". Now instead of mush, it goes into gear with a good hard snap and it always stays in gear.

Ray Rosene, Lead, SD



Erik Zenz at speed in the first outing for his new rally Saab, a 1980 99 GLi, at the 100 Acre Wood Pro-Rally in Missouri, in March. Erik's Navigator is Lawson Smith.

#### COLD START PROBLEMS & FUEL PRESSURE, 900's

Concerning Ken Andrews' cold starting problem (Feb. '83, p. 8): my '80 900 developed the same problem the second winter and is still there this winter. I have never been able to figure it out either. Manual activation of the cold start valve via a separately-wired switch keeps it going, but goosing the throttle is easier. It is very strange that it starts up immediately and runs fine after the throttle blip; and it worked fine the first winter.

Another note for Steve Parsons in the same issue with regard to his hot start problems and normal rest pressure. I have checked pressure in conjunction with my cold start problem and for general interest. I have no hot start problems so would classify my car as "normal." Rest pressure was

found to be:

0 minutes 34 psi 20 30 80 25 180 0

Again this is for the '80 900, Lambda equipped. Bob Swinehart, St. Paul, MN



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#### RALLYISTS BEGIN SEASON WITH MIXED RESULTS

After winning the Manufacturer's Title for the Production Class for the third season in a row, the Saab rally drivers will have a difficult time repeating last year's successes again in 1983. The new Pro-Rally season opened with a sour note for Saab as Erik Zenz and Lawson Smith saw their fine third in Class and tenth overall at the opening 100 Acre Wood Pro-Rally in Salem, MO erased by a protest over the tires used by the Saab team.

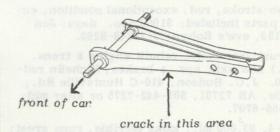
It seems that the Production Class rules have a vague clause requiring tires to be "generally available to the driving public through normal retail outlets." Even though Erik bought his Finnish-made Hakkapeliita snow tires over-the-counter in Milwaukee, the powers that be decided the Hakka's were "rally specials." Part of the problem is that the tire company most involved in Pro-Rallying, B.F. Goodrich, does not make a 15-inch snow tire smaller than 205/75-15. While Sandy Liversidge uses that size BFG's on his Saab, Erik prefers a narrower tire, which greatly limits the range of choices available.

So at the next event, the Budweiser Forest Pro-Rally in Chillicothe, OH March 26, Erik was forced to use Kleber M+S tires, which are about the only 165-15 mud and snow's available at this time of year.

Sandy Liversidge was back in the U.S. for the Budweiser Forest after going to Europe for a taste of big-time rallying in Belgium and Sweden. Sandy managed a second in Production Class at the Budweiser Forest (fifth overall) while Erik was fifth in Production and tenth overall.

#### '69 99 SUFFERS SECOND BROKEN UPPER A-ARM

A note about the continuing mechanical restoration of my 1969 99. I have just discovered my second broken upper A-arm. My first broke a year ago on the left side of the car and upon disassembly of the front end to replace u-joint boots, I discovered the same part on the other side half way cracked through. This is a fatigue failure right near the suspension rebound rubber stop.



The local dealer said that in 23 years of service he has never replaced a fatigued upper A-arm. I suppose that just about anything can happen on a 14-year old car. This is a potentially dangerous failure and other club members with aging 99's should check it out.

David Roth, Port Byron, NY

Ed. Note: David's A-arm problem may be related to the '69 model only. As far as I can tell by looking at various parts books, the '69 had a different style A-arm than later models. But this is a safety check that is relatively easy to make.

#### 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.

#### CLASSIFIED AD DEADLINE.

The Classified Ad deadline for the May Newsletter will be May 4th, while the deadline for the June Newsletter will be June 8th. All ads should arrive on or before those dates to be in that issue.

#### SONETTS FOR SALE

1969 Sonett, 20,000 miles: \$2500. Hank Latunski, 25612 Via Solis, San Juan Capistrano, CA 92675, 714-831-7024 or 714-493-4066.

1972 Sonett III, 53,000 mi., new 140 hp turbo V-4 eng, trans. w/posi; int. & paint in exc. cond; garage kept Dallas car; Koni's, CN-36's, 5 spare fact. mags & spare trans, etc: \$4995. Leon McCaskill, 214-462-8040.

1972 Sonett V-4 for parts; rough body & interior, driveable; good motor & clutch, fair trans: \$1400 obo. John Brosseau, jr., 830 Olive St, Elgin, IL 312-741-0380 days, 312-742-0960 eve's.

1973 Sonett III, maroon, 75,000 mi., exc. int., new clutch, new MSS exhaust, new all-weather steel radials, a/c, motor runs but needs work; slight fiberglass damage in rear: \$1000. John White, 301-962-7600 or 301-997-9174, 5028 Castel Moor Dr., Columbia, MD 21044.

#### 95's and 96's FOR SALE

1967 96 two-stroke, red, exceptional conditon, extra spare parts included: \$1900 obo. days: Jon 312-299-7153, eve's Robyn: 312-248-5292.

1967 96, rust-free body, rebuilt engine & trans. (8,000 mi.) new exh. sys. & brakes, Michelin radials: \$1650. J.C. Hudson, 410-C Huntsville Rd., Fayetteville, AR 72701, 501-442-7275 or after mid-May 501-565-6707.

1968 95 V-4, 93,000 mi.; looks terrible, runs great; reblt eng. & trans., many spares: \$500. Marc Frank, 1528 49th St., Brooklyn, NY 11219, 212-438-2022.

1968 96, British racing green, 44,000 mi., body perfect; no eng. or trans.: \$800 firm. Bill Cook, 4019 Leland, Comstock Park, MI 49321, 616-784-6497

1968 96 Pro-Rally car; good cond, recently reblt trans., complete w/lights, Halda & belts: \$1250. Richard Miller, 214-644-8112.

1970 95, dark green, cruise, southern car, no rust; am-fm stereo, two mounted snows extra, many spares incl. trans; very good cond.: \$2200 obo.

Gary Rumrill, 502-775-6431 offic; 502-239-6366 home 6801 Switchbark Ct., Louisville, KY 40228

1973 96, yellow, mech. exc., 76,000 mi., one owner new tires, new trans, spare parts avail: \$1200. Terry Smith, 1528 E. 1st St., Duluth, MN 55812, 218-724-8244 or 724-2385.

#### 95, 96 and SONETT PARTS FOR SALE.

Sonett parts: one pr. '71 doors: \$150 ea; Sonett rack & pinion: \$75; heater core: \$15; visors: \$10; steering wheel: \$40; '73 trans.: make offer; headlight linkage: \$50; complete '62 96, good en. & transell complete or parts. Bibb T. Gault, Wilson K-212 SHSU, Huntsville, TX 77341, 409-294-4489 aft. 11pm

One complete 750cc engine from '65 96 sedan-also trans. for same car: good cond.: \$200 each. Fred Thompson,  $903\frac{1}{2}$  State St., Bellingham, WA 98225 206-733-6209.

Saab V-4 factory service (repair) manual, covers V-4 1969-1972: \$35. Kenneth Wyle, 251 W. State St. Waverly, IL 62692, 217-435-9777 eve's & weekends

Two-stroke parts: starter for 750: \$25; starter for 850: \$25; gen/water pump for early 750: \$35; triple carb: \$25; single carb & manifold for early 750: \$30 and many other parts. Ted Smith, Rt. 1, Box 80, Bent Mtn., VA 24059, 703-929-4328.

Four-year old 95 gas tank, exc. cond: \$35; many 3 cyl & V-4 parts, generators: \$20 ea.; trans. parts gear sets, etc.: Roger Harris, Box 47, Ashfield, MA 01330, 413-638-4435, 413-736-5639 or 800-332-2753 in-state, leave message.

#### 95, 96, and SONETT WANTEDS .

Wanted: Original rear mudflaps for '68 96. Karl Ogren, 16251 Thornberry W., Grass Valley, CA 95945.

Wanted: set of hand brake cables for '62 96. John Bartko, 5712 Roosevelt St., Bethesda, MD 20817, 301-530-7633.

Wanted: left & right front seats for Monte Carlo restoration project, in good cont. or rebuildable. Mark Rheude, 781 E. Swanee Ln., Covina, CA 91723 213-332-0046.

Wanted: two or four Sonett steel rims, must be true: \$15 ea or trade for other Sonett parts. Bob England er, 6 Wildwood Terrace, Glen Ridge, NJ 07028

Wanted: Set of foglights and complete a/c unit for '74 Sonett. Neil Simon, 2810 So. 162 Pl, Omaha, NE 68130, 402-330-1604.



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#### 99's and 900's FOR SALE \_

1970 99, needs engine: \$200; 1974 99EMS, needs engine: \$700. R. Palmer, 3148 Wildwood Ct., Lancaster, CA 93534, 805-277-4630 weekdays, 805-943-6250 eves/weekends.

1973 99L 4 dr.; 116,000 mi., 150 psi compression; smooth shift; int/ext show age, but runs well; good stereo, Shockley tow hitch, sell whole or in parts: \$750 whole. Ben Millard, 3760 Bertrose, Ft. Worth, TX 76107, 817-731-8056 (beware answering machine)

1974 99EMS, orange, v.g. cond., driven every day; 85,000 mi; many new parts too long to list; orig. owner, never hit; serious inquiries only: \$2500 obo incl. v.g. parts car to match. Gary Cortese, 717-622-2230 days, 628-5295 eve's PA.

1974 99EMS, exc. cond., new paint, Michelin XZX, no rust, trailer hitch & connec.; 4 spd; am-fm cass. silver, 103,000 mi., complete records, runs great; \$2500 Need a new headliner, seats, & radiator. Jack Poisson, PO Box 1076, Wilmington, NC 28402, 919-762-2620 early or late; 763-6207 9-5.

99EMS, 1974 with alloy wheels, eng. runs but needs work: \$500 firm. Bill Cook, 4019 Leland, Comstock Park, MI 49321, 616-784-6497.

1975 Wagonback, orig. owner, 61,000 mi., am-fm cass., roof rack, tach; first & second gears bad: \$900 or will sell for parts. Can Deliver. Tom Nola PO Box 627, Wurtsboro, NY 12790, 914-888-2246.

1975 99LE, 2 dr., 4 spd.; good body & int., no rust or damage; new alternator, brakes, exh., tires; 82,000 mi. a/c, NMR: \$1995. David Joyce, Misenheimer, NC, 704-463-5348 eve's & weekends. If not sold soon, will part out.

1976 99GL, 42,000 mi., auto., new factory air, very good cond., radials; \$2895. Arnold Raymond, 213-540-2285, Redondo Beach, CA.

#### 99 and 900 PARTS FOR SALE .

Pirelli P-6 Tires, 195/60HR15 from '80 Turbo, three in various levels of even, normal wear; newest has 5250 miles. Best Offer. 1980 Saab front seatcovers, two grey & blue Saab insignia front seat & headrest covers. Best offer. R. Prymak, 617-358-4331 eve's

99 Spoilers; factory duplicates made of fiberglass: \$70 plus ship. Jim Hollowell, 16449 Humber, Huntington Woods, MI 48070, 313-548-3671.

Four Inca wheels in exc. cond. mounted w/ P-6's, 195/60HR15 with 1/2 treadwear left: \$500. Dave Chronister, 1801-A Solomon Rd, Charlottesville, VA 22901.

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#### 99 and 900 PARTS FOR SALE, continued

Four TRX wheels for sale: \$80 each incl. UPS, caps & lugs. Also Superfox remote radar detector, recently factory renewed: \$125. Grant Gongoll, 3244 Edgeware, Memphis, TN 38118, 901-363-9542 days & eve's before 9 pm.

Headlight covers for 900's, look like European headlights, easily installed, set of two: \$29 +\$2 postage. Paul Dukehart, 81 W. Green St., Westminster, MD 21157, 301-848-7207.

Cylinder head for 99 1.7 liter eng., complete w. camshaft, possible crack in water jacket has been planed: \$30 + UPS; starter for same: \$35 + UPS. Ted Smith, Rt. 1, Box 80, Bent Mtn., VA 24059

From '75 99, power steering rack w/pump: \$150; two manifolds, no cracks: \$50 ea.; 4 dr. interior, pumpkin colored, no rips: \$100; other misc body parts. Tedd Donlon, Herrick Rd, Lyndeboro, NH 03052, 654-6612 days, 654-9296 eve's.

1976 Wagonback hatch: \$175; rear bumper: \$35; 1971 99 body: \$125; 1.7L engine: \$175; carb, manifold, radiator, new gasket set \$10-\$100. Jeff Burkes Rt. 1, Box 294C, Pittsboro, NC 27312, 919-542-5730

Four Michelin XM+S Snows, never used, spin-bal. and studded on EMS alloy wheels: \$120 ea. or four four \$125 or trade for Inca wheels. Dave Nichols, 3017 Oxbow Rd, Evergreen, CO 80439, 303-674-0159 or 674-2875.

Two new Inca Wheels,  $5\frac{1}{4}x15$ , \$275 plus ship. Jim Fortune, Hendersonville, NC, 704-885-5615 day, 704-891-9603 eve.

Koni shocks, gas pressure, front for 99's except Turbo, new still in orig. box: \$70 pair plus ship. Dash Clock, oem for 99: \$10; 55w H-1 quartz-iodine bulbs: \$4 ea. W. Reid Pepin, RFD#1, Main Street, Dunstable, MA 01827, 617-649-6536.

#### 99 and 900 WANTEDS \_

Wanted: Power steering rack for '75-80 99 GLE; must be working in good cond. Phil Connaught, 215-977-1668 work, 609-589-0376 home.

Wanted: for '78 99GL 3 dr.: rear spoiler. Fran Scarver, 164 Hosmer St, Marlboro, MA 01752, 617-481-4174.

Wanted: for 99, two headrest inserts, blue, black or grey, good con., offer \$30 pr. David Kronen, 22706 Califa St., Woodland Hills, CA 91367, 213-346-0993.

Wanted: Saab factory shop manual for 1980 900, reasonable cost cheerfully paid. Jim Schlueter, 1639 North Bend Road, Cinci., OH 45224, 513-681-2800.

Wanted: owners (glovebox) manual and shop or other manual for '78 99 Turbo. I. Hyslop, 633 Alexander Ave, Penticton, BC Canada V2A-1E6

Wanted: for '77 EMS, one headliner for sunroof equipped cars: \$30 or best price offered; one right mudflap: \$10 or best; Also desire to purchase factory manual complete for '77, less than \$40-Need suggestions for very good paint shop in Detroit area that will paint with Imron. Walter Shwayder, 1470 Cedar Bend Dr., Ann Arbor, MI 48105

MORE CLASSIFIED ADS ON BACK PAGE.....

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99 and 900 WANTEDS, continued -

Wanted: for '75 99LE 2 dr.: factory trailer hitch: \$40?; Headrest inserts (cinnamon) \$15?; 1 foot piece of door trim/moulding & 1 foot piece of rear side window moulding (to fix shrinkage) Dick Peterson, 212 N. 5th St. W., Mt. Vernon, IA 52314, 319-895-8962.

MISCELLANEOUS ADS \_\_\_\_

For Sale: Universal distributor bench tester with storage cabinet, exc. cond.: \$100. Marc Frank, 1528 49th St., Brooklyn, NY 11219, 212-438-2022.

LAST MINUTE CLASSIFIED AD\_

For Sale: 1972 Sonett, for parts; stored past four years, nose damaged: \$475 complete; Also strong V-4 engine & trans. from '73: \$425 or will split. Tom Nola, PO Box 627, Wurtsboro, NY 12790, 914-888-2246.

CLUB T-SHIRTS STILL AVAILABLE -- We still have many of the Jack Ashcraft designed "Old Saabers" and "Giant Killer" T-shirts left from the second (and probably last) printing. We have Med, Large, and X-large in both styles. \$6.00 each plus \$2.00 per order shipping. Please state size and style.

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