



2341 S. CIRCLE X PL. TUCSON, AZ 85713

VISIT OUR CLUB WEBSITE: www.subaru360club.org

NEWSLETTER, VOL. XXIX, No. 1

DECEMBER 2007

SPECIAL THANKS to KELLIE DeFRIES for producing the color pages in this issue, to STEVE & JEAN McCARTHY for the photos from the 2007 Unique Little Car Meet and the Letterhead, and to others who sent photos of their own cars and info for technical articles inside.

I THOUGHT I HAD AT LEAST SEEN PHOTOS of every vehicle that was ever produced on a Subaru 360 chassis. Then RALPH LOPEZ sent the feature article in this issue. The BURRO BURRITO was a new one on me. It used a 360 sedan chassis, in contrast to the CHEESEBOURGER that was based on the Sambar chassis. We know there were probably at least 900 CHEESEBOURGERS made, and some of our members own them. But do any of you own a BURRO BURRITO, or have you ever seen one? The article gives no clue as to how many were made. It shows a Young, and in the dash photo the switches are on a Young lower dash panel, but the speedometer is from a sedan. If you have further information on the BURRO BURRITO, we'd like to publish it in a future issue!

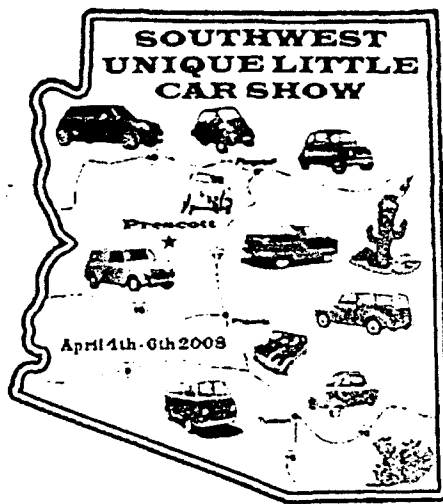
MY APOLOGIES FOR THE MESSY LOOKING ROSTER! When e-mail addresses became common, in order to include a column for them in the Roster, I converted the Roster fro Pica to Elite type. Now, just after printing the Classifieds, my 20-year-old word-processing typewriter suddenly quit printing files that were in elite type. It substitutes an unknown (to me) alphabet that looks like this:

UNRECOGNIZABLE GARBAGE

So I had to convert the Roster back to Pica, at least temporarily. In order to avoid adding many more pages, by giving most members 2 lines, I condensed lines as much as possible. So the columns are not straight, some listings have "Mr/Mrs" abbreviations, some punctuation marks were dropped, some lines consolidated, etc. The information, however, I hope is accurate; and if not, please let me know so I can correct it. I now have the word processing typewriter in the shop in hopes that it can be fixed.

REMINDER - ANNUAL DUES ARE NOW \$8. a year. To keep everything fair, any dues money received before Oct. 1 was credited at \$6. a year and any that came after Oct. 1 has been credited at \$8. a year. I think it's been at least 10 years since the last dues increase, and I hope we won't need to do it again for another 10.

ANOTHER REMINDER - The discussion forums on the Club Website are open to all Club members, and closed to everyone else to prevent abuse by spammers, con artists, etc. But you need to go thru a brief process online first. If you have problems completing this, e-mail Jamie Thomas subiegal@gmail.com - include your full name and State, she will help.



The
ARIZONA MINI OWNERS

Invite you and your Unique Little Car
To join us for the

28th SW Unique Little Car Show
In Prescott, Arizona
April 4th, 5th & 6th 2008

Prescott is in central Arizona amid the largest stand of Ponderosa Pine in the world. Prescott was the Territorial Capital of Arizona in 1864 and much of the original architecture has been restored from construction in the late 1800's. The Governor's "mansion" is preserved at the Sharlot Hall Museum where other historical structures have been brought to the site.

There are many other attractions in Prescott. Lots of quaint shops surrounding the Courthouse Square offer everything from ice cream and pizza to Birkenstocks and antiques. There are lakes for fishing and boating, a Zoo, golf courses and tennis courts, a roller skating rink and a bowling alley so there is plenty to keep everybody amused.

The average temperature in Prescott in April is upper 50s during the day, dropping at night so come prepared with jackets and sweatshirts.

Our headquarters Hotel will be the America's Best Value Motel where we have arranged a special rate of \$69.99 per night + tax. You must call 928-776-1282 and mention the Unique Little Car Meet to obtain this rate.

We are arranging all the usual features, the show itself we are opening to all unique vehicles at the owners discretion. If you feel you have something Little and Unique by all means bring it. The number of show awards and the classes will depend at the pre-registration figures so gather the fellow owners of your car's family together and register early.

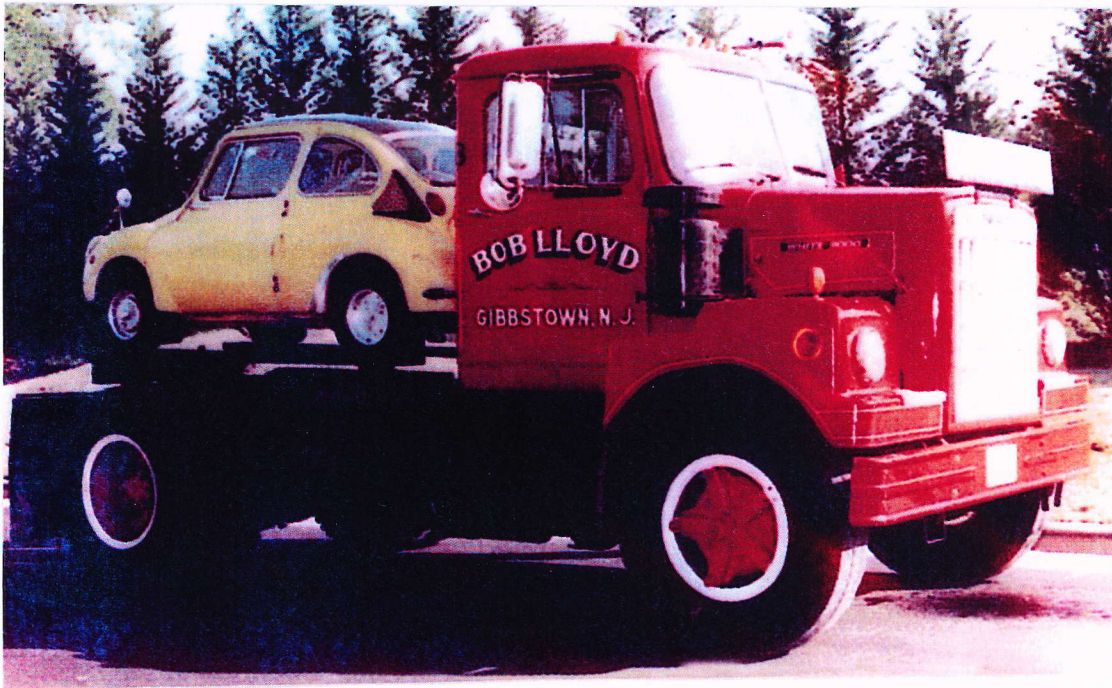
The entry form will be available soon and if you have an email address we would appreciate a message from you and we will send the form that way.

Before long there will a special SWULCM web page so please be patient and keep checking www.azminiowners.com

Alternatively email or phone for the latest updates.

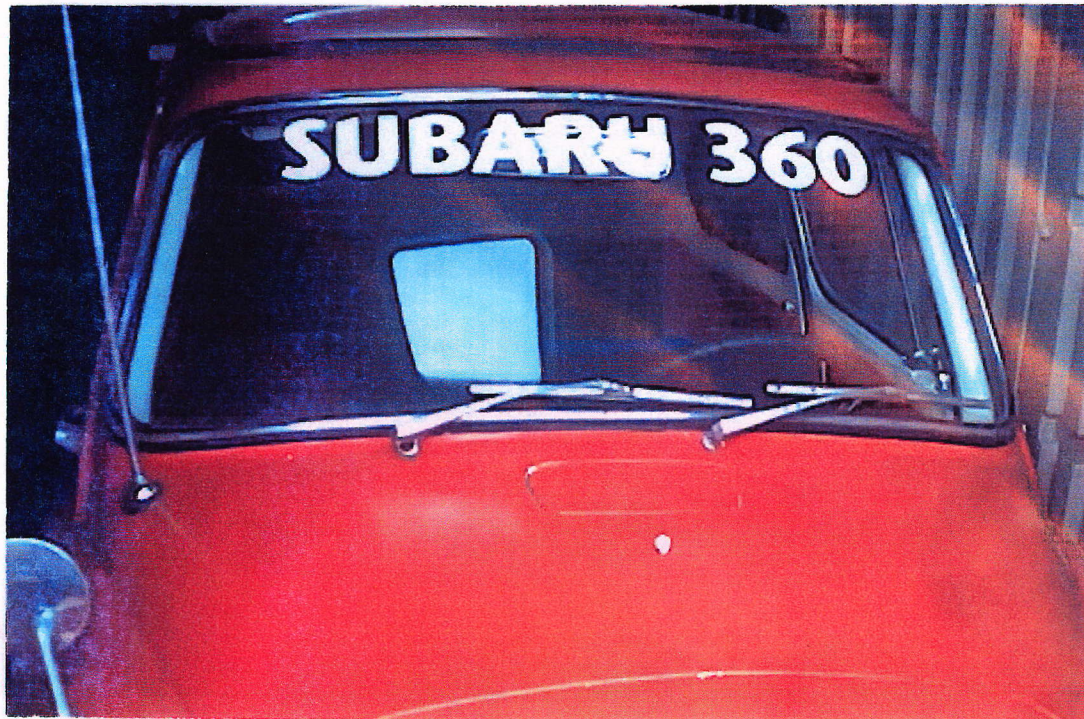
Shirley@azwildblue.com
arizonaminis@earthlink.net

Phone 480-985-2531



ABOVE: BOB LLOYD HAULS HIS 360cc SUBARU YOUNG ON HIS 14,000 cc WHITE TRACTOR BELOW: DAVE HINTON HAD THIS DECAL MADE FOR HIS 360 - SEE STORY INSIDE FOR HOW YOU CAN GET ONE MADE FOR YOURS

EUGENE FRITTS HAULS WITH HIS TWIN-STACK 360 PICKUP GREEK 50cc MINICAR AT LOCAL MEET IN TUCSON

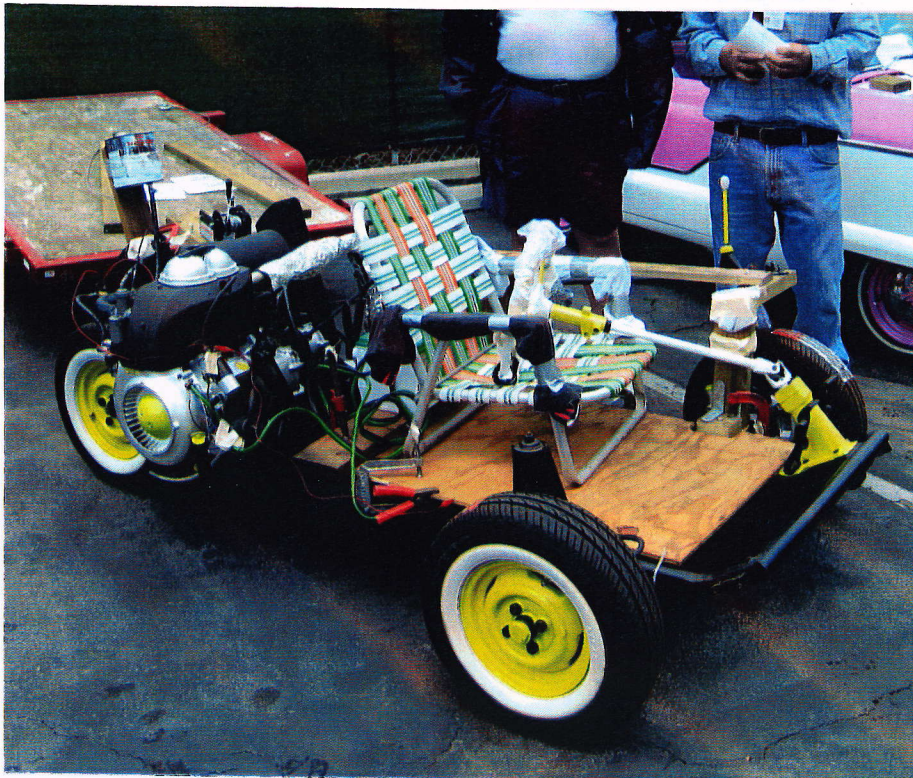


SEEN AT THE 2007
SOUTHWEST UNIQUE
LITTLE CAR MEET -
CLOCKWISE:
GLENN & VALERIE
ROBERTS'
SUBARU 360 VAN

ROGER WARD'S
SUBARU 360
PICKUP

BEST OF SHOW -
AMERICAN BANTAM
SEMI

BASIC
TRANSPORTATION
- ISETTA ROADSTER



WHILE UPDATING THE INDEX FOR THE 2008 EDITION OF THE BOOK OF REPRINTS, I broke the 2 largest categories into smaller parts. If you put this page in the front pocket of your BOR, next to the index that's already there, you should have a much easier time finding articles on BRAKES and FUEL SYSTEMS that will help with what you're working on. At least 95% of the questions I get by e-mail are already answered in the BOR, so hopefully this will help you get your answers quicker.

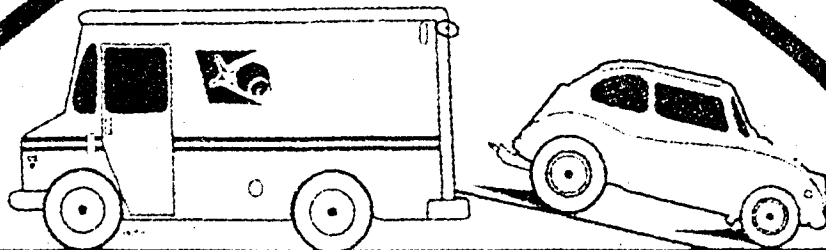
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LIFE MEMBER ANTHONY DEL MONTE FROM NJ USES THE SUBARU 360 SEDAN IN HIS COMPANY'S LOGO, AS SEEN BELOW. ANTHONY SENT SOME OF THE DECALS HE HAD MADE, AND IF YOU ARE A LIFE MEMBER YOU WILL FIND ONE OF THESE INSIDE THE ENVELOPE THIS NEWSLETTER CAME IN.



squeaky wheel media

535 West 34th Street | New York, NY 10001

WANT A SUBARU 360 WINDSHIELD DECAL AS SHOWN ON THE COLOR PAGE OF THIS ISSUE?

DAVE HINTON WILL PUT IN A BULK ORDER TO THE COMPANY WHO MADE HIS ON JANUARY 1, and is taking orders between now and Dec. 31 (but don't wait til the last minute please). This strip mounts inside the top of your windshield, all the way across, to answer the question "What Izzit?" before the nerd in the other car asks you. Dave will sell them at his cost, \$10- \$12. each + postage, depending on how many are ordered. DAVE HINTON, 1908 12th Av. SE, Cedar Rapids IA 52403 319-364-1290 dh1908@cedar-rapids.net

CLASSIFIED STUFF

AUOMOBILIA FOR SALE: CLUB T-SHIRTS - Subaru 360 Driver's Club logo, now in 5 colors, on white t-shirt with pocket on the front; sizes L & XL only. \$15. each, includes shipping. STEVE McCARTHY, 5431 Chapel Brook Dr., Houston TX 77069 281-580-2915 smccarthy@sbcglobal.net

AUTOMOBILIA FOR SALE: SUBARU ORIGINAL sales brochures showing all Subaru models, interiors and features for the year. Great for restorations or gifts! 1968-70, \$18. each year; 1971-present, specific model, \$15. each year. 1971-present, full line (all models), \$10. each year. Add \$3.85 shipping. Visa/MC. Specify year and model. WALTER MILLER, 6710 Brooklawn, Syracuse NY 13211 315-432-8282 Fax 315-432-8256 www.autolit.com

CAR FOR SALE: 1968 Subaru 360 sedan, complete but needs restoration, \$1500. Also have lots of extra parts including rims. CHRIS WHITE, 64 Slocum Rd., Dartmouth MA 02747 508-994-1237 cwfordham1@comcast.net

CAR FOR SALE: 1969 Subaru 360 sedan, painted purple, asking \$1600. PAULA CONKLIN, 915 W. J St., Forest City IA 50436 tuffy50436@yahoo.com or 641-590-3325

CAR FOR SALE: Subaru 360 sedan, recent new paint and upholstery, see photo in Sept. 2001 issue - needs minor work on brakes & gas tank. Always garaged, lots of extra parts too. UNA HALFORD, P O Box 135, New Cuyama CA 93254 805-755-2336 (no e-mail)

CAR FOR SALE: Project 360 van, straight & rust free, all glass good, 2 1/2 engines, body off, needs reassembled. Will make any Club member a good deal. KEN WALKER, 500 Hackberry Av., Mission TX 78572 956-585-3572 drugstorecowboy@att.net

CAR FOR SALE: Estate sale, John Mosher's 360 Zatmobile, garaged in Trenton NJ and in nice condition, including the snap-on canvas top. Needs only the usual brake seals. See P. 342 of your Book of Reprints for the modifications Tom Zat made to 12 360s. \$2000. obo. Photos available, Contact Mary Mosher 609-393-8040 or Mmosher@hotmail.com

CAR FOR SALE: Estate sale, Jeff De Long's 360 van, Seattle WA area - contact Jeff Calley, 18805 SE 42nd St., Issaquah WA 98027 206-409-5845 jeff_calley@hotmail.com

CAR FOR SALE: 1971 Subaru 360 4-speed sedan, 90% complete, engine locked up, needs brakes & body work, good TX title. Includes 4 new tires & tubes; Subaru 360 autoclutch parts car, mechanically complete, engine turns over, no interior, windshield, or rear window; also some extra parts. \$1650. obo HAROLD PETER, 1534 Theresa Ln., Moody TX 76557 (near Waco) 254-853-3109 HAROLDPETER@peoplepc.com

CARS FOR SALE: Subaru 360s 1 sedan, engine out; 1 van, did run; 1 pu, engine out but rebuilt; 1 pu, restoration started. \$2995 takes all. Arlan Wedemwyer, 15034 NE 172nd Av., Brush Prairie WA 360-256-6426 or 360-624-0940 aww@pacifier.com (non-memb)

VAN TO SWAP - 1970 360 van in pieces, ran when I took it apart. Wish I had time& patience to restore, bot don't. Want to trade (with \$) for fully restored 360 van. JUSTIN PATTON, 4045W. 800 N., Tangier IN 765-498-2815 big_stud01_2000@yahoo.com

PARTS FOR SALE: Good used rims, brake drums, shoes,, backing plates, wheel cyls., starter motors & parts, misc. seals, bearings, trim parts, etc. - New stainless seal carriage bolts & nylock nuts for connecting rim halves. Factory tools to rent, deposit refunded (less postage). DAVID NUSS, 3908 Durst Clagg Rd., Cortland OH 44410 330-684-0266 dn26512@aol.com

PARTS FOR SALE: New Subaru 360 Van or Truck replacement windshield weatherstrip \$25. + postage. Reproduced Dome lite lens \$25. BILLY PAUL, 210 Betsy Run, Longwood FL 32779 407-862-4928 wfpaul1@aol.com

PARTS FOR SALE - 2 rear brake drums, 2 front sedan drums, \$25. each. REX BROWN, 1804 Cedar St., #3, Forest Grove OR 97116 503-359-9186 rexbrown@comcast.net

PARTS FOR SALE: Hitachi distributor caps (\$10. each) and points (\$6. set) + postage, for pre-'68 distributors used in early Sambars and all "Cheeseburgers", shown on P. 100 of BOOK OF REPRINTS. BOB ALPERT, 12 Carroll St. #129, Westminster MD 21157

PARTS FOR SALE: New & used Subaru 360 parts, factory tools for 360 & ff-1, new & used auto lit., die-cast 360, long SASE for 8-pg list. No phone calls please! ED PARSIL, 2341 S. Circle X Pl., Tucson AZ 85713 subaru360nut@aol.com

PARTS FOR SALE: Your CLUB PARTS DEPOT has lots of NOS 360 parts, and some for FF-1 and later Subarus. Send long SASE, specify which list(s) you want, to FRANK DUVAL, 648 Holly Corner Rd., Fredericksburg VA 22406 or E-mail CorvairDuVal@netscape.net

PARTS FOR SALE: 2 sets of 4 new pu/van wheelcovers, also fit sedans, \$240. a set + postage. TAKING ORDERS FOR 360 SEDAN WINDSHIELDS - getting close to the 25 orders I need to get these made. If you need one, contact me to order: LOUIS QUENNEVILLE, 297 Arthur-Villeneuve, Laval, Quebec, Canada H7L 5R3 proscenium@videotron.ca

WANTED: Suaru 360 sedan. Call PETER DAWSON, 248-647-1879 in Birmingham MI or e-mail PHDAWSON@SBCGLOBAL.NET

WANTED: for Subaru 360 pu - set of pistons, ring & gaskets, backup lens, throttle & choke cables, oil tank, wheel covers, window cranks, air filter assy., shocks. VANCE BALDWIN, 122 N. 3rd., PO Box 865, Chiloquin OR 97624 541-783-2911 360driver@gmail.com

WANTED: For Subaru 360 Young - rear bumper, interior black panel for passenger door. JIM BENITEZ, carrie_benitez@hotmail.com or 760-749-4039 til 10 PM PDT, leave message.

WANTED: For Subaru 360 sedan - 2 exhaust manifold gaskets, 2 exh. donuts, 2 boots for tie rod ends, chrome strips for under both door windows. DAMIEN PASQUA, 758 E. Broadway, Milford CT 06460 203-733-4934 whiteoakdesign@yahoo.com

WANTED: Gas tank for 360 truck/van. Buying Subaru 360 parts, don't throw them away, contact me first. ERIC STEVENSON, 1048 Ridge St., Hammond IN 46324 219-931-6111 ecs1015@aceweb.com **ALSO NEEDS A COMPLETE VAN FUEL FILTER,**

WANTED: Subaru 360 sedan jack with handle, front hood emblems for sedan and Young. KEN WEGER, 3815 Oak Ridge Rd., Crystal Lake IL 60715 815-236-1650 knsweiger@mc.net

WANTED: 1970-71 Subaru ff-1 Ric Ottaiano, 298 Terraza Pl., Fullerton CA 92835 714-348-5182 ottaiano@att.net (non-member ad)

WANTED: Subaru 360 van - former van owner in Denver looking for another one for his brother in Houston TX. contact Elijah Roberts elijah_roberts@yahoo.com

DEADLINE FOR CLASSIFIED ADS FOR NEXT ISSUE - JANUARY 15, 2008 - e-mail to subaru360nut@aol.com or mail to ED PARSIL, 2341 S. Circle X Pl., Tucson AZ 85713.



SUBARU BURRO BURRITO

A rugged Bug from Fuji's Mini-Car

by Chuck Nerpel

The Subaru based Burrito is the result of a cooperative project between Subaru of California, Inc., of Newport Beach, and the Burro Co., of Santa Ana, Calif. Dave Knappen, Regional Manager of the Subaru outlet, a racing and off-road enthusiast, recognized the possibilities of using the mini-car's components to build a strong, light weight, and low cost dune buggy. All of the necessary parts, except the frame, were taken from the model 360 sedan, a rear engine, 70.9-inch wheelbase, 2-door model, that retails new for about \$1297, P.O.E. Los Angeles.

In production since 1958 but only imported recently, the Subaru 360 is made by Fuji Heavy Industries Ltd., of Japan. Despite its small size and light weight, it has some very interesting engineering features and is extremely well built. Because of its monocoque construction, the body/chassis being all one sheetmetal unit, the usual process of putting a buggy body on the base frame was not possible. It has no frame,

but the fully independent front and rear torsion bar suspension, rack-and-pinion steering, tubular hydraulic shocks, 4-speed transmission, and vertical-twin-cylinder, 2-stroke cycle, air-cooled engine, are ideal for hanging on to a simple square tube frame.

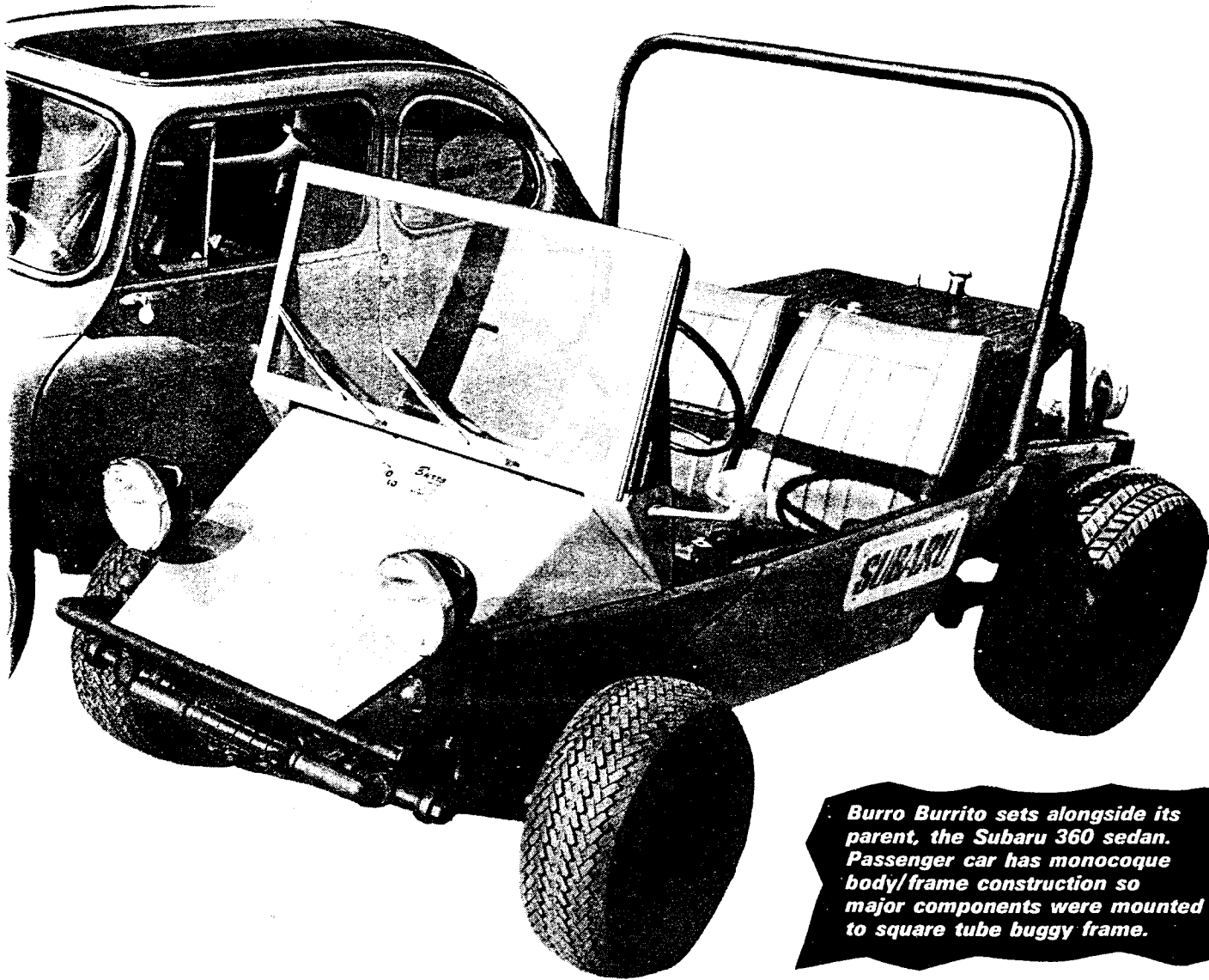
The curb weight of the 360 sedan is 925 pounds, but the Burro Burrito weighs only 600 pounds, quite a saving and necessary to get the desired performance from the stock engine that has only 21.7 cubic inches piston displacement and a horsepower rating of 25 at 5500 rpm's. With this horsepower at a total weight of 600 pounds, the performance compares well with a 1000 to 1200 pound VW based bug with the 36 horsepower engine. While the gearbox is a 4-speed transaxle unit housed in an aluminum case, it is only synchromesh in the top 3 gears and 4th is slightly overdrive instead of 1 to 1. The ratios are: 1st, 3.130::1; 2nd, 1.601::1; 3rd, 1.0::1; and 4th, .806::1. Reverse is 4.248::1, and there are other

ring and pinion sets available from the factory for changing the overall ratios.

The front suspension system is an interesting variation of the transverse torsion bar application in that the center anchor for the single bar is spring mounted. The small coil cushions torsion bar windup at the extreme twist position, giving a little extra softness at the top of the bound where it is needed. The arms to the wheel hubs are husky single trailing arms, curved to allow good front wheel steering arcs. In the rear, a single transverse tube-enclosed torsion bar is driven by plate type arms, similar to VW, to the swing axle hub carriers.

Air-cooled engines have proven their worth for off-road use as the problems of coolant and radiator are eliminated. Two-cycle engines, with no valves or camshafts, and a power stroke at every revolution, further simplify the potential problems that can occur in rough back country. The Subaru engine is a vertical twin, alternate firing power plant with

REPRINTED WITH THANKS
TO ROAD TEST/DUNE BUGGY
MAGAZINE, MAY 1970 - AND
RALP LOPEZ, WHO SENT IT IN



Burro Burrito sets alongside its parent, the Subaru 360 sedan. Passenger car has monocoque body/frame construction so major components were mounted to square tube buggy frame.



Fully independent suspension system has great movement. Burrito literally "walks" over deep depressions.



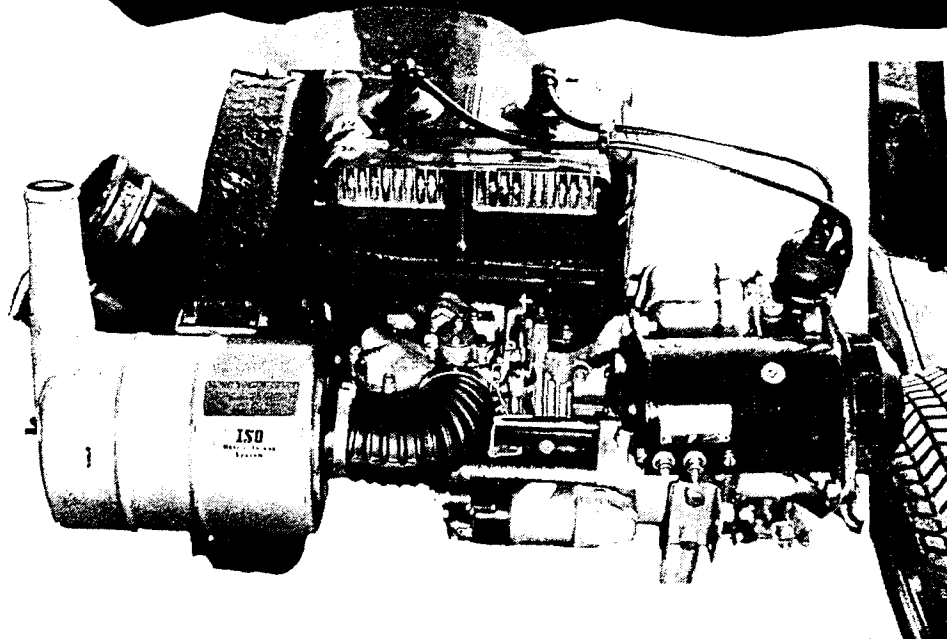
Weighing but 600 pounds, ready to run, the Burrito gets a lot of performance from its 25 horsepower engine. Body is pop riveted aluminum and offers adequate protection from off-road debris.

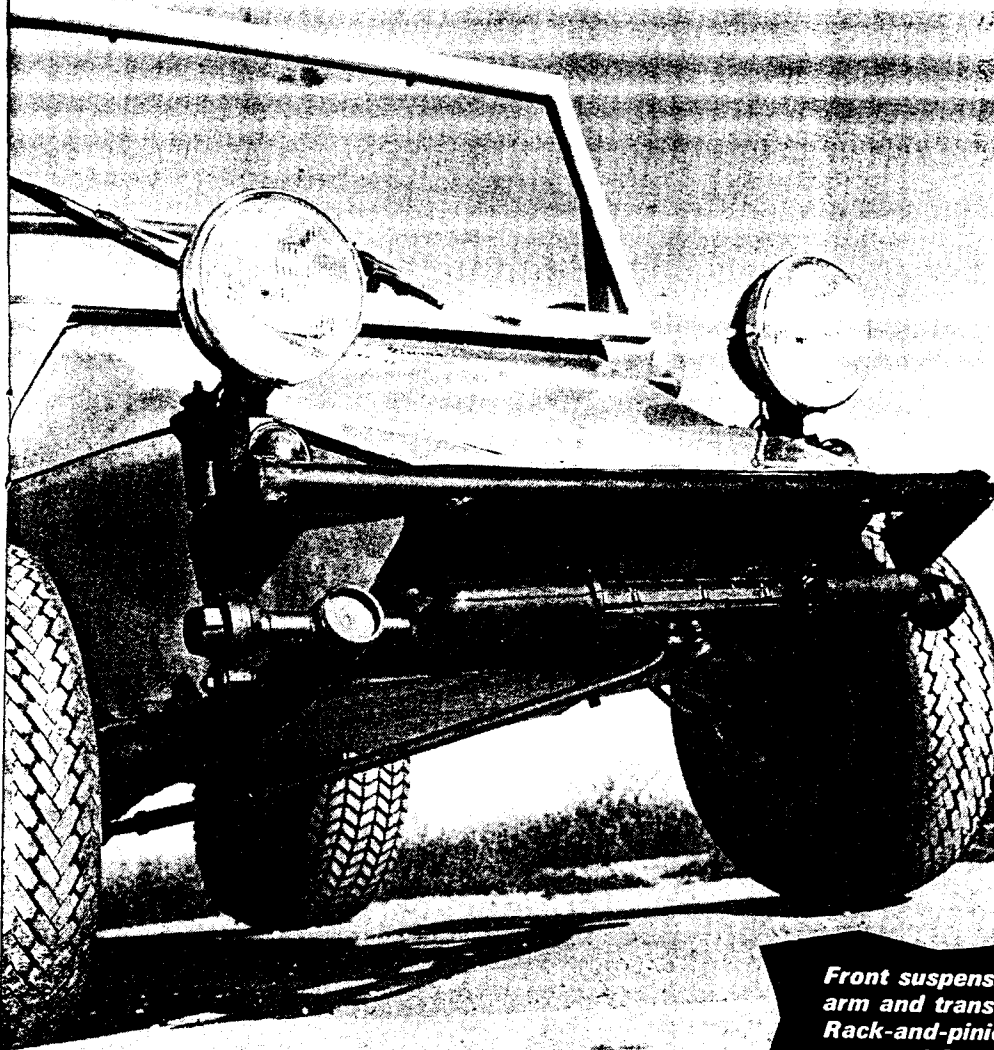
an oil injection system to the bearings and cylinder side walls that eliminates the need to mix fuel and oil as is common in many 2-strokes.

Light weight with extra beef where needed is evident throughout the entire power plant. Crankcase and cylinders are aluminum alloy, and the heads are cast iron. The crankshaft is composed of 7 pieces of high tensile steel, assembled with special tools as the connecting rod big ends are solid, running on roller bearings on the crank pins. Caged rollers are also used on the wrist pins. Six main crank bearings are ball type, and like the rod ends are pressure lubricated from a separate 2.6 quart oil tank. The engine is shrouded with a cooling duct and air is supplied from a crankshaft driven blower. Cooling fins, cast into the barrels and cylinder heads are deep and angles around the exhaust port to insure adequate cooling in this area. Intake manifold is aluminum with a multi-jet side draft carburetor, gravity fed from the 6.6 gallon fuel tank, and the exhaust manifold is cast iron.

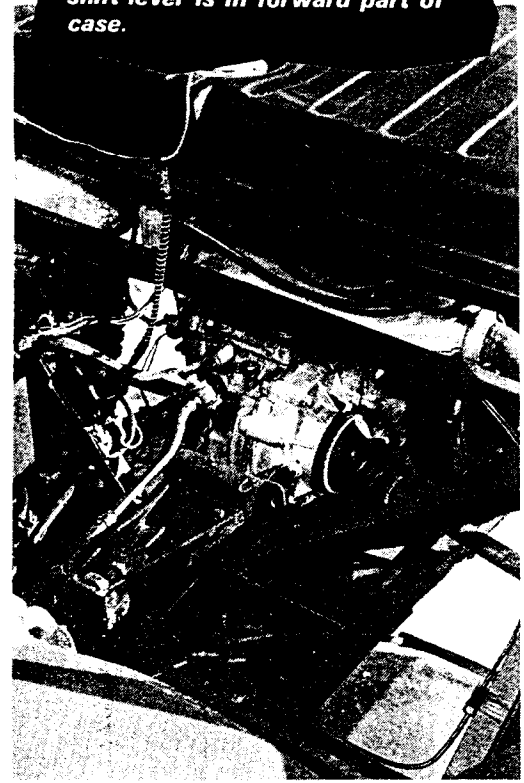
In building the Burro Burrito, the

Transverse air-cooled, vertical twin, 2-cycle engine is a very compact unit, small enough to be removed by one person without an A-frame. Large light colored "can" is air cleaner side draft carburetor, gravity fed from high mounted tank.



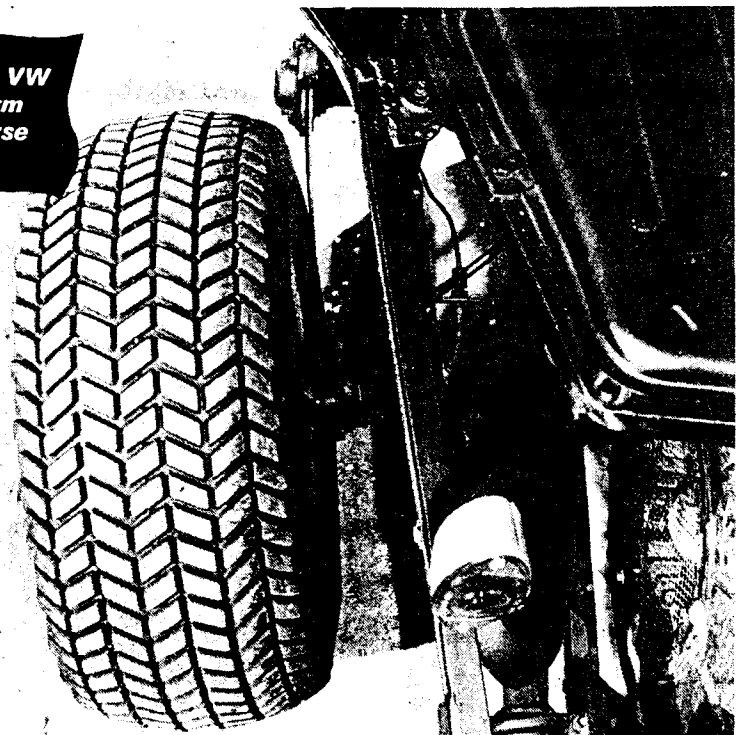
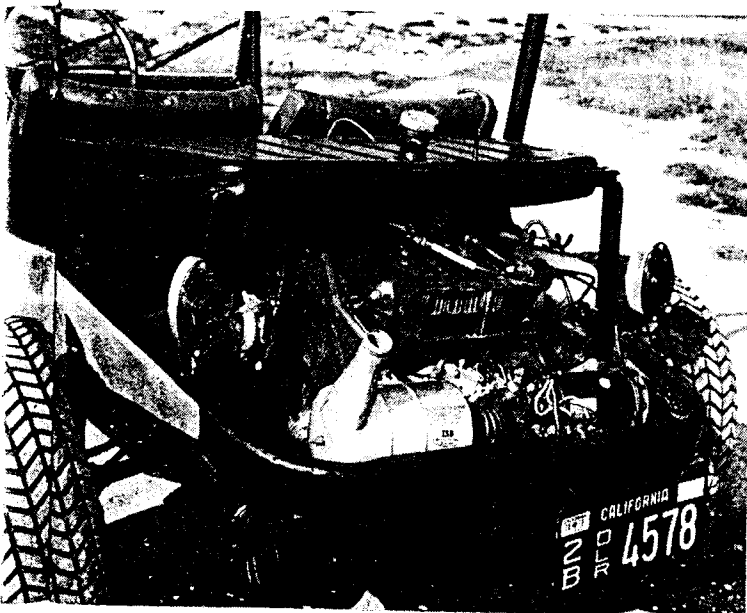


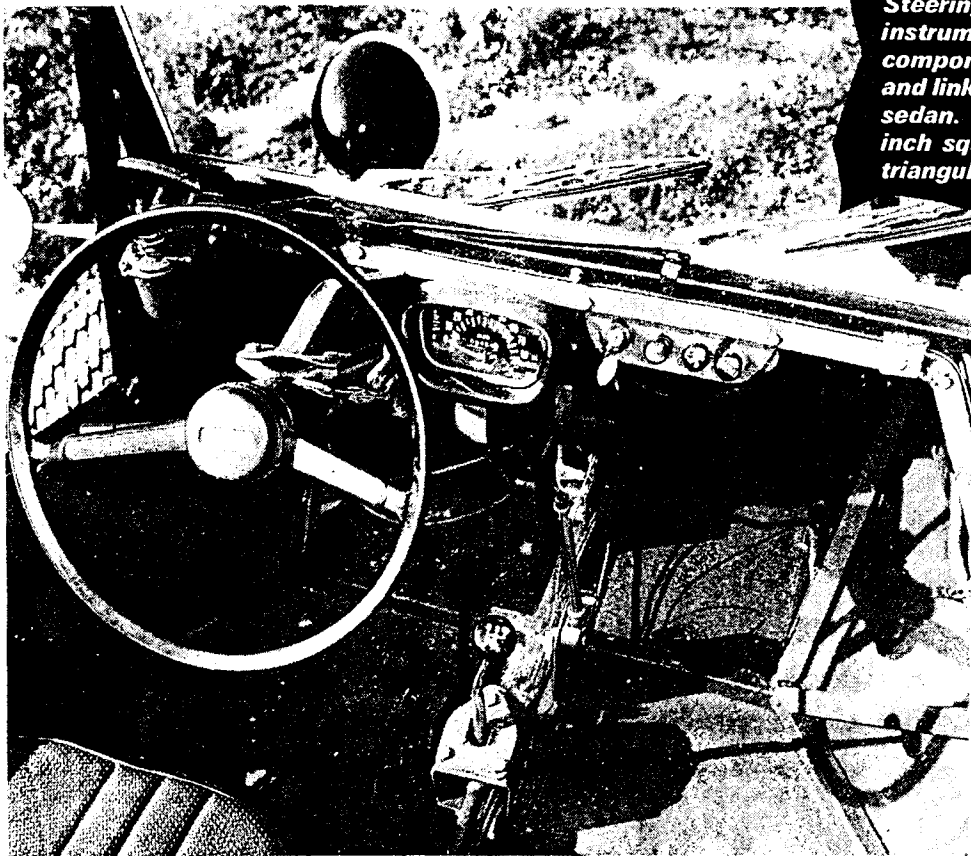
Transaxle case as well as main engine lower case is aluminum alloy, all bolt together as a single light weight unit. In-board U-joints are rubber booted and shift lever is in forward part of case.



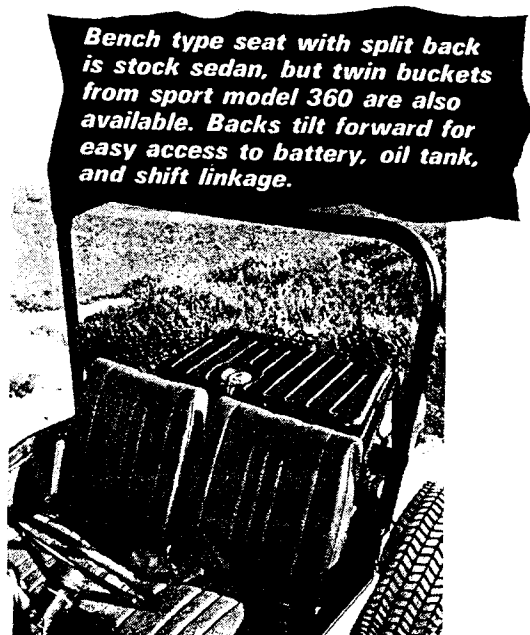
Front suspension is single trailing arm and transverse torsion bar. Rack-and-pinion steering is mounted forward of torsion tube, has center couplings for radius rods.

Rear suspension is similar to VW swing axle with plate type arm at wheel hub driving transverse torsion bar.





Steering wheel and column, instruments, and electrical components, as well as controls and linkage are from Subaru sedan. Burro built frame is 1-inch square milled steel tubing, triangulated construction.



Bench type seat with split back is stock sedan, but twin buckets from sport model 360 are also available. Backs tilt forward for easy access to battery, oil tank, and shift linkage.

Burro Co. used 1-inch square steel tubing for the frame, then covered the desired areas with pop-riveted aluminum sheets. A roll bar was added and the stock bench type sedan front seat was used. The Sport Model Subaru has twin bucket seats and they are available if desired. Stock wheels were modified by fabricating wider rims to the center section to utilize the same bolt pattern, and Goodyear Terra tires, 23 by 10.50 by 12 installed on the rear, 20 by 8.00 by 10's on the front.

With the weight reduction and the large footprint tires, the Burrito is a real off-road performer, blasting up grades and through ditches with ease. On the pavement, it drives like an open passenger car and will reach speeds of over 65 miles per hour while getting around 60 miles per gallon of regular grade fuel. Naturally, the off-road mileage will be less depending on the amount of high rpm, low gear driving, but cruising range will still be great on the small fuel tank supply.

Current marketing plans call for Subaru dealers in California to take orders and have the Burro Co. build them, using either new parts supplied by the dealer or used ones from the customer. Prices have not been set either but for further information contact: Subaru of California, Inc., 1000 West Coast Highway, Newport Beach, Calif., 92663, or Burro Company, 1353 Santiago Ave., Santa Ana, Calif.

Short wheelbase and minimum front and rear overhang, plus a good flat belly pan, gives the Burrito ability to negotiate steep drop-offs without hanging up.



MORE ON REPLACEMENT COILS: KEN FOWLES FOUND THE ff-1 coil that works on 360s at his local NAPA store - Part #IC645B, their book shows it for 1971 Subaru Star (another name for the ff-1) for \$39., but the store sold it to him for \$26. And it works great on his 360, which was experiencing problems similar to those described last issue.

MORE ON COPPER-CORE SPARK PLUG WIRES - Ken found them with the Garden Tractor parts, so you don't need to find a Speed Shop. Since most Garden Tractors don't come with radios, there is no worry about radio interference so they use copper-core wires that are more efficient and last much longer than suppression "rag-wires" used on cars & trucks.

MORE ON NIPPON-DENSO DISTRIBUTOR PARTS: Steve Caudle has to pay Suzuki more for them now, so the new price for cap & rotor set is \$25. including postage. See P. 368 in your BOOK OF REPRINTS for complete info on how to order. Points and condensers will go up when he has to order a new batch, but he still has a few sets in stock.

STEVE ALSO HAS SOME SUZUKI PISTONS THAT WILL FIT SUBARU 360s! He had some made for Suzukis by Wiseco last year. Stock size for Suzuki is 61mm, and Subaru is 61.5mm, so if you need pistons for standard bore for your Subaru 360, order the 61.5 mm size, and if you want .50 mm (.020") oversize for your 360, Steve also has a few 62mm. They cost \$320. a pair, and include rings, wrist pins and circlips. Shipping is \$9. or less to anywhere in the US. You can e-mail Steve for more info at stevec@lj10.com or write to the address on P. 368 in the BOR.

HOW TO REBUILD A MASTER CYLINDER USING BECK-ARNLEY KIT 071-3560:

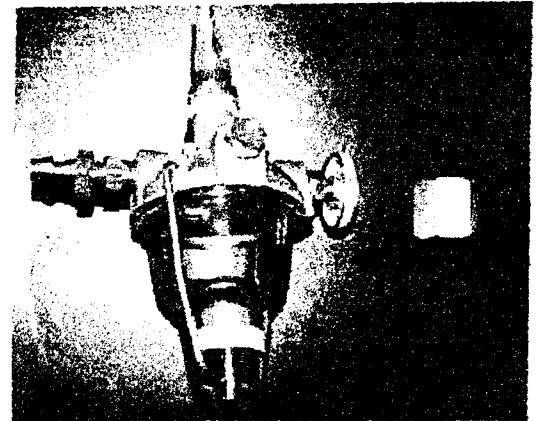
(This also requires a generic 3/4" primary cup, available locally.)

- (1) Remove the boot, snap-ring and all internal parts from your master cylinder. Be sure you get the check-valve out. See P. 93 of your BOOK OF REPRINTS for the blow-up view. Remove the plastic nipple from the top of the casting CAREFULLY. Do not discard anything.
- (2) Clean the casting well, then hone the inside lightly with a brake hone. Keep the hone moving the length of the bore as it spins. Stop the hone before removing it, and squeeze the stones together to prevent scratching the cylinder while you remove it.
- (3) If there are deep pits or scratches in the bore, get it sleeved. See P. 343 for where to get this done.
- (4) Shine a bright light into the open end of the cylinder, and look thru the hole where the plastic nipple came out. You should be able to see clearly thru 2 holes, one of which is tiny. If you cannot see thru the 2 holes, clean them with compressed air - and with a piece of thin nylon fishing line if necessary.
- (5) Put the check valve FROM THE KIT in. Side with the larger hole in the rubber should be visible thru the open end of the cylinder
- (6) Put the big spring FROM THE KIT in, with the big end resting on the check valve.
- (7) Remove the seal from the SUBARU piston, and the corresponding seal from the piston IN THE KIT. Clean the Subaru piston, and snap the new seal, coated with brake fluid, on it.
- (8) Coat a generic 3/4" primary cup with brake fluid, and insert it with the cup over the spring. Push it in with the SUBARU piston until the piston is all the way inside the cylinder.
- (9) Insert the SUBARU stop washer and snap ring, and the boot FROM THE KIT. Nothing else from the KIT goes in. The other parts from the kit will not fit, nor are they needed. Install the plastic nipple.
- (10) Bench-bleed the cylinder (See P. 356 in BOR) and the rebuilt master cylinder is ready to install in your 360.

TWO MORE ALTERNATIVES TO THE SEDAN FACTORY FUEL CONTROL VALVE:

DOUG MILLER found that fuel valve tips would not stand up to the only mix of gasoline available in his part of TN, so he made an adapter from brass hex stock to connect it to a FORD/MASSEY FERGUSON sediment bowl with shutoff valve to his gas tank. The fuel bowl/shutoff is a TSC (Tractor Supply Co.) #0236986 that costs about \$25.

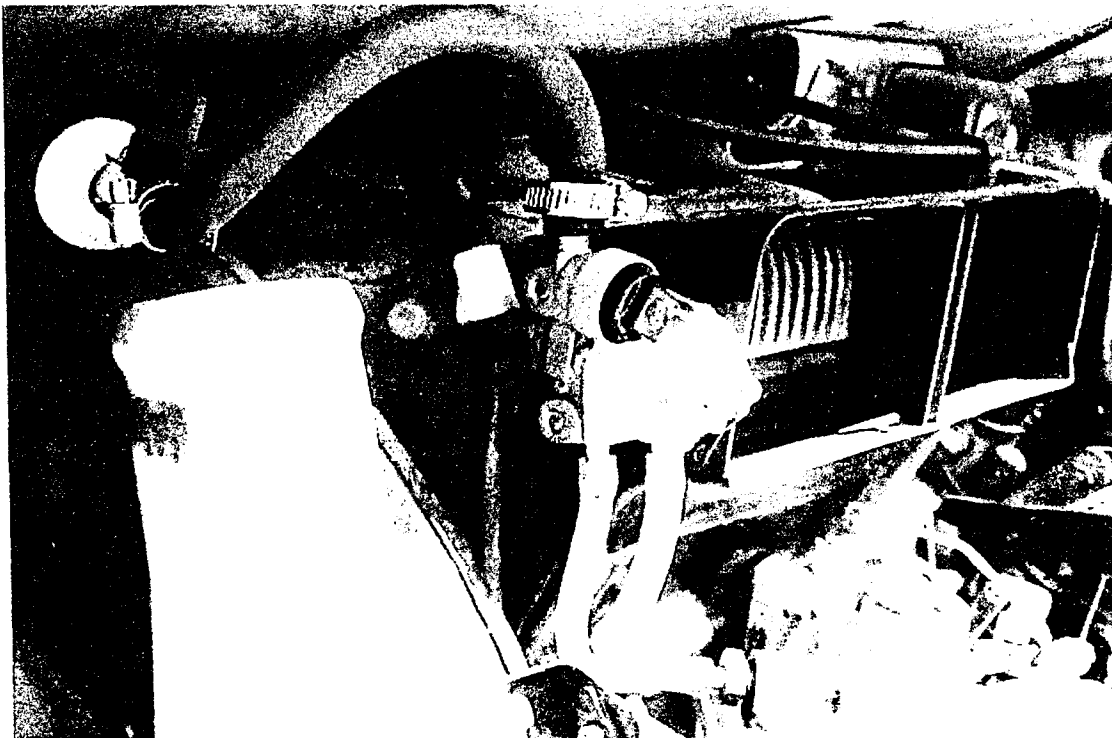
Doug made the adapter from a piece of 3/4" brass hex stock 7/8" long. He drilled one end deep enough with a 5/8" bit to thread 6 turns with an 18x1.5 metric tap for connection to the gas tank. He drilled the other side deep enough with a 9/16" bit to thread 5 turns with a 3/8" NPT tap. He used Rectorseal #5 as a sealant on the threads during installation. It stands up to gasoline and was easier to use than teflon tape given the limited clearance of the tank threads to other surrounding components.



Doug screwed a barbed hose connection into the outlet from the new unit, and ran neoprene hose directly to the carburetor. He plugged the vacuum outlet on the manifold with a rubber plug from an auto parts store. It is not necessary to block the fuel supply each time you shut off the engine, as long as the float and needle/seat in the carb work properly. But it's a good idea to shut it off overnite or when you're away.

If you want an adapter like this, but don't have the tools to fabricate it, Doug may be able to do it for you - see TN Roster4 in this issue.

LARRY SODERGREN in WI found a YAMAHA FUEL COCK ASSY. #3KJ-24500-02-00 designed for Yamaha scooters, at www.boats.net for \$28.26 including postage. He had already adapted a 1/4" fuel nipple to the tank with 2 clamps and a 2" piece of 5/8" neoprene hose. Between the tank and the carburetor, he had been using a VW inline fuel filter and a manual fuel shutoff. He added the vacuum fuel control valve between the manual shutoff and the carburetor. Photo below shows the installation.



REAR AXLE/DIFFERENTIAL SEALS ARE STILL AVAILABLE FROM SUBARU! If you need them, order #880 650 110 (for 4-speed transaxle) from any local Subaru Dealer, about \$17. If your local dealer can't be bothered, Jamie Thomas subiegal@gmail.com can get them shipped to you.

BRUCE DEWING FOUND 7mm COPPER WIRE SPARK PLUG CABLE at www.drattv.com/bucowi7so.html - it's 69 cents a foot, a good deal.

ROB LOWRY FOUND 2 online sources for the WHEEL COVERS shown on P. 337 of the BOOK OF REPRINTS:

www.cartbarn.com - click on WHEEL COVERS in left column. First one shown is 10" Ninja - same as on P. 337 - Price shown is \$59.95, this should be for a set of 4 but that is not specified.

www.store.evparts.com - click on GOLF CARTS at top of main page. When GOLF CART page shows, click on HUBCAPS in left column. 10" Ninja is in there too, \$16.37 each.

TOM RICHDALE FOUND BABY MOON HUBCAPS that will fit right on the clips of Subaru 360 rims - the only downside is you have to remove the hubcaps to get at the tire valves. But they look good, he found them for \$25. for a set of 4. If you want more details on these, e-mail Tom at xanth_princess@yahoo.com

MITCH BERESCO FOUND CLEAR RECTANGULAR LENSES, meant for interior lights on a larger vehicle but the same profile as the lenses on the front of Subaru 360 trucks & vans - at WAL-MART. He shaped the backs of the lenses on a belt sander and they fit the original fixtures perfectly. Use these with amber bulbs and you are all set.

WHERE TO FIND YOUR VIN (Vehicle Identification Number) in case your local DMV (Department of Motor Vehicles) won't believe what's on your Title or Registration: This number is the same as the CHASSIS NUMBER in the Owner's Manual, so if you have an Owner's Manual you already know where it is, but if not, read on.

SEDAN AND YOUNG: There should be a metal plate on the bulkhead under the front hood. The CHASSIS NUMBER (VIN) will be K111L +4 or 5 digits. If this plate is missing, or if the DMV insists on seeing the VIN where it is stamped into the frame, just remove the spare tire, and just below where the spare was you will see a "crossmember" to which the front suspension is attached. Right in the middle of this crossmember the number is stamped into the metal. You will probably have to use at least a soapy wet rag, or more likely a soapy toothbrush, to unearth this number from nearly 40 years accumulation of dirt that covers it.

TRUCK AND VAN: There should be a metal plate on the driver's door, just above the DOOR POCKET, with the CHASSIS NUMBER (VIN) stamped in it. On Vans, this number will be K163L +4 digits. On Pickups, it will be K153L +4 digits. If this plate is missing, or if the DMV insists on a second location, savor the moment! This is where the usual roles are reversed, and you get a bureaucrat to grovel! The VIN is stamped into the passenger side frame rail, underneath the vehicle. It's on the outside of the rail, near the front, just behind the carburetor air intake. In case you didn't know already, the air that goes in your truck or van carburetor comes in that air scoop with the screen on it, just behind the front bumper. It goes through the right frame rail, up through a pipe that fastens onto the back of the frame rail, and angles up thru the engine compartment. Originally a paper hose connected it to the air cleaner, but by now a rubber hose has probably replaced it.