

RALLY TO THE

JULY 11-14 1985

ROCKIES

COME TO BEAUTIFUL COLORADO SPRINGS IN JULY AND VISIT THE UNITED STATES AIR FORCE ACADEMY AND SHOP IN HISTORICAL MANITOU SPRINGS.

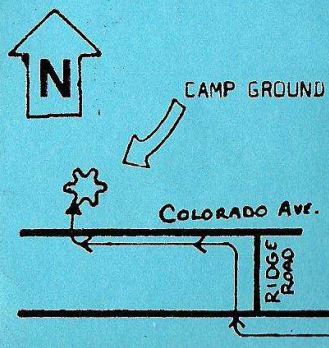
PLANNED ACTIVITIES INCLUDE: CRAFTS AND TECHSESSIONS, TOUR OF THE AIR FORCE ACADEMY, GM PROVING GROUNDS PRESENTATION, DINNER AND SHOW AT FLYING W RANCH, VISIT SHOPS IN MANITOU SPRINGS, AND YANKEE SWAP.

LOCATION: Garden of the Gods Campground
Colorado Springs, Colorado

HOSTS: Pat and Jim Wood #396*
Clare and John Hoffman #468
Simone and Hal Honer #T2038

RSVP: Wagonmaster*
1550 Waurika Circle
Colorado Springs, Colorado 80915
303/591-2407

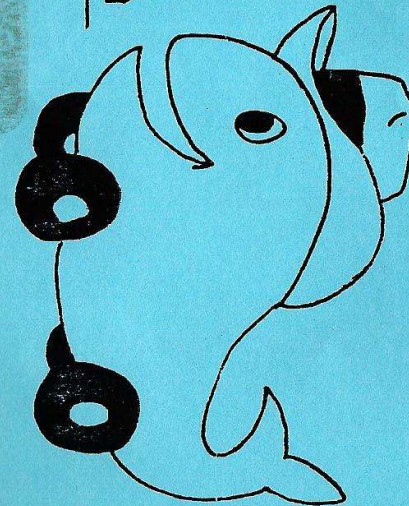
DIRECTIONS: WEST ON U.S. 24 TO
RIDGE ROAD. NORTH 1
BLOCK TO COLORADO AVE.
AND WEST 2 BLOCKS TO
ENTRANCE.



VOL IV 1199 Dunsyre drive
No.2
SPRING 85 LAFAYETTE, CALIFORNIA
94549

TO:

ULTRAVAN



WHALES ON WHEELS



WHALES ON WHEELS IS A QUARTERLY PUBLICATION OF GROUP ULTRA VAN, A CORSA CHAPTER.

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"Jim Craig's Corner"

Corvair

Spoken Here

Jim Craig #232



AFTER SNOW SEASON

Here we are in spring time already, the snows are diminishing, hopefully in your area, the countryside is taking on a new cover of green and its about time to start thinking about those trips you have always wanted to take in the "Ultra".

In order to do that, there are some maintenance checks that should be done first, so that we can be assured of a safe and trouble free trip.

The following is a list of tasks and checks that I consider the basics and of course you will probably add more of your own, just for your particular unit.

1. Wash and clean exterior and interior.
2. Check for water leaks and repair same at time of washing exterior. Visually check sealant at all seams, especially on the roof (be careful on that ladder.)
3. Liquid wax the exterior (type of wax that you add to your wash water).
4. Flush out your fresh water tank. Add 5-10 gals., and check operation of all the water pumps. Look under the

cabinets and other hidden areas for water leaks while system is pressurized. Check under coach for leaks in all the tanks.

5. Service and clean the bathroom units. Install a fresh deodorizer for the bathroom. Check the cabinet and store in fresh toothpaste, paper and etc. Don't forget the first aid kit.
6. (a) If you haven't already done so (prior to winter storage), run the engine to normal operating temp. Drain the oil and change the oil filter.
(b) Verify condition and tightness of blower belt. Replace it if there are any signs of cracking, fraying, oil contamination and etc.
(c) Lube the blower and idler pulley bearings. (See following tip on lube tool details).
(d) Check all rubber hoses and electrical wires in engine compartment for cracking, loose connections, chaffing and etc.
(e) Remove air filter/filters, blow clean or replace as necessary.
(f) Check auto. trans. fluid for proper level (only at normal operating temp.) If fluid smells like something burnt, change it.
(g) Check rear axle and 4 speed trans for proper fluid level as applicable.
(h) Check tightness of all fuel line connections at carb. (Especially the large nut on carb. that gas lines attach to). Careful now, when tightening the nut.
(i) Verify that carb. air filter container is sealed properly to the carb.
(j) Lube all throttle linkage (lubriplate is best, heavy oil last choice).
(k) Clean and lube (with lubriplate) all throttle, clutch and emergency brake cables under coach.
(l) Check throttle cable to see that it is not cutting into lower side of alum. tanks, repair as necessary.
7. (a) Check front shocks for looseness or breaks at lower connection point. Check for heavy rust on exposed chrome shaft of shocks. Clean and lube as required. Change shock if excessive oil loss is evident.
(b) Check all front suspension attach bolts for

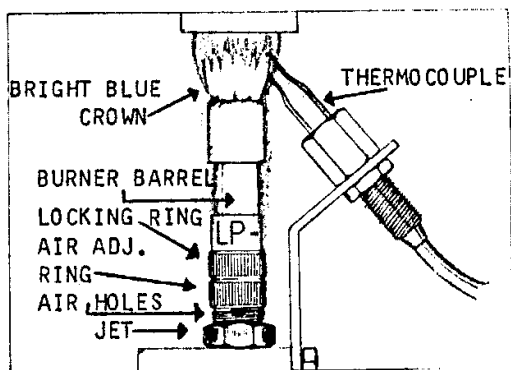
looseness or evidence of movement (rust or dark stain around head of bolt or nut).

Adjust to proper torque as necessary.

- (c) Clean and lube all suspension and steering connections (use caution if lubing the steering bellcrank on left side, too much pressure has been known to crack the casting).
 - (d) Jack front wheels off ground and check wheel bearing for looseness, adjust as necessary. Spin wheel by hand and verify that bearing is smooth and quiet, replace if suspect of rumbling, rough, noisy and etc.
 - (e) Check steering gear box for proper lube.
Note: Visually check all tires for proper wear, have alignment shop confirm any suspected problem, correct as necessary.
 - (f) Check tires for proper inflation, don't forget that spare tire. Check for jack and lug wrench.
 - (g) If it has been a long time (in excess of 8-10,000 miles since you inspected the rear "U" joints, better do it now.) Any rust stain around the bearing cup inner seal area is a sure sign you have a problem.
 - (h) Jack rear wheels off of ground, check wheel spindle bearings for proper adjustment, roughness or noise. If all appears well and your spindle assy is modified with a grease fitting, remove wheel and brake drum and lube as necessary.
 - (i) And for those with the capabilities, disassemble the spindle assy, clean and lube as necessary and reassemble to the proper preload.
 - (j) Check brake fluid reservoir for proper level.
8. Clean the windows, check operation and condition of the windshield wipers.
 9. Level the coach, check propane connections for leakage. Fire off the wall heater, refrigerator, stove, oven and water heater. Check all for proper operation, make adjustment and repairs as necessary.
 10. Fill fuel tank with at least 10 gals. of good fresh gasoline, throw in some fresh vittles, the dog or cat and the wife, not necessarily in that order and hit the road to "Anywhere America". Good Luck and Happy Ultraing - see you in Minden, NB at the National.

DOMETIC REFRIGERATOR SERVICING
(Ref. Manual-Section 4, Page
4-6 through 4-9)

Most of the Ultra's came equipped with the Dometic refrigerators and they have given good service through the years, but they do require an occasional servicing. The following are a few things that you can do that will keep it running great. This will also apply to other makes of refrigerators.



(6) The air-intake of the burner should be adjusted by means of the air adjustment rings so that a slight roaring sound is heard and so that the flame has a bright blue crown at it's base. (See above)

First, let's remove the burner assembly (See sketch) for cleaning and adjusting. Working from outside of the Ultra through the access door for the refrigerator, remove the sheet metal cover that protects the burner from excessive air movement. Remove the bolt that holds the burner assembly to the refrigerator. NOTE: Prior to unscrewing the burner, make a mental/visual note of the air adjusting ring position in relation to the air holes in the burner.

Second, Remove the burner barrel and jet from the burner base, clean both with alcohol and air pressure only. "Do not use wires or other objects to clean the jets. If the jet is obstructed and

cannot be blown out with the air, replace it." (Quote from Dometic Service Bulletin #566, Dated 8-9-66). Personally I would use a piece of fine screen wire and make an effort to remove the obstruction before actually replacing it.

Third, Prior to reinstalling the cleaned burner and jet unit, locate the baffle in boiler tube, which is directly above the burner assembly when it is installed. Shake the baffle and rattle it around to break loose as much rust as possible. A half inch diameter bottle brush can be used to assist in cleaning the tube also. (Flaking rust falling into the burner reduces its efficiency).

Fourth, Reinstall the burner and jet, adjust air ring to previous location. Install assembly to the holding bracket. Verify that the thermocouple is located 1/8 to 3/16 inch above the top of the burner head and about 1/8 inch off center to one side.

Fifth, With Ultra leveled, fire off burner and adjust as noted in item (6) of the sketch.

Sixth, Reinstall air shield on completion of adjustments.

Final, If your unit has sat dormant for a year or more or will not cool down properly, remove the complete refrigerator and turn upside down for 24 to 48 hours then reinstall. Fire it off and if it still doesn't cool down properly, start looking for a new unit. (Upside down trick is recommended by Dometic)

by: Mike McGowan
CCE AIRHORN Jan 1985

TECH TIPS
Tires by the Numbers

Size designation	Rim Width min-max (std)	Section Width	Diameter	Load Rating	
155R14	4.0-5.5	(4.5)	6.18	23.78	1010
BR78-14	4.0-5.5	(4.5)	6.25	24.70	1060
165R14	4.0-5.5	(4.5)	6.57	25.43	1120
BR78-14	4.0-5.5	(5.0)	6.93	24.88	1150
175R14	4.0-5.5	(5.0)	7.01	25.44	1230
CR78-14	4.0-5.5	(5.5)	7.01	25.44	1230
DR78-14	4.0-5.5	(5.5)	7.00	25.40	1320
185R14	4.0-5.5	(5.5)	7.20	25.59	1360
ER78-14	4.0-5.5	(5.5)	7.40	25.80	1400
195R14	4.0-5.5	(5.5)	7.40	25.80	1500
FR78-14	4.0-5.5	(5.5)	7.80	26.20	1620
205R14	4.0-5.5	(5.5)	7.85	26.30	1620
175/70R14	4.0-5.5	(5.5)	8.19	27.01	1025
185/70R14	4.0-5.5	(5.5)	8.93	27.59	1155
195/70R14	4.0-5.5	(5.5)	7.32	24.82	1230
205/70R14	4.0-5.5	(5.5)	7.65	25.64	1280
DR70-14	4.0-5.5	(5.5)	7.76	25.24	1320
BR70-14	4.0-5.5	(5.5)	7.90	25.67	1400
CR70-14	4.0-5.5	(5.5)	8.11	25.68	1400
DR70-14	4.0-5.5	(5.5)	8.10	25.67	1400
195/60R14	4.0-5.5	(5.5)	7.39	24.46	1100
185/60R14	4.0-5.5	(5.5)	7.28	23.76	1050
175/60R14	4.0-5.5	(5.5)	7.24	23.16	1060
165/60R14	4.0-5.5	(5.5)	7.70	23.23	1135
155/60R14	4.0-5.5	(5.5)	7.99	24.17	1200
185/60R14	4.0-5.5	(6.0)	8.50	24.65	1320
195/60R14	4.0-5.5	(6.0)	8.78	25.30	1500
205/60R14	4.0-5.5	(6.0)	9.35	25.59	1500
215/60R14	4.0-5.5	(6.0)	9.72	26.91	1060
225/55R14	4.0-5.5	(6.0)	7.99	23.78	1265
225/55R14	4.0-5.5	(6.0)	8.78	23.78	1265
155R15	4.0-5.5	(4.5)	6.18	24.80	1015
BR78-15	4.0-5.5	(4.5)	6.25	24.70	1060
165R15	4.0-5.5	(4.5)	6.57	25.43	1130
175/70R15	4.0-5.5	(5.0)	6.93	24.88	1090
BR70-15	4.0-5.5	(5.0)	7.10	25.14	1150
185/70R15	4.0-5.5	(5.5)	7.32	25.51	1210
CR70-15	4.0-5.5	(5.5)	7.50	25.58	1230
195-70R15	4.0-5.5	(5.5)	7.76	25.83	1320
185/65R15	4.0-5.5	(5.5)	7.28	24.45	1120
175/65R15	4.0-5.5	(5.5)	7.72	24.21	1170
165/60R15	4.0-5.5	(5.5)	7.99	24.68	1280
215/60R15	4.0-5.5	(6.0)	8.50	25.16	1320
195/50R15	4.0-5.5	(5.5)	7.72	22.72	955
205/50R15	4.0-5.5	(5.5)	7.99	23.11	1060
225/50R15	4.0-5.5	(6.0)	8.78	23.90	1230

Use this chart to determine your tire size diameter and load ratings, Now using Harold Washmuths chart you can figure what rear end ratios you want. Speedometer can be adjusted to any tire size by changing the gear in the reducer found in line behind the panel below the dash board.

Whale Tip: Summer 2-85, Tires for the Ultra (Ref. Manual-section 11, Page 11-5). There are dozens of makes and sizes of tires that could be used on the Ultra and it seems everyone has a favorite. Here are three makes that I consider premium tires, so you might like to consider them at your next tire purchase time. Also the rolling diameter is adequate to provide a match up with the Corvair engine, some V8, and 3.55:1 and 3.89:1 rear axle ratios.

Make	Size	Ply Rating	Load Range	Load Cap./PSI	Ply Contr.	Remarks
Continental	185R14	6 Ply Tubelless	C	1750 lbs at 50PSI	Tread-5 plies (2 ply rayon, 2 steel & 1 rayon) Side-wall-2 ply rayon	* "SR" means reinforced sidewall.
Continental Model RS321	195R14	6 Ply Tubelless	C	1855 lbs at 55PSI	Tread-6 plies (2 ply rayon, 4 ply steel) Sidewall-2 ply rayon	
Michelin	185SR14*	6 Ply	C	Max. load 1540 lbs at 40PSI	Tread-2 rayon & 2 steel, Sidewall-2 rayon.	

Jim Craig #232



Craig Lamond giving tech tips at campfire



Fish fry, "all you can eat" Barrett Junction Cafe



Jim Craig demonstrates his Swirl-on Van washer

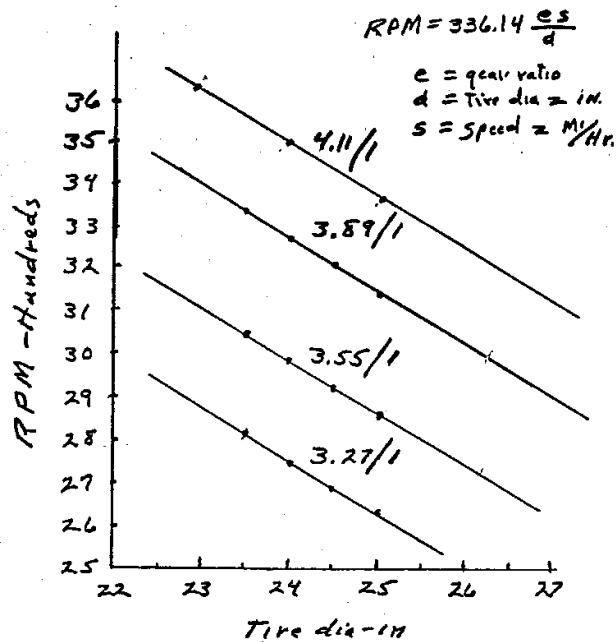


Art Eller sets up a time for his Transmission clinic

REPAIRING LATE MODEL REAR AXLES

By Dick Campbell

Harold Washmuth
Ventura County Corvoirs



RPM Vs Tire dia.
with the 4 basic gears
at 60 MPH

Harold Washmuth #326 sends this chart to figure your engine speed at 60 miles per hour, using tire diameter in inches and 4 different rear axle ratios

Are the bearings going bad in your rear axle assemblies? Do the instructions and pictures of all those pretty tools scare you? Don't be, it is a relatively easy job if you have access to an arbor or hydraulic press. My press is home made and uses a 12 ton bottle jack and works like a charm. I made most of the tools and got bar stock at the metal yard for the press work, at small cost. The only store bought tools I use are a bearing puller and bearing race driver set from J. C. Whitney, but you could make these up also. One tool, to make for use during the press work, is a blind nut to use on the threaded end of the axle. I made one from an axle nut with flat stock tack welded on. When pressing, it will keep you from mushrooming the threads. Quite a few axles have been ruined by pressing directly on the threads.

There are several things you should have before starting. Get a couple of sets of shims and two of the large spacers from Clarks. You won't need them all but you won't know which ones until you're ready to reassemble and its nice to have the parts you need ahead of time. Get the bearings, I use Timken, because they're U.S. made, part #M86649-LM67048 for the bearings and M86610-LM67010 for the races. The last G.M. bearings I got were made in Japan. The grease seals are, G.M. has the small seal #3794002, National has the small #9178S and large #9195X, and Chicago Rawhide has the large one #CR21650. You'll need grease for packing the bearings.

The job is much easier with the assembly off the car. Doing it on the car would probably take all the tools pictured in the manual. Another reason I take the assembly off is so I can blast the parts and paint everything after rust treating them. The assembly will come off the trailing arm without removing the U joint flange first. Take off the wheel, brake drum, emergency brake cable, brake line, and U joint, remove the four nuts, line up the U joint flange with the slot in the trailing arm and pull it out. Remove all the brake assembly and wheel cylinder, take off the castle nut and thick washer, put on the blind nut,

REPAIRING LATE MODEL REAR AXLES CONT.

block up the assembly on the press with about six inches of clearance under it and start pressing. You'll be pressing off the U joint flange and one bearing so it will go a little hard at first. Remember the blind nut and stop just before you get to it so it can be removed, then use a brass or nylon spacer and keep pressing until you can remove the U joint flange, then press the axle out of the housing. Take the dust shield off the housing and tap the bearing and seal out with a hammer handle. Put on the bearing puller and blind nut and press off the remaining bearing. Drive the old races out of the housing and after cleaning everything up you're ready to rebuild.

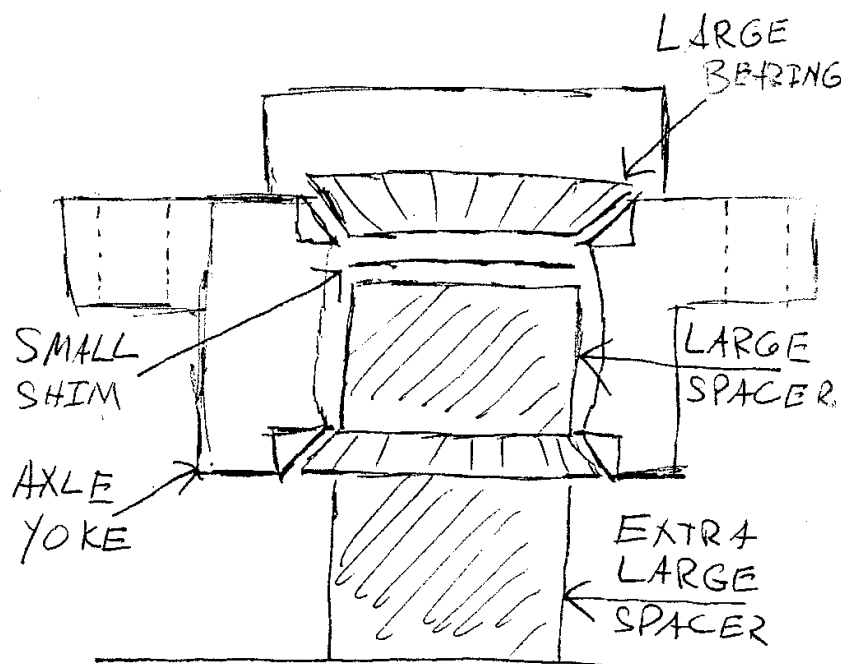
The manual says to use the special gauge to determine the thickness of the shim, but it can be done without a micrometer or dial indicator and be within the .001 to .006 recommended bearing clearance. Install the new races in the housing. Now set one of the spacers, I recommended you buy on end, set the lightly oiled small bearing on it, as it will be installed on the axle, set the spacer and shim you removed from the axle on top of the bearing and then set the housing on this stack. Set the large bearing in the housing, hold it down on the stack, grab under the housing with your fingers and lift up. There should be movement up and down. If there is no movement take the shim out and replace it with the next thicker one from the set you bought. As there is .006 difference in thickness between each of the shims in the set and if you have movement with this shim your clearance is right. If initially you have movements, then reverse the procedure until you reach the no movement stage and then go back to the next thicker shim. Simple huh?

If you are wondering why I said buy two spacers, now you will find out. After repacking the small bearing, press it on the axle with the spacer and shim on top. You will find the two spacers will be just right for doing this press operation. Reassemble in reverse order from disassembly.

REPAIRING LATE MODEL REAR AXLES CONT.

A couple of points to watch. Make sure you have the backer plate on correctly before you install the large seal, its discouraging to have to take it apart again if you forget. When installing the dust shield, pack it with grease, seems to keep water out of the bearings. If you did the job right and got plenty of grease in the bearings the job should last as long as the original bearings did.

Now that wasn't so hard, was it?



Classified

THE SECRETARY SEZ

In all my years of rebuilding and working on Corvair engines, I've tried various methods to achieve positive results. One thing, though, that I never compromised with is gaskets. I realized that a fine performing and leak-free engine depends on the type of material that is used in gaskets. There are different brands on the market today supplying the Corvair (Felpro, standard gasket, etc.), but the one I recommend is OTTO Parts gaskets. They use top quality material that is aircraft standard. It's price is a little higher than the other brands, but it sure is worth it when the end result is a leak-free engine.
Order #RS-112

Recently, while rebuilding my steering linkage, I came across an interesting situation. I had to remove the two floor boards that cover two compartments between the wheels. When I lifted the boards, I found that a rat once made its nest there. Fortunately no carcass were found, but I was determined to make sure I wasn't going to have another "visitor". A thorough inspection revealed that the rat came in thru the opening and down the channel where the bellcrank are mounted. By fabricating two pieces of aluminium sheets and riveting them inside the channel, that would keep anything from coming into that compartment.

By Dennis D'Amico

AUTOMATIC TRANSMISSION CLINIC WITH ART ELLER

Date: 1 thru 4th of July
Bring your own transmission to be rebuilt. Call Art at 213 665-3457

ULTRA VAN for sale:

Ed Martins family is selling his Van #296. The van has been sitting for quite awhile. Needs some exterior work. They are asking \$5,000.

Contact
John Rasmusson
104 Via Estrellita
Redono Beach, Ca.
213 375-6335

ULTRA VAN bumper pads (original type foam). Cut and shaped to fit. \$60.00 a pair plus tax and shipping. Also bumper pads, vinyl cover 12"x9", \$10.00 each.

Contact
Dave Peterson
93 Van Cleave Way
Oakland, Ca. 94619

ULTRA VAN washer. (See photo elsewhere in this issue). By Swirl-On, holds soap and reaches the top of the van while you stand on the ground. \$18.00 plus \$4.00 shipping.

Contact
Jim Craig
7731 Peacock Dr.
San Diego, Ca. 92123
619 571-3493

VITON "O" RINGS for Corvair engines. Member Steven McDaniel #437 has just taken over Safari-O-Rings. These are the famous "Brown" ones. He has a special for ULTRA VAN owners.

	1 set	3 or more
Head rebuild (E110 A)	\$7.95	\$7.50
Complete set (E100 A)	\$10.85	\$10.00
Includes E110A, fuel pump, 2 crankcase vents, oil cooler, seals.		

Price including postage, Washington residents, includes sales tax of 7.8%.

Make checks payable to:
Safari O-Rings
18131 W. Lake Desire Dr. S.E.
Renton, Wa. 98058
206 255-6751

CORVAIR, 1961 Lakewood station wagon. \$500, 1963
Corvair, \$1500.

Contact
Dennis D'Amico
1218 So. Electric Ave.
Alhambra, Ca. 91803
818 570-0012

FAN BELTS (for Corvair engine) Mitsuboshi fully
wrapped, correct size. \$4.00 each.

DELCO CARB KITS, for rochester carb rebuilding
\$6.00 each.

Contact
The Vair Shop
80th Ave, Box 164
Frankfort, Ill. 60423
815 469-2936

ULTRA VAN MAINTENANCE MANUALS, the most complete
and uptodate available. \$58.00 plus shipping.

GANG-NUTS for holding the holding tanks in place
on the Van. \$10.. for a set of 16.

Contact
Len O. Ryerson
18628 Rayen St.
Northridge, Ca.
818 349-5058

In regards to Jim Craigs article:

Blower & Idler Bearing Greasing Tools
order from: Dale Manufacturing
3425 Fairhaven N.E.
P.O. Box 7417
Salem, Oregon 97303
503 364-8685

1. Fan Bearing Lube Tool, #T-1, \$22.50
2. Idler Lube Tool, #T-2, \$13.54

Rebuilt rear axle assemblies. Send in your old
Corvair 65-69 axle assemblies and have them rebuilt,
with new timken bearing and new seals, new spindle
washer and nut. Assembly blasted, rust treated
and repainted semi gloss black. \$55 Plus Shipping.

Contact
Richard Campbell
16140 Saticoy St.
Van Nuys, Ca. 91406
818 786-7815

WANTED: 1961 Corvair 4 speed transmission, the one
with the low (4.26:1 ratio) gear.

Contact
Jim Craig #232
7731 Peacock Dr.
San Diego, Ca. 92123
619 571-3493

FOR SALE, 1940 House car.

218 MISCELLANEOUS CARS FOR SALE



1940 HOUSE car Chevrolet factory produced, all
wood interior, licensed, drivable, \$7,500. Fay,
PH: 619-256-7807, CA.

Classified