

The Ideal Garage Presents

Corvair

Pre-purchase Questionnaire and Checklist

Please email all comments, suggestions,
additions, and corrections
concerning this list
to
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Questions for a 65-66 Corvair Corsa

Overall

- 1) How many miles are on the car?
- 2) Is the car driveable/on the road?
 - a) If *yes*, when was the car last driven? How often does it get driven?
 - b) If *no*, when was the car last registered/inspected and on the road?
- 3) Where has the car been stored since you've owned it? In a garage? Outdoors?
- 4) What sorts of service records/other documentation exist for the car?
- 5) Can you provide contact information or a telephone number of a mechanic who has worked on the car?
- 6) What is the current asking price for the car?
- 7) Does the car have a clear title?
- 8) What is the car's VIN? (The easiest way to find the VIN is to look it up on the car's title or registration. If these are unavailable, the car's VIN is located in the engine compartment, near the battery, on a small aluminum plate riveted to the frame rail.)

Exterior: General

- 9) What color is the car?
- 10) Has the car been repainted or does it still have the original finish? If the car has been repainted, what was the original color of the car?
- 11) What is the current condition of the paint (e.g., oxidized, rust peeking through, parking lot dings, etc.)?
- 12) Has the car ever been in an accident?
- 13) Has any body-filler/putty/bondo been applied to the car? Has any other dent-repair or rust-repair work been done?
- 14) Do the doors shut evenly and cleanly? Do they sag?
- 15) What is the condition of the tires? Are they older bias-ply tires or are they radials? What is the approximate tread-depth?

Exterior: Rust

- 16) Is there any rust along the lower, rear portion of either front fender (i.e., the area behind the front wheel wells, in front of the doors, and below the chrome “corsa” script)?
- 17) Is there any rust on either of the rear quarter panels? We’ll need to look in three areas:
 - The area ahead of the rear wheel wells, behind the doors, and below the chrome “C” logo);
 - The lower edge of the quarter panel behind the rear wheel but ahead of the rear bumper; and
 - The tops of the rear wheel wells, underneath the aluminum trim.
- 18) Is there any rust on either of the rocker panels (i.e., the skinny metal panel on the outside of the car, below the doors, and just beneath the aluminum threshold with the “Body by Fisher” logo)? Please be sure to examine the entire length of each rocker panel, front to back, on both sides.
- 19) When the doors are opened, is any rust visible at the bottom of the door pillars (i.e., particularly above and below the door hinges on the front pillar)?
- 20) Is there any rust on (or peeking out from under) the chrome on the moldings around the windows?
- 21) Is there any rust at the bottom of the windshield pillars or rear window pillars?
- 22) Is there any rust in the area along the top of the hood, just below the windshield (i.e., just to the outsides of where the wiper arms are attached)?
- 23) Is there any rust on the underside of the hood?
- 24) Is there any rust on the trunk floor? Have you checked for rust under the small rubber mat on the bottom of the trunk floor?
- 25) Is there any rust on the interior floor (i.e., where the driver’s and passengers’ feet rest) or in the front fender wells where the fender well joins to the bottom of the car? Has the car ever been “up on the rack” at a mechanic’s garage to verify this?
- 26) Is there any rust in the engine compartment (specifically, in the battery area, underneath the battery)?
- 27) Is there any other rust in an area not covered above (e.g., the roof)?

Exterior: Chrome / Trim

- 28) What is the condition of the chrome on the bumpers? While we're looking, do the bumpers have bumper guards installed?
- 29) Is the exterior chrome pitted or dented (e.g., door handles, rear view mirror, etc.)?
- 30) Are any of the trim/chrome pieces missing (e.g., the rear grille underneath the back bumper or any of the chrome "Corvair", "corsa", or "C" insignias)?
- 31) Please rate the original outside trim/chrome on a scale of 1-10 with 1 being "poor" (i.e., scratched/pitted/rusty) and 10 being "bright, shiny, showroom condition".

Exterior: Windows

- 32) What is the condition of the windows? Is the glass clear with no scratches, cracks, or dings? Has the front windshield been scored by the wipers?
- 33) Are the windows tinted?
- 34) What is the condition of the rubber weatherstripping around the doors and windows? Is it cracked? Has the rubber hardened to the extent that the wind whistles through the windows while driving at highway speed?
- 35) Do any windows leak?
- 36) What is the condition of the window "fuzzies" (i.e., the felt-like material in the channels where the windows roll down)? Are they ripped, rotted, or tattered?

Interior

- 37) What color is the car's interior (i.e., seats, dash, carpet)?
- 38) What is the condition of the seats? Is the vinyl ripped?
- 39) What is the condition of the vinyl/padding on the dashboard? Is it cracked and worn?
- 40) What is the condition of the paint on the front of the dash (i.e., around the instrument cluster) and glove compartment? Is the black crackle finish scratched/chipped?
- 41) Is the chrome "corsa" script still intact on the glovebox door?
- 42) What is the condition of the plastic kick-panels (i.e., the area around the air vents by the front passengers' feet)? Is the plastic chipped, peeling, scratched, or faded?

- 43) What is the condition of the carpeting? Is it excessively worn, torn, or stained? Is it original?
- 44) Are the original rubber floor mats still in the car? Front and Rear? What is their condition?
- 45) What is the condition of the small chrome & black console around the shifter? Is it dirty and scuffed? Is the black paint peeling away?
- 46) What is the condition of the interior door panels and arm-rests (i.e., front and rear)? Is the vinyl cracked, cut, or torn? Is it bowing out or pulling away from the inside of the door along the top or bottom edges?
- 47) What is the condition of the steering wheel? Other than the minor scratches that come with age, is there a gap or large crack in the wheel? Is the horn button intact?
- 48) Are seatbelts installed? Front? Front/Rear? Other (retractable, shoulder)?
- 49) What is the condition of the headliner? Is it ripped, torn, discolored, or sagging in any way?
- 50) Is the dome light and cover in good shape? Has the chrome peeled away from the base?

Engine

- 51) Which drivetrain is installed in the car (e.g., 140/3spd, 140/4spd, 180/4spd)?
- 52) Is the engine in running condition?
- 53) When was the engine last run?
- 54) Has the engine ever been rebuilt? If so, how many miles are on the car since the rebuild?
- 55) Have the cylinder heads ever been rebuilt? If so, who did the work? Were the valve seats replaced?
- 56) Has the harmonic balancer been replaced?
- 57) Have the O-rings been replaced?
- 58) Does the engine "lubricate your garage floor" (i.e., leak oil)?
- 59) Would you say that the engine is a strong runner or does it suffer from "tired Corvair engine syndrome" (e.g., compression loss, smoking, carbs perpetually out of synchronization, etc.)?
- 60) Please rate the engine on a scale of 1-10 (with 1 being "poor" and 10 being "I'd let my Mom make a long, solo trip in it")?

Transmission / Clutch

- 61) Has a new clutch been installed or any major transmission repair work been done?
- 62) Is the car a smooth, solid shifter or is shifting excessively loose and/or difficult in any way (e.g., "you really have to 'jam it' to get it into third")?
- 63) Is the gearbox noise-free or does it scream/squeal when starting up in 1st or Reverse?
- 64) Please rate the transmission/clutch on a scale of 1-10 (with 1 being "poor" and 10 being "recently rebuilt")?

Other Mechanicals

- 65) What is the condition of the gas tank? Is it rusty?
- 66) Has the fuel pump ever been replaced?
- 67) How are the other mechanicals? Specifically:
 - Mufflers/exhaust?
 - Brakes?
 - Shock absorbers/springs?
 - Steering? Is it loose? Is there excessive play in the wheel?
 - Alignment? Does the car pull to one side?
 - Battery?
 - Alternator?
 - Starter?
 - General electrical? Any intermittent shorts? Do the turn signals work?
- 68) Have any of the above ever been rebuilt/replaced/repaired?

Special Options

- 69) Is the car air-conditioned? If so, does the A/C still function? Is all the A/C hardware (e.g., condenser, compressor, evaporator, etc.) still installed in the engine compartment?
- 70) What kind of hubcaps/wheel covers are installed? The full chrome covers that were standard on Corsa models? The optional wire wheel covers w/3-prong spinners? The optional "mag" wheel covers? Are any wheel covers missing?

71) Are there any other noteworthy options installed in the car? These would include:

- Wood steering wheel
- Telescoping steering column (with or without wood steering wheel)
- Quick-ratio steering
- Positraction
- Heavy-duty suspension
- AM/FM radio
- Rear speaker(s)
- Stereo multiplex
- Rear antenna (manual)
- Rear antenna (power)
- Head rests
- Remote control outside rear-view mirror
- Exterior rear deck luggage rack
- Trailer hitch
- Spare tire lock
- 4-way flasher
- Tissue dispenser

Onsite Inspection / Test Drive Checklist

Check the VIN

- ☞ *Before you start crawling around under the car, look closely at the VIN to verify that the car is a true Corsa and not a converted Monza (or 500 Model).*

- 1) The first six numbers of the VIN of a true Corsa should appear as follows:

A "7" in this position indicates the car is a Corsa.

107376W100025

The next two numbers indicate the car's body style. "37" = coupe and "67" = convertible.

In the example above:

- If the number in the third position of the VIN is not a "7", the car is not an original Corsa:
 - If the number is a "5", the car is a converted Monza.
 - If the number is a "1", the car is a converted 500 model.
- The two numbers immediately following the "7" indicate the body style.
- The next number, just before the letter, indicates the car's model year (i.e., 5 = 1965, 6 = 1966).
- The letter following the first six numbers indicates the assembly plant at which the car was built (e.g., W = Willow Run).
- The final six numbers indicate the unit number of the car. Since 1965 and 1966 VIN build sequences started at 100,000, the car in the example above would have been the 25th Corvair model built at the Willow Run assembly plant in 1966.

For additional assistance in decoding a Corvair's VIN, please see Mike Kellstrand's excellent VIN decoder at http://www.mkellstrand.com/corvairs/resources/vin/vin_decoder.html

Items to Be Reviewed Onsite

- ☞ *Tools that should be brought to the onsite inspection include standard and Phillips head screwdrivers, pliers, an adjustable wrench, a refrigerator magnet, a flashlight, a notepad and pen, and something to lie on. If the car hasn't been started in awhile, you should also bring starter fluid, WD-40, a new set of points, a gap tool, jumper cables, and a fresh, strong battery. Other useful items would include a floor jack, the Shop Manual, and, if you have one, a digital camera.*

- 1) Once you're satisfied that the car is a true Corsa, use a refrigerator magnet to check for the use of bondo or other filler. Pay particular attention to the areas mentioned in Questions 16-22 above. Also, are there any pull hammer holes?
- 2) Regardless of what the owner might have told you on the phone, check for rust-through in the door pillars again. Rust in this area is difficult to fix, if not impossible. *It is structural.*
- 3) Likewise, regardless of what the owner might have said, take another good look for rust along the rocker panels. If these need to be replaced, the price will be considerably more for labor and paint — 4-5 times more — than the replacement cost of the rockers themselves. (Please also take a moment to look at the special notes on convertible rocker panels in the "[Additional Convertible Checklist](#)" section of this document.)
- 4) Look for rust along the front edge of the dash, where the dash meets the windshield. Be sure to look from outside the car (i.e., through the glass) as well as from the inside. If the front edge of the dash is rusty, it's a sure sign that the windshield is leaking or has leaked in the past.
- 5) Open the engine compartment and wiggle and pull on the carburetor/accelerator linkage. If the carburetor throttle shafts, cross shaft linkage, and accelerator linkage (bushings) are loose, it may adversely impact your ability to adjust the carburetors properly.
- 6) While you're in the engine compartment, look to see if an aftermarket fuel filter is installed. The use of an inline fuel filter can indicate the presence of a rusty or crud-filled fuel tank.
- 7) Open the trunk and take a close look for a leaky master brake cylinder (or slave cylinders). In particular, look for rust under the seam sealer directly under the master brake cylinder. Brake fluid can migrate under the sealer and start to rust, more or less out of sight. You can usually pull the sealer away enough to tell if it has.
- 8) On the inside, look at the condition of the rubber on the clutch, brake, and gas pedals. If the odometer has turned way past 100,000, these will be well worn and you may not be looking at "original" miles. It's possible, of course, to replace these, but somehow folks never do.
- 9) In addition to copying down the VIN, be sure to copy down the information on the car's body tag. Decoding the body tag info can help you identify any alterations, additions, and deletions made to the car since it left the factory. A good explanation of the information listed on the body tags (and build sheets) of Corvairs can be found on Rad Davis' website located at <http://www.mindspring.com/~corvair/buildsheet.html>.

The Test Drive

- 10) If possible, ask the seller to allow you to test drive the car from a cold start. You'll be more likely to hear knocks and rattles from the engine (e.g., lifters) when the car is cold.
- 11) Before or during your test drive, don't forget to check the following easy-to-forget items:
 - Do the speedometer, odometer, and trip odometer all work?

- Does the gas gauge work?
 - Do the turn signals work? Do they continue to work when left on for 10-20 seconds?
 - Does the turn signal cancel work? In both directions?
 - Do the windshield wipers work? How about the windshield washer?
 - Does the radio work?
 - If the clock is working, go out and buy a lottery ticket: it's your lucky day.
 - Finally, run the heater/defrost full blast. Does the fan blow? Does the heat/defrost work well? When the engine is running, does the heater smell of oil, exhaust, or gasoline? (Don't forget to open the rear heater outlet as well.)
- 12) When finishing the test drive, pick a straight, flat stretch of road and coast with the engine off. Listen closely for noises from the bearings.

Powerglide Transmissions

- 13) If the car has an automatic transmission, be sure to check the shift points during your test drive and to listen for any noises.
- 14) After the test drive, pull the dipstick to check the color of the fluid. It is important to check the dipstick after the drive because when Powerglides sit for extended periods of time, the fluid tends to drain from the torque converter into the transmission itself. The dipstick will probably read on the high side until the engine has been run and the torque converter has filled up again.

If the fluid on the dipstick is brown, the transmission has, in all likelihood, overheated at some point in its past. The fluid on the dipstick should also not have a burned smell which, again, would be indicative of past overheating and a suspect transmission. If the fluid is the normal reddish-pinkish color and has no burned smell, everything should be okay.

A Few (Potentially) Abusive Tests to Be Performed Onsite

- ☞ *Performing the following tests requires the permission of the seller. Removing body parts and poking around with garden hoses and screwdrivers should not be undertaken unless you have a serious interest in purchasing the car. Some of these test may appear to be excessive, but if it is to end up being your car, don't you want to know for sure before you buy?*
- 15) Ask the seller if you can spray the windshield and rear window with a garden hose. It might be an awkward request, but it's important to do since late model Corvair windshields are prone to leaking and you should know if the car is a leaker before deciding on an offer. Another giveaway for a present or former leaker would be a mildewed carpet.

- 16) Ask the seller if you can you can remove the sheet metal panels in either corner of the trunk, just over the parking lights. Removing the panels will allow you to check for rust and/or shabby body repairs underneath. While you can look for damage of this sort during the outer body inspection, if the front has been covered well with bondo it might be difficult to tell. An inside look tells the story.
- 17) Check for rust in the front crossmember. Use a hammer or screwdriver to probe the center of the crossmember for softness.
- 18) Do a “hard, Harder, HARDEST” brake test to simulate how the brake system is likely to behave in a panic stop. It is critical to ask the seller's permission before stomping on the brake, however, since performing this test might very well rupture a brake line. To perform the test, step on the brake pedal and hold it. The pedal should go part way to the floor and then offer firm resistance, with no softening. Next, increase the pressure, verifying again that the pedal holds steady. Finally, release the brake pedal and then stomp on it as hard as you would in an emergency stop. While this test runs the risk of blowing out a brake line, stressing the system is particularly important if you're thinking about driving the car home. *“Know before you go.”*

Making the Offer

- 19) If possible, log onto Virtual Vairs and describe the car's condition and features to the group before making an offer. Be sure to share the VIN and body tag info as well as the notes you wrote down and any digital pictures you took. Asking questions on VV will allow you to get several informed opinions about what a fair price might be for the car.
- 20) As far as general Corvair pricing goes, Joel Rushworth, of Western Canada CORSA, has an excellent no-nonsense formula:

“Start at \$5,000 (more or less) and deduct \$500 for every rust bubble bigger than a dime and \$1,000 for holes bigger than a coffee cup.”
- 21) Notwithstanding the above, your offer will be relative to the seller's asking price, of course. When developing your “opening price”, be sure to factor in any and all replacement and repair costs you have identified (e.g., interior, speedometer cable, windshield, etc.).
- 22) If, in the end, the seller refuses your final offer, remember that the market for Corvairs is not as active as, say, the market for Corvettes. There's a good possibility that yours maybe the only credible offer the seller receives and that you may only need to wait until his or her expectations adjust accordingly. Before leaving, be sure to leave your phone number in case the seller changes his or her mind.

Convertible Checklist

Rocker Panels on a Corvair Convertible

- ☞ *There's no getting around it: Whether you're purchasing an early or late model Corvair convertible, the most critical areas to examine are the rocker panels.*

To understand the importance of this, put the top down, open both doors and look at the section of the convertible from side to side in the door sill area. The floor pan is flat, from wall to wall. There is nothing structural in this area to offer any resistance to the bending and flexing of the rest of the car's body. The only support is provided by the rocker panels. For all practical purposes, then, even though the Corvair is technically a "unibody", the rocker panels are the frame of the car.

The rockers consist of three long pieces of steel: an inner panel, an outer panel, and a center web. The panels are made of .110"-thick steel (i.e., just under $\frac{1}{8}$ "). Of the three pieces, the straight vertical web carries more stress than the curved inner and outer panels. If the Corvair Convertible you're looking at has been neglected to the extent that rust has eaten through $\frac{1}{8}$ " of material and has made a visible hole on the outside, you don't have to be a "rocker rocket scientist" to make a good guess about the condition of the center web.

Replacing the rockers on a convertible can be especially costly because, again, the rockers form the car's frame. To replace them, everything will have to be held together in perfect alignment while new parts are welded in. Otherwise, the doors won't shut, the top won't line up properly, etc.

So...

- 1) *The most important thing to do when looking at a convertible, is to pay attention to any flex in the body. Open both doors and stand up inside the car while the is top down. Better yet, ask the seller to join you. The doors should continue to close cleanly and evenly and shouldn't bind.*
- 2) *In addition to the "stand up inside" test, visually check the clearance between the doors and jambs. Tightness and chipped paint at the top of the jamb are indications that the car is sagging due to rust in the rocker panels.*

Other Questions to Ask and Items to Be Reviewed Onsite When Buying a Corvair Convertible

- 3) Does the car have a manual or power top?
 - a) If the convertible is equipped with a power top, does the power top work? Does it go all the way up and down cleanly and completely? Run it for two full cycles to be sure (or ask the seller to do so).

- b) If the car has a manual top, be sure that the hold down latches are present and intact on both sides. These latches help hold the manual top down and are necessary because manual tops are counterbalanced by springs (for easy operation). Without the hold downs, the top will not seat properly and will not stay all the way down.
- 4) Does the convertible top need to be replaced? Are all the fasteners in place?
 - 5) Is the back window reasonably clear and usable/legal?
 - 6) Does the rear window zipper work? Is it torn at the seams?
 - 7) It might be awkward, but ask the seller if you can spray the top and all areas where the windows meet the weatherstripping with a garden hose. Please note that most Late Model Corvair convertibles *will* leak a little. However, the leakage should be of the “drip, drip, drip” variety, and not something like the bow of the boat during The Perfect Storm.
 - 8) Make sure all four weight canisters are still installed in the convertible. The weight canisters are intended to absorb vibration from the convertible body and help to keep the car quiet. They should be installed in the four corners of the car in the engine compartment and trunk. A Corvair convertible with missing dampeners might be suspect because:
 - a) The car may have been in an accident and the body shop was too lazy to put them back; or
 - b) The car was owned in the past by someone who removed them without knowing what they were for. Who knows what else he/she did that you can't see?
 - 9) Finally, does the seller store the top boot with the car? If not, remember to get it if/when you purchase the car.

Turbo Checklist

First, Confirm It's a Factory Turbo

- 1) The best way to verify that a car is a true turbo (and not a 180-hp engine dropped into another car), is to look at the body tag. There is no indication of Turbo vs 140 in the VIN.

The body tag is riveted to a frame rail in the engine compartment, behind the engine. Normally the body tag is on the right side of the car, just behind the distributor, but it could also be on the left side on '65 models.

Examples of body tags from valid, factory turbo cars appear as follows:

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ST 65-10767   WRN       2421 Body
TR 785-
W2L3C4FU05W
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ST 65-10767   WRN       2230 Body Paint
TR 733-                               E-1
W2L3C4UO
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In all cases for a valid turbo, the letter 'O' (turbo option) should appear on the last line of the body tag (after the number 4, but before the number 5).

- 2) You can also look at the serial number on the engine. It should end with the suffix "RL." (If it ends in "YR" then the engine is from an earlier 150 hp model.)
- 3) An original 180 compressor housing should have a plate with number ending in '709' on the induction side. (The exact GM part # for the turbo listed on the tag should be 3856709.)
- 4) The exhaust side housing's exhaust packing should be just that: a packing and not a flat gasket. The flat gasket was used on the 150.
- 5) The carb on a turbo was originally the Carter YH single-barrel sidedraft. Its linkage and top cover bolts are commonly chromed. If it hasn't been touched with carb cleaner, the factory black paint should still be intact all over the carb body and air horn, with the throttle body being the exception.
- 6) Look for the return line from the fuel filter that goes all the way back to the gas tank.
- 7) On a true turbo, there should be a factory body cutout on the right rear for the tailpipe. Feel along the top of the cutout, there should be 2-3 layers of metal all together at the top and a wide spot on the top area above the outlet. If it feels like it was cut out with tin snips, it probably was and the car is not a factory turbo Corsa.
- 8) Inspect the car's interior and find the high-temperature warning buzzer located on the bulkhead above the driver's feet (next to the headlight dimmer switch).

Confirm That the Turbo is Complete

- 9) After you're satisfied the car is a factory turbo, verify that the turbo unit is original and complete. Items to look for include:
- a) There should be a $\frac{3}{16}$ " fuel line running from the 3rd port on the gas filter (on the bracket under the air cleaner) all the way back to the gas tank. This acts as an excess fuel pressure relief during unboosted conditions.
 - b) There should be a plastic $\frac{1}{8}$ " line from the driver's side head to the manifold vac./pressure gauge. This line may also exist on 140 (4 x 1-bbl) engines as both have identical Corsa instrument panels.
 - c) Look at the heads and verify that there is NO outlet on the opposite side of where the two vacuum outlets are tapped and brass fittings installed. If there are round plugs, the car probably has 110 heads installed. Please note that this isn't necessarily bad, but it's not original either.
 - d) Other small parts to look for include the bracket under the air filter that also serves as a bracket mount for the fuel filter.
 - e) Look at the pressure retard canister and observe if the hose is bulged on the end due to a hose barb, intended to keep the hose on the end of the canister. If the hose looks smooth and pulls off easily and no barb is present on the canister, the distributor might be in question.
 - f) The fan shroud should have an oval opening on the driver's side of center where the top hose attaches (instead of the 3" round hose on the passenger side of a normal late-model car). Be aware, however, that late-model A/C cars also used this oval opening and hose.
 - g) The heat shield is important, but unfortunately its mounting tabs to the turbo have a habit of breaking.
 - h) The turbo oil drain tube should be present. It is angled and mounted through a unique boss on the passenger's side head.
 - i) Both the 140 and 180 have the 12-plate oil cooler.
 - j) There should be a 180 decal on the air cleaner. (The '66 sticker may be different from a '65.)
 - k) If only for amusement purposes, please note that the turbo hood emblem on a '65 has arrows turning counter-clockwise. The arrows on a '66 turn clockwise.
 - l) Finally, as long as you're checking, it's worth noting that no turbo cars ever came w/Powerglide, although some had a 3-speed.

Prepare for the Test Drive

- 10) Determine the last time the car was run as well as how often it has been run lately. If the car has been driven infrequently:
 - a) Examine the rubber on the induction tube hose between the turbo and the tube to the heads to make sure it isn't rotten. This will affect performance during the test drive.
 - b) Look for or ask about poor (stale) fuel, dirty oil, clogged air filter, poor shifting ability, dirty plugs, poor quality plug wires from non-use.
 - c) If you can, investigate the pressure retard diaphragm and inspect the fuel lines, both into the car and back to the tank. Also look for a bad diaphragm in the carb and take a moment to examine the tip of the needle/seat.

Start the Car and Take the Test Drive

- 11) The car should start well cold in addition to hot. This could be affected, however, by the choke and/or the rest of the tune up, including the fuel pump.
- 12) Verify that there's not an excessive amount of black smoke belching from the car. Problems here could be caused by carbon build-up or the pump diaphragm being bad, a tank full of bad gas, or the lack of a tune-up.
- 13) Verify that the turbo boost actually kicks in during hard acceleration. During the test drive:
 - a) Get the engine warmed up, and shift into 3rd gear (or, better, 4th gear) for testing purposes.
 - b) Rev the engine to 3,000 rpm (or 60mph) and put your foot to the floor and count to four. By the time you say "four" you should be showing positive pressure on the gauge. If you don't, lots of things can be wrong including the turbo being tied up, an exhaust leak, a plugged muffler, and/or all points mentioned above regarding tune-ups, bad wires, air filters, leaks, improperly adjusted accelerator linkage, and so on.

Checklist for Cars That Have Not Been Run for Awhile

Engine/Lubrication

- 1) Make sure that you have a $\frac{3}{4}$ " open-end wrench in your toolkit to put on the bolt on the crank. Cranking by hand *first* allows you to see if the engine turns freely before trying it with the starter. If the engine moves, then proceed.
- 2) Check the oil level and, after looking at the dipstick, wipe it clean. Look for a varnish look to the dipstick. If the dipstick does not wipe clean, the car's oil was probably not changed regularly. If the oil level is up and the quality of the oil looks okay, then hook up the battery.
- 3) Pull the coil wire and spin the engine with the starter a few times. This will allow you to listen for uneven compression (the "ka-thump" sound). The oil pressure will also come up from the spinning and will lubricate the engine.
- 4) At a minimum, crank the engine long enough until the oil light goes out.
- 5) To help avoid wearing out both the battery and starter motor, you can also turn the oil pump with an electric drill to bring up the oil pressure. Start the procedure by noting the position of the distributor and then removing it. Next, take a long rod with one end ground into a flat bit and chuck it in your electric drill. Finally, engage the flat bit into the oil pump at the bottom where the distributor shaft engages it, and run the oil pump for at least two minutes. This may seem excessive, but it avoids subjecting the car to an unlubricated start.

Fuel

- 6) While spinning the engine, check the carburetors to make sure they are functioning. You can spin the engine enough to prime the carbs or you can pour a little gas into the carb throats to prime them. Alternatively, you can use a squeeze bottle or a syringe to fill the float bowls with gas through the bowl vents. If the bowls are filled and the car starts and dies quickly, you will know that you either need a fuel pump or have a stopped up pickup and/or strainer in the tank.
- 7) To rule out a clogged fuel tank pickup or strainer, or if you are looking over a car with unknown gas quality, attach a piece of steel fuel line to the fuel pump inlet and connect a piece of rubber hose to the steel line. Attaching a hose in this manner and dropping the hose into a fresh can of gas offers several advantages:
 - First and foremost, in terms of starting diagnostics, you can be confident that good fuel is going to the carbs;
 - You can avoid clogging up the fuel line stones with debris;
 - You can avoid gumming up the internal parts of the engine (e.g., valve stems) with old gas and varnish; and

- You can avoid difficult-to-pinpoint fuel delivery problems that occur when the fuel tank is empty or gummed up or the strainer is blocked.

If you don't want to go to the trouble of putting together a specialized piece of steel fuel line with a rubber hose attached, you can also jack up the car on the left rear corner. Using pliers, disconnect the rubber body fuel line from the metal fuel line that runs into the engine compartment. Attach a long section of rubber hose to the metal fuel line and secure it with a hose clamp. Drop the other end of the hose into a can of fresh, new premium gas.

- 8) The accelerator pump cups can also dry out from lack of moisture and use. Because the car won't be driveable without accelerator pumps, check for the pump squirt by manually working the linkage while looking down the carb throat.
- 9) In addition to all of the above, it can be useful to take along a can of starting fluid (a.k.a., ether).

Electrical Systems

- 10) Try all the electrical systems. Turn on the heater fan and watch for debris to blow out of the ducts. Some dust would be okay, but too much could be evidence of mice in the ducts.
- 11) Once you have confirmed the operation of the fundamental electrical systems, hook up the coil wire and see if the engine fires.
- 12) Don't be discouraged if you can't get it to start right away. Check to see if the points are oxidized. If this is the case no spark is being delivered to the plugs. Pull the cap, examine the points, clean them if necessary, and use your gap tool to re-gap the points, if necessary.
- 13) Despite all of the above precautions, you might still need to crank the engine a long time to get it oiled and started so remember to pack a pair of jumper cables in your tool kit.

You Got the Car to Start. Now Turn It Back Off and Let's Think About General Safety...

- 14) Brakes tend to freeze up if the car has not been driven in a while. Inspect the master cylinder and confirm that there is fluid in it. If there is no fluid, you can add a little and check the pedal pressure. Don't be surprised, however, if the brake pedal feels very hard and then moves.....all the way to the floor. Brake repair on a Corvair is straightforward, but please bear in mind that this must be attended to before even contemplating a test drive.
- 15) Examine the car's front end and steering components. It is common for the lower ball joints and idler arms to wear. Give a good, firm tug on the tie rod ends to see if they feel loose. If so, these will need to be repaired before driving the car.
- 16) If the car is equipped with a Powerglide, check the parking/emergency brake. The parking brake will need to be operational since there is no Park-position detent on the transmission.

If You Can't Get the Car to Start, Are You Still Interested?

17) If you can't get the Corvair to start, then you can't take the it for a "run around the block" to check things out. If this happens, there will be many unanswerable questions, including the quality and functioning of the:

- Engine (e.g., knocking, compression, etc.)
- Transmission
- Differential
- Carburetors
- Steering and suspension
- Wheel bearings
- Etc.

A cautious buyer should assume that all components that are unknown and untestable will have to be repaired or replaced and therefore should have little other than salvage value.

18) In this case, it's time to manage the expectations of the seller. It should be delicately pointed out that:

- Anyone who is trying to sell a car, and
- Who is not willing to get the car running and driveable in order for it to be assessed properly by prospective buyers,
- Should be amenable to, if not expecting, salvage-type offers only.

Unless you're looking at a *rarissimo* model (e.g., a '66 Turbo Convertible), there are still enough Corvairs out there that it's usually worth it to wait, rather than take on a real project.