



# The **PUSHROD**

Monthly Publication of  
The Milwaukee Corvair Club  
[www.milwaukeeclub.com](http://www.milwaukeeclub.com)

CORSA Chapter 532

February 2009

## "Sweets" Auction Friday!!!

## Anniversary Dinner A Success!



# From The Front Seat

by Walt Baranowski  
MCC President

Well - the party's over! Last night (February 7<sup>th</sup>) we held our 39<sup>th</sup> Anniversary party at Albanese's Road House. Twenty-five folks attended this event on a balmy spring evening. The food and companionship was, as always, great. The highlight of the evening was honoring Jim Kasten for his 20 years as MCC Treasurer. Jim was presented a Life Membership plaque. My thanks to all who participated in this, our annual event. And special thanks to Jim and Gail Stranc, who came all the way from Trempealeau, Wisconsin, to spend the evening with us. It was my pleasure to meet you both, and talk Corvairs.

On Friday, January 30<sup>th</sup>, during our monthly meeting, we enjoyed an informative and entertaining presentation on the Corvair, courtesy of Larry Claypool of the Vair Shop. Larry also held a Q & A session after the presentation. Ken Frenz, member and owner of Cousin's Subs in Muskego, provided sub sandwiches for all in attendance. This was the largest attendance at a meeting in my four years of club membership. Thanks, Larry for a great presentation! Also - a BIG thanks to Jim Ott, for bringing in the electronics to facilitate the presentation.

On February 4<sup>th</sup>, invitations were sent to the Corvair clubs in IL, IA, MI, MN and WI, inviting them to participate in our 50th Corvair Birthday Party. **This is an important undertaking, and will take the commitment of all available club members to make it a success.** We will need **volunteers** to **work** registration tables, **sell** coffee and donuts in the morning hours, **park** cars, **tally** votes for awards, and many other jobs. Please contact any club officer and let them know what you would like to volunteer for.

**NEWS ALERT:** Dick Reinders has again welcomed the club to use his wonderful facilities for our bi-annual picnic. The date has been set for Sunday, August 16<sup>th</sup>, 2009. Further details will be published as they become available. Please mark your calendars now for this important (and enjoyable – Ed.) date.

**REMINDER:** Friday, February 27<sup>th</sup> is this month's meeting date. It is also our "Sweets Auction", which is our major fund raising activity for the year. Last year we raised \$311.00. Let's see if we can beat that mark this year. Bring an item or items (doesn't have to be edible) to auction off, and your checkbook and/or wallet to pay for your treats. I look forward to seeing you all at the meeting!

- February 27 - "Sweets" Auction
- March 27 - Nominations for Officers and Board Members
- April 24 - Election of Officers and Board Members.
- May 29 - Monthly Meeting - How 'bout a Custard Cruise?
- June 26 - PLBC @ Ken Frenz's Cousin Subs in Muskego - BE THERE!
- July 31 - Monthly Meeting - **Any ideas?**
- August 8 - Kingdom Kar Klub Show/Sheboygan - Corvair to be the featured marquee - BE THERE!
- August 16 - Club Picnic @ Dick Reinders - BE THERE!
- August 28 - Monthly Meeting – **Any ideas?**
- September 20 - Beloit Autorama
- September 25 - Monthly Meeting – **Any Ideas?**
- October 3 - Corvair 50th Birthday Party - Holz Motors/Hales Corners - BE THERE!
- October ? - Fall Tour - date and details TBD



## Newsletter Editor Stepping Down

Another note to remind all that I will be stepping down as Newsletter editor with the release of the March 2009 issue. Here is a Golden Opportunity for someone who enjoys writing to show their creative talents and make a contribution as well.

I will be available to provide mailing lists, graphics, software, and advice if needed. Please contact myself ([pvsinger@hotmail.com](mailto:pvsinger@hotmail.com)) or club president Walt Baranowski ([wbaranowskijr@yahoo.com](mailto:wbaranowskijr@yahoo.com)) if interested.

# Corvair Tech Corner

By Andy Kinzelman

This month Andy, **master of the three-hour Corvair engine swap**, submits his “quick and dirty” instructions for removing a Corvair engine (as first step in a swap, sending motor out for rebuild, painting engine compartment, etc.). I used these instructions recently to help a fellow Corvair enthusiast remove the motor from his '64 Spyder convertible. I asked for some instructions from Andy, as I have not participated in one of these events for a couple of years, and needed some memory refreshment. As it turns out, Andy's memory is much better than mine – I tried to skip a few steps, with most unsatisfactory results. Andy's instructions are below in black, with my comments in blue.

## Corvair EM Engine Removal (as I recall)

1. Start by purchasing (3) 3/8-16 x 4” bolts. Cut off the heads and round off the resulting bolt bodies (to act as guidepins). Cut screwdriver slots into **both** ends. Clean up any burrs from this operation.
  2. Disconnect battery. Remove spare tire and air cleaner assembly – cover carb(s).
  3. Disconnect the following from the top side of the engine:
    - Large battery negative connection at or near generator or alternator.
    - Two wires to generator or alternator.
    - Wire to coil.
    - One or two plugs for sensor wires near coil.
    - Any ground straps from the body to the engine shrouding.
    - Short 3” air hose from front of top shroud to firewall.
  4. Remove front (shroud) seal retainer from bottom of firewall – full length across.  
(Hard to get wrench on screw directly behind turbo on turbo engines – use small ignition wrench and plenty of patience. Seal also has stiff asbestos strip to keep turbo heat from melting rubber seal underneath – makes removal even more challenging)
  5. Jack up back of car & place securely onto jack stands. Rock car around to ensure jack stands are stable – you don't want the car to fall onto you!
  6. At bottom of car – do the following:
    - Remove rear lower grille.
    - Remove motor mount cover (at rear center of engine).
    - Remove side shroud seal retainers – on both sides of car.
    - Remove rear shroud seal retainer.
    - Disconnect three wires from starter.
  7. Remove starter. Set aside. (Starter **must** be removed – bolts go through differential, screw into engine bell housing. Upper bolt hard to remove – use 3/8” ratchet, extensions, universal joint. Thread removed starter around axle/lower suspension)
  8. Disconnect both lower 4” heater hoses – tuck up out of the way if possible.
  9. Remove 4” hose connectors from both sides – three screws each (Hard to remove on Turbo side on turbo motor. Use 1/4” ratchet, extensions, universal joint, and lots of cursing to remove topmost screw – May have to bend connector a bit to get clearance for socket wrench)
  10. Disconnect fuel line from car to engine – this is a rubber hose connection near the starter.
  11. Remove exhaust pipe(s) & muffler(s). (**DON'T** skip this step! Crossover actually runs **behind** differential mating surface Guaranteed that something expensive will **break** if you try to remove engine w/x-over installed)
  12. If the car has a manual transmission:
    - Remove the bolts holding the clutch rod dust cover to the bell housing.
  13. Remove retainer straps from U-joints to axles.
  14. Remove rear tires & brake drums from car.
- Note: brake hardware does not have to be removed for the following steps.
15. Rotate axle so hole in wheel flange (where the wheel studs mount) aligns with axle (bearing keeper) retainer nuts
  16. Remove four nuts from each side, turning wheel flange hole to expose each nut.
  17. Just start to slide axle bearing from A-arm.
  18. Separate U-joint from axle. As the parts get farther apart – wrap tape around bearing cups on U-joints. Do not slide axles further out yet.
  19. Remove throttle rod from bell crank on transmission.
  20. Remove rear tunnel cover (under car).
  21. Remove next throttle rod from pivot (under tunnel cover) to trans bell crank. Set aside.
  22. Remove cotter pins from two transmission mounts. Loosen nuts – but keep nearly full thread engagement.
  23. Remove cotter pin (if used) from rear engine mount vertical bolt (or stud). Loosen nut – again keeping nearly full thread engagement.

Note: If powerglide equipped – remove nut holding dipstick tube to bell housing. '64 or '65 w/diff. dipstick, watch union of tube to diff. – may have to loosen to enable smooth removal

**If only engine is to be removed from car do the following from the top side:**

1. Disconnect throttle rod from carb cross shaft. Remove throttle rod from car – set aside.
2. Remove fan belt.
3. Disconnect & remove gas line to fuel pump.
4. Pull large starter wire through (rubber) grommet (in black engine “firewall” cover).
5. Unplug plug going to other two starter wires – let hang in grommet.
6. If powerglide equipped – remove grommet for modulator line through front shroud. Remove rubber hose from vacuum balance tube to modulator line. Remove PG dipstick.
  - If a '64 or '65 model w/differential dipstick – remove dipstick.
7. Remove bolt(s) holding center of vacuum balance tube. Remove tube from car – set aside.
8. Remove 3” hose outlet from front of top shroud – set aside.
9. Remove screws & bolts holding front shroud to side shrouds & engine.
10. Remove front shroud – be careful of modulator line & dipstick tubes (if applicable). Set aside.
11. Remove bolt at top of bell housing (four bell housing bolts total). Screw in one of the guide pins made previously.
  - Ensure back of car is lifted high enough to remove engine (on jack or cart) from underneath.
  - Front of car may be raised up at front crossmember to allow better control of initial engine removal. (Strongly recommend that if you are fortunate enough to have a lift, use spacers to raise front of car up higher than rear to prevent binding)
  - Barely loosen remaining bell housing bolts. Remove one side & one bottom bolt – screw in guide pins (small screwdriver may be put through threads from front side to screw in pins). Try to have the guide pins spread apart to help maintain stable alignment.
  - Support engine on jack (or cart, or ATV lift). If using only a floor jack – spread the load with a length of 2 x 6 wood (also protects oil pan).
  - Remove (rear) engine mount nut.
  - Remove remaining bolts from bell housing.

Lower engine (it will angle down in the back) until the engine can be slid off of the transaxle. The guide pins will help keep everything in alignment. If a manual trans – ensure input shaft stays with transaxle. Similarly, for a PG trans – ensure the center torque converter drive tube stays with the transaxle.

Remove engine from beneath car. Place a jack stand or other support under differential to keep it in its normal orientation – don't leave it hanging.

Before reinstalling engine – I recommend cutting screwdriver slots in the two side bell housing bolts – they can then be screwed in with a small screwdriver (as the guide pins were screwed in). However, use a proper wrench to tighten them. (Forget about head end of right side bolt on turbo motor – NO room to get even a stubby screwdriver in that space. Use 12-point box wrench or ratcheting box wrench to remove the passenger side middle bolt – slot on threaded end of bolt should make engine install much easier, however)

**Jim's Treasurer's Report**

	<u>INCOME</u>	<u>January '09 EXPENSES</u>	<u>BALANCE</u>
<b>Budget Fund:</b>			
Beg. Bal.			\$ 3,780.14
Dues	\$30.00		
Pushrod		\$40.00	
End Bal.			\$ 3,770.14
<b>General Fund:</b>			
Beg. Bal.			\$ 655.16
39th Anniv. Party	\$144.00	\$464.45	
Special Raffle	\$88.00		
Accrued Interest '08	\$4.09		
Accommodations - Larry C.		\$100.00	
End Bal.			\$ 326.80
<b>Car Show Fund:</b>			
End Bal.			\$ 500.00
<b>MCC TOTAL ASSETS</b>			<b><u>\$ 4,596.94</u></b>

---

## Upcoming Club Events

### February 2009

February 27<sup>th</sup> - Monthly Meeting/**Sweets Auction**

### March

March 9<sup>th</sup> - Pushrod Submission Deadline

March 27<sup>th</sup> - Monthly Meeting/**Club Officer Nominations**

### April

24<sup>th</sup> - Monthly Meeting/**Elections**

### May

29<sup>th</sup> - Monthly Meeting/**Custard Run?**

---

### More Shots From This Year's Anniversary Dinner:





**The Milwaukee Corvair Club**  
**c/o Vince Singer**  
**1504 32<sup>nd</sup> St.**  
**Lubbock, TX 79411**



**Milwaukee Corvair Club 2008-2009 Officers**

<b>President:</b>	Walt Baranowski	262-547-6420
<b>Vice President:</b>	Lee Sharafinski	414-491-4571
<b>Treasurer:</b>	Jim Kasten	414-762-7989
<b>Secretary:</b>	Andy Kinzelman	262-637-0876
<b>Librarian:</b>	Walt Baranowski	262-547-6420
<b>Board:</b>	Chris Hockerman	262-246-8172
	Ken Frenz	262-534-3047
	Chip Ostrand	248-672-6601
	Mike Treptow	414-540-6761
<b>Photographer:</b>	Jim Ott	414-425-6169
<b>Sunshine:</b>	Lee Sharafinski	414-491-4571
<b>Webmaster:</b>	Dave Schneider	262-308-1874
<b>Newsletter Editor:</b>	Vince Singer	<a href="mailto:pvsinger@hotmail.com">pvsinger@hotmail.com</a>

- We meet the last Friday of each month (except December) at: **WaterStone** (Wauwatosa Savings) **Bank**, located at: **6560 S. 27<sup>th</sup> St., Oak Creek, WI.**
- Meetings start at 8:00PM sharp.
- Membership is \$18.00 annually, due in May.
- The Milwaukee Corvair Club is an affiliate club of: **The Corvair Society of America** (CORSA, [www.corvair.org](http://www.corvair.org)), and encourages individual membership