



The

Dagmar



The monthly newsletter for the Rocky Mountain Region Cadillac & LaSalle Club

APRIL 2012



Rebuilding a 429

Continued from the March issue...

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MONTHLY MEETINGS

Regular business meetings of the Rocky Mountain Region Cadillac and LaSalle Club are held on the second Tuesday of each month. We meet at the Elks Lodge at 2475 W. 26th. Ave. in Denver. The meetings begin at 7:00 PM with a dinner served beginning at 6:00 PM for those interested. The meetings are open to the entire membership.

THE DAGMAR

The Dagmar is published monthly except December and mailed First Class to all RMRCLC members on the current roster. The Dagmar is copyright ©2012 Rocky Mountain Region Cadillac and LaSalle Club. Other CLC Regions may reprint articles without permission as long as attribution is given. The deadline for submission is the 25th day of the month prior to issue date. ALL RMRCLC members are encouraged to submit articles, letters and photos to the Editor for publication.

ADVERTISING

Display ads are \$15 per issue or \$125 per year prepaid for a business card size ad. Larger ads are available (contact the Editor for more information).

CLASSIFIED ADS

ALL CLC members are welcome to submit Cadillac and LaSalle related ads. The ads are FREE for Rocky Mountain Region members for three months and are \$20 prepaid for non-members for three consecutive months.

WEB SITE

Be sure to visit our web site at www.rmrclc.com and the national site at www.cadillacclasalleclub.org.

NEWS IN BRIEF

FROM WAYNE SHMITKA: EARLY RVs

My wife, Vonnie and I enjoy road trips with our RV with all the comforts of home. When I came across this picture of an earlier car and trailer combination, I paused to think what a RV road trip would have been like back in it's day!



FROM NANCY TUCKER: CADILLAC SHOES

The attached photo is one page of a two-page spread in Vogue Magazine, featuring the Cadillac shoe designed by Prada. In true Cadillac style it retails for \$1450 and comes in an assortment of colors. A must for every ('59) Caddie owner or spouse!

I think we should offer an award for the person who can afford the shoes and who is able to wear them for an entire meet...maybe the show at Sheplers or the Golden Cruise???



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DIRECTOR'S MESSAGE FROM JOHN SERFLING

Since we don't have any activities planned for April, I don't have the opportunity to encourage you to attend an event. Instead, I will encourage you to take your tool box to the garage where you keep your old Cadillac or LaSalle and start preparing it for the driving season, which has suddenly been sprung upon us. It's not quite summer, but it sure isn't winter any more. The daffodils are in bloom, the tulips are budded, the flowering plums are perfuming the air and soon the crab apples will burst into a riot of pink and white. It is definitely time to get out the list from last summer and start correcting the problems that you should have taken care of then. Here is what I have been up to:

March 5th dawned clear, sunny and warm. By noon it was nearly 70 degrees so I walked to my storage garage to see how well the '63 convertible had survived the winter. Of course she was covered with dust and the garage floor was discolored from some fluid, but was it motor oil, transmission fluid or anti-freeze? Actually, it was a combination of all three. Fortunately, the anti-freeze was just from the overflow tank. A new hose clamp seems to have solved that problem. The transmission had lost about a pint over the winter, like it always does. Not much motor oil had dripped. I removed the air cleaner and then set the choke to an appropriate position. I turned the key to 'on' and let the electric fuel pump fill the carburetor bowl. Then I turned the key to 'start' and she fired right up. How gratifying! Everything worked

well. I added transmission fluid and a little gas and off we went on our first drive of the year.

Last May the turn signals in my convertible quit working. I noticed it shortly after having the oil changed. I assumed that the mechanic had forced the lever and broken something, but I really didn't want to dig into it and find out that I would have to buy an expensive part. I lived without turn signals all of last summer. This is Denver. No one uses turn signals, so who would notice? I did use hand signals as much as possible. Recently, I worked up the courage to find the problem. I got lucky. The Bowden cable that connects the turn signal plate just under the steering wheel to the switch on the steering column near the firewall had come off of its mounting on the plate. Once I figured out how to get to the plate, which was no easy matter for me, it was a simple fix. I have turn signals again!

Having experienced a modicum of success I decided it was time to tackle a problem with the '70 Eldorado. The car had been making a clicking sound under acceleration. I assumed this was a sticking valve lifter, which I wouldn't tackle, but Bill Woodman informed me it was a failed exhaust manifold gasket. Do you have any idea how expensive these gaskets are? The pair cost me almost \$9! Before I got around to working on the Eldorado I was browsing the '63-'64 Region web site. There was an article about removing the exhaust manifold from a '63 Cadillac. The shop manual

suggested removing the engine, but clever mechanics have figured out that you can get to the right side bolts by removing the right wheel and well. Oh, that's just what I want to do on my Eldorado—NOT. Once you get to the bolts, they are probably next to impossible to remove from the heads. More good news. Fortunately, the Eldorado is more mechanic friendly. You can get to all of the bolts. None of them were stuck, either. As I loosened bolts, pieces of gasket would fall out from under the manifold. Perhaps Bill was right. The worst part of the job was holding the heavy, cast iron manifolds in place while also holding the gaskets and trying to insert the first bolt. The bolts aim up, so if you let go of one before the treads engage, it falls out of its hole. No bad words were used in the completion of the job. Life is good when something works like it is supposed to. This did indeed fix the clicking noise.

We continue to meet at the Denver Elks Lodge on 26th Ave, near Speer Blvd. and I-25. For those of you who haven't joined us yet or it has been a while since you joined us, the Elks Lodge serves soup and salad, beef or bison hamburgers, fries and dessert for only \$10. Those of you who only want soup and salad can have it for \$5. We really do have a good time at the dinner, so please join us. The meeting portion of the evening begins at 7 (or whenever I get around to starting it), and we rarely go much past 7:45. I hope to see you at the April meeting. ♦





SECRETARY'S MONTHLY MEETING MINUTES FROM NANCY TUCKER

ROCKY MOUNTAIN REGION CADILLAC & LA SALLE CLUB MONTHLY MEETING MINUTES

March 13, 2012

Vice President Brad Bauer called the meeting to order at 7:00 p.m. The meeting was held at the Elk's Lodge. There were 23 in attendance.

SECRETARY'S REPORT: Minutes from last meeting are posted in The Dagmar and on the RMRCLC website.

MEMBERSHIP REPORT: Janice Olson said we have 64 paid members and she will be sending out annual dues reminders to those who have not paid.

CCCC REPORT: No report.

OLD BUSINESS/NEW BUSINESS:

- Jim Salmi reviewed the February annual member brunch in which 31 attended. He discussed and asked for suggestions for the coming year.
- Bob Lyons suggested that we promote the club with a kiosk at various events. The suggestion was well received and we discussed having one at the Colfax and Havana cruises and will look into other venues.
- Leonard Johnson said that Mark McCaddon would like to move our Regional meet to sometime in August to coincide with the opening of the newly remodeled dealership. The suggestion was enthusiastically approved.
- The Golden Cruise event is tentatively scheduled for July 7. However, there is rumor that Golden is going to entirely cancel the cruise. Leonard Johnson suggested we attend the informal car show held east of Boulder at 95th and Arapahoe the first Saturday of each month, with cars arriving between 7:30 and 8:00 a.m.
- Brad Bauer mentioned a car show proposed at the Landmark area in Greenwood Village. Organizers want a \$40 registration fee, which Brad told them was far too expensive. If they do reconsider, it was suggested that we participate.
- Members discussed a new car show the 2nd Saturday of the month near the Jaguar dealership and the Dairy Queen on S. Broadway between Bellevue and Littleton Blvd.
- Bill Bowser advised us of a car auction in Brighton on 3/31 as well as an auction 3/24 at 5095 Colorado Blvd.
- Brad Bauer suggested we repeat Bob Lyon's Nederland driving tour again this year.
- Nancy Tucker asked members if they would be interested in another tour of the Wild Animal Sanctuary in Keensburg now that the new raised walkway connects the main area to the Bolivian lion habitat. She and Jeanne Tiffany will organize the event for late July.
- John Cullinan suggested an outing to Colorado Springs to tour car museums and the old airport.
- Bob Lyons mentioned car events at Rosie's Diner in Aurora at Iliff & 225.
- George Dameron said that James Sears is feeling better and recently attended an Olds Club breakfast. He will be moving in the next few weeks to Evans and Colorado Blvd.

UPCOMING EVENTS: (See page 5 for the latest list of Proposed Events)

National Board Meeting hosted in Denver – January 10-12-2013. Tim Coy gave an update. The Westin Westminster has been approved and rooms are available to all members at \$89/night. Agenda will include bus tours on Thursday and half day Friday to the Tebo collection (if he is not moving), as well as the collections of Cussler and Brewer. Friday will include the Molly Brown House as well as Rickenbaugh service department, if not remodeling. There will be a dinner at the hotel Friday night. All members are encouraged to attend and to help host the event, including a hospitality suite at the hotel.

CHRISTMAS CHARITY PROJECT:

\$64 was donated to the fund.

The meeting was adjourned.

Respectfully submitted,

Nancy Tucker, Secretary





ACTIVITIES FROM JIM SALMI

Rocky Mountain Region CLC 2012 Proposed Activities

(as of March 30, 2012)

Proposed Activities:	Leader:	Date:
Shepler's BPOC Show and Shine	Olds Club (www.rockymtnoldsclub.org)	May 12
Memorial Day Parade	Jim Salmi (303.758.8930)	May 26
Pueblo Area Tour	John Washburn (303.646.6105)	June 7-10
	Art Cutler (303.470.6271)	
Grand National (St. Augustine, FL)	N/A	June 13-16
Havana Cruise	Bob Lyons (303.337.7319)	June 16
Father's Day Car Show	Blaise Flaherty (303.805.8850)	June 17
Golden Cruise (or Bdw'y)?	Brad Bauer (303.791.1516)	July 7 0?
Tune-up Clinic	John Washburn (303.646.6105)	July/Aug ?
Wildlife Sanctuary Tour	Nancy Tucker (303.394.2557)	July 28
	Jeanne Tiffany (303.452.4148)	
VFW Cookout	John Evans (303.425.9515)	Aug 4
Colo. Yellow Ribbon Event	J. Salmi (303.758.8930)	Aug 11
Regional Meet/McCaddon Cadillac	Leonard Johnson (303.438.6632)	Aug ?
Labor Day Parade (Louisville)	Tim Coy (303.673.0011)	Sep 3
	John Evans (303.425.9515)	
Colfax Cruise/Picnic @ East High School	Bob Lyons (303.337.7319)	Sep 15
	Brad Bauer (303.791.1516)	
National Driving Tour (Las Vegas, NV)	N/A	Oct 13-14
Veterans Day Parade	Jim Salmi (303.758.8930)	Nov 10
N/A = Not Applicable		

OTHER 2012 CAR RELATED ACTIVITIES (Not RMRCLC Events)

Other car related activities, as published in Old Cars Weekly, Hemmings, CCCC, Denver Post or from other sources.
Please verify accuracy before attending.

1st Sat ~ Boulder, CO Informal car show, S.W. corner of Hwy 42 & Arapahoe, 8am-12pm on the first Saturday of the month.

April 14 ~ Westminster, CO Ms Wheelchair Colorado Car Show., Westminster Senior Center, 72nd & Hooker St., Noon-3pm

May 6 ~ Golden, CO Great Machine Car Show, Arapahoe Park, 44th & Indiana

Rocky Mountain Nova Club, www.rockymountainnovaclub.com

May 11-12 ~ Denver, CO Specialty & Collector Car Auction, National Western Complex, www.everettdickensheet@gmail.com

May 12 ~ Gateway, CO Gateway Canyons Classic, Gateway Canyons Resort,

1-hour southwest of Grand Junction on Hwy 141, www.gatewayautomuseum.com

May 19 ~ Canon City, CO Antique & Special Interest Car Show, The Abbey, 2951 East Hwy 50, VMCCA is sponsor

June 8-10 ~ Loveland, CO Goodguys Colorado Nationals, Larimer Cnty Fairgrounds

June 10 ~ Monument, CO Benefit Car Show, downtown Monument

June 22-24 ~ Pueblo, CO R. M. Street Rod Nationals, State Fairgrounds

July 4 ~ Arvada, CO Olde Town Arvada Spirit of America Car Show, Stenger/Lutz Complex, 58th & Kipling

July 11-14 ~ Westminster, CO Buick Skylark Club Meet, Springhill Suites by Marriott, www.skylarkclub.org

July 29 ~ Golden, CO Orphan Car Show, downtown Golden, Washington between 10th and 11th.

July 29-30 ~ Denver, CO Colorado Collector Car Auction, Denver Merchandise Mart, 451 East 58th Ave.

Aug 11 ~ Centennial, CO All Mopar Car Show, Southglenn, 7001 So. University Blvd. 10am-2pm

Aug 18 ~ Front Range Airport, CO F.R. Aircraft and Car Show, 8am-2pm

Oct 6 ~ Loveland, CO Specialty Auto Auction, Larimer Cnty Fairgrounds

Visit us on the web at www.RMRCLC.com





PUEBLO TOUR: JUNE 7TH THRU THE 10TH

FROM JOHN WASHBURN

The Rocky Mountain Region of the Cadillac & LaSalle Club is sponsoring a tour to Pueblo, Colorado. The event organizers are Bill Woodman (of Pueblo Colorado), Art Cutler (of Highlands Ranch) and John and Martha Washburn (of Elizabeth, Colorado). John Cullinan, who will provide adult leadership, is planning a short driving tour, on Saturday, for those who might be interested. The tour details are top secret.

On Thursday, June 7th, we will depart from Murdoch's Ranch & Home Supply at 8:30 AM. Murdoch's is located in Littleton, two miles South of intersection C470 on Santa Fe Drive, the store will be off to your right. Art Cutler will lead the tour from Murdoch's to the Weisbrod Aircraft Museum at the Pueblo Memorial Airport. Art is still working on the route. The goal is to arrive at the Aircraft Museum when it opens at 10:00 AM. The tour will end shortly after noon. Our friend Art Cutler was not all that enthused about a tour to Pueblo, until we got to the Aircraft Museum. Woodman, wife, and I had to drag Art out of the museum after about 3 hours, while he kept screaming, "just give me a few more minutes"...

From the museum we will head out to lunch at the Shamrock Brewing Company, in old town Pueblo. The restaurant is located in an old brick building and serves interesting Irish Fare. Of course the beer is good as is the food.

Around 2:00 PM we plan to head to the El Pueblo History Museum. We will tour this interesting old site and if you are a member of the History Colorado (once known as the Colorado Historical Society) bring your card. With your History Colorado ID you get in free.

After the Pueblo tour you can check into the Marriott Hotel Pueblo, which is a block or two away. You can check in starting at 3:00 PM. Or you can take a walk on Pueblo's River Walk (which includes the Medal of Honor Memorial and the Center for American Values. Both of these are interesting exhibits about our Veterans).

The Hotel is in the Marriott Convention Center, 110 West 1st Street. The negotiated rate is \$99.00 a night for two, or \$119.00 per night, for two, with a free breakfast for two each day at Charlie B's Restaurant hot buffet (eggs, bacon, and sausage, fruit, and yogurt, oatmeal, made to order eggs and omelets, and Belgium Waffle's). Online reservations can be made by using this link:

<http://www.marriott.com/hotels/travel/pubdt?groupCode=rccrcca&app=resvlink&fromDate=6/7/12&toDate=6/10/12> Once you pull up the site, you will notice the dates have been filled in, make sure it is the correct date. This will be on the left hand side of the page. If there is more than one person staying in the room you can change it. The room selection on the next page gives you options for the number of beds you want. At the bottom left (in red) is the word **FIND** in a red box. Click on that and it will move to an area where you put in all your details. Then click the circle to the left of the \$119.00 room rate. This will direct you to the pages to reserve the room you want. If you want to go with the \$99.00 rate and skip breakfast then you will have to make your reservations as listed below. If you have problems call me on 303-646-6105 or drop me a note at: john.washburn@att.net. If you don't want to reserve the hotel online call: 1-866-706-7815 and give them group code RCCRCCA. You will also need to let the operator know that the hotel is in Pueblo, Colorado and this event is with the Cadillac Club.

On Friday, June 8th, we will have breakfast at Charlie B's Restaurant in the hotel. The Rosemount Mansion opens for tours at 10:00 AM so we will depart the hotel at 9:30 AM. We are hoping to get parking on the grounds of the mansion. The tour of the museum takes 1 ½ to 2 hours with a cost of \$4.50 per person. Once the tour is complete we can wander down the hill to the Carriage House Restaurant for Lunch. This is a wonderful old building and the food is very nice. Tour attendees will receive, prior to the tour, some items they can pre-select for lunch. Lunch includes a nice salad, choice of a non-alcoholic drink, and a small desert. The cost of lunch is included in the tour registration. Once lunch is devoured we will drive over to the famous Bill Woodman Horse Barn Mansion & Museum. While Bill will host the event, Mr. Brent Hladky will supply beverages and a light snack for anyone suffering from hunger. You can stay as long as you want or leave whenever. We expect most folks will have seen all there is to see by around 3:00 PM. When you decide to leave we suggest heading back to downtown. You might consider visiting the Sangre de Cristo Arts Center. The center has art exhibitions in 6 galleries, which includes the Francis King Collection of Western Art.

Dinner will be at the Pueblo institution, Nachos Mexican Restaurant, just a few blocks from the hotel. We will have dinner around 5:30 pm. The food is exceptional, and we are hoping to have a private seating area for dinner.

Saturday, will begin with breakfast at the hotel. The Steelworks Museum opens at 10:00 AM so we will depart at 9:40 AM for the tour. The tour will last about 2 hours, so we will be leaving the museum around noon. Lunch will be at the Hangar Restaurant, 120 W. 23rd Street (719-544-8208). This is a local institution so lunch will be a fun event. After lunch you are on your own to tour downtown Pueblo. The Old Rail Road Station and the Train Depot Museum are interesting and there are lots of antique and boutiques along the way. Or you can join Mr. Cullinan on a short driving tour he is planning for the afternoon.

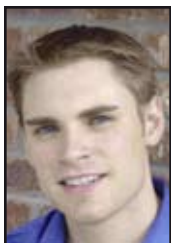
The final event is Dinner at the La Renaissance Restaurant located in an historic old church. The management has scheduled a Broadway Musical Review and Buffet dinner for us and others, in a private room. This restaurant has been in business since the late 70's and the food, service and shows are all top notch. The cost is \$45.00 per person, which includes, tax, and tip. The only added charge will be for the alcohol. You will enjoy this event.

Sunday we head back to the big city.

If you plan to go let me know so I can send you the registration form. The registration form will allow you to sign up, or not, for the lunches and dinner. A couple of events will require that we pre-pay (if you decide to attend), but that will be included in the registration form.

Please consider joining us for this fun filled and historic tour.





REBUILDING A 1967 429 ~ CONTINUED FROM THE MARCH ISSUE FROM GRANT LANDSBACH

Part 3 – Decisions, decisions...

I now had the all clear and the budget pretty much worked out. It was time for action. Now, remember, the “bad” engine currently in the car is “engine #2” the unknown mileage engine. Remember that in the shed I had the original block ala spun main bearing. As the inevitable decision drew near, (and I started to count the costs and look at my resources) it became obvious that I’d REALLY like to have that numbers matching block back in the car if I could. Heck, I had two engines so one would think that if I could just get the right machining on that original block, I’d have a smorgasbord of parts to choose from for the final engine.

I started shopping for engine rebuilders. During this process I learned some things about engine rebuilders and engine rebuilds:

- They do not all perform all the work “in house.” In fact, that’s a rarity these days.
- Some rebuilders are what I refer to as hybrid builders. They may do some pieces in-house, they may farm some of it out...such as the machine work.
- Others do not do ANY of the work in-house but rather, send it off to a larger engine rebuilder and handle only the “swap” and “tune” parts of the project.
- There are some potential advantages and disadvantages to weigh between an in-house builder vs a hybrid vs a large engine rebuilder. Each have their own advantages and disadvantages.
- There are “short” and “long” block options which I won’t go into, but the long-block option is the fullest rebuild (from the oil pump up to the top of the rockers).
- There are a number of parts (block, main bearing caps, crankshaft, heads, etc.) that constitute a “core.” Failure to produce any of these parts will not equal a core and things will be more expensive.
- Blocks are cleaned, blasted, and measured to make sure the core can be rebuilt. They must be within certain warp and

thickness tolerances and checked for cracks using a process called “magnafluxing.” The outcome of these tests will determine whether a block can be rebuilt. If it can’t you have to start searching junk yards. But, the good news is most can and these days even complex machining, sleeving, etc. can be done to save original blocks...sometimes for higher costs though of course.

- There are standard tolerances for all reputable engine rebuilders/remanufacturers, but some have even tighter standards, three point valve alignment, etc.

- In a standard long block rebuild, there are a number of things that are “consumables” and are completely replaced. Other parts are re-machined and on older engines, the mix between what’s a consumable and what’s reused can get blurry so you really have to know all the parts and what is being done.

- All rebuilds these days should include “hardened” valve seats, etc. so that you can run the regular “unleaded” fuels of today without issues. That’s a pretty nice thing to have although I’ll miss using Marvel Mystery Oil.

At the same time as I was shopping for engine rebuilders, I was also researching my particular 429 engine, taking notes, and finding out a lot about it. I was inspecting my disassembled engine to learn how it all worked, and reading my shop manual. I also visited with fellow RMRCLC club members and engine rebuilders. Finally, I spent a lot of time checking out the National CLC site and blogs, and learning anything and everything I could online from those that had rebuilt 429’s in the past. Through all this research, I started to learn a few things specific to my 1967 429:

- Though the 1967 body style is among the most valued, the 429 engine was in many people’s opinions quite “so-so.” Almost all previous and subsequent engines were better...most notably the 390 (before) and the 472 (after).

- The 429 ran from 1964 through 1967. The engine had a 4.13 in (105 mm) bore and a 4.00 in (102 mm) stroke, raising displacement to 429 cu in (7.03 L). Power

was 340 hp (254 kW) and torque was 480 lbf•ft (650 N•m). The 429 was used through the 1967 model year. (though it is not uncommon to find an early 1964 model year with the ‘63 390 V8 as Cadillac tried to use up the older engines in stock first).

- The 429 block is basically a bored out 390 (and the 390 is a bored out 331) so the block itself can actually have some interchangeability with some 390 parts but, they redesigned a lot of it so that other components cannot be swapped. (Timing chain cover, water pump, etc.)

- The Cadillac engineers changed some things on the 429’s through the 4 year run. Notably...the timing cover housings for one. So, you could not interchange a timing cover housing from a ‘65 with a ‘67 for example.

- Because the 429 is a bored 390, the block is a bit thinner-walled than a 390 per say. It still has plenty of “meat” compared to new engines etc., but it cannot be bored too excessively. The protocol is that .30 over is okay but as you approach .60 etc...that’s apparently getting into dangerous territory. In contrast, apparently a 390 can be bored .60 over no problem with room to go higher.

- The 429 had a history of lubrication issues centered mainly around the timing chain cover and integrated “gear” oil pump which was all housed in the aluminum casting. Over time, these aluminum covers would get “galled” or worn in different spots and oil pressure could be significantly decreased due to increased tolerances.

- The 429 utilized the timing cover for everything. Everything seems to be contained in or bolted to this timing cover, (integrated oil pump, fuel pump, distributor, water pump, oil filter, etc.

- The 429 is a flat-tappet engine which has certain break-in specifications and also really SHOULD have oil with the proper zinc dithiophosphate (ZDP or ZDDP) levels (even new, rebuilt ones)...which is getting harder to find as the EPA changes the level. Your oil today DOES NOT have the same ZDP levels in it that it once did! There are zinc ad-

ditives though, and these should be used because of the flat-tappet design and...to keep the engine from "flattening" the cam. ALL FLAT TAPPET ENGINES (which most of us have) NEED ZDP. We heard this from all the experts, so please take that away from this article if nothing else. Now, having said this, I know there is debate as to having the proper levels of ZDP and, more is not necessarily better. I'll include some links at the end of the article so you can research it yourself. My Dad and I have resolved to use ½ a bottle of ZDP additive every oil change after doing our research.

Now with all of my newly acquired knowledge, I began to make some decisions. I began to talk to rebuilders about their services and expertise and...also about their prices. As an example, a high-end custom rebuilder will charge a good \$4,500 for this particular engine rebuild without even discussing the "swap" part which can run between \$1,200 to \$1600 labor and \$600 plus in additional parts. It depends on your car/engine, but rebuild kits alone are not cheap for our old Caddy's. Kits are only made by a few manufacturers and prices are high.

As far as the engine swap, although my Dad and I have the facility and would have liked to attempt the swap ourselves...my life, work and grad school made me take a second look at that "project." So, I did have to find someone who could do the "whole enchilada" for the most part. I weighed A LOT of variables (especially those pertaining to an all "in-house" builder vs a "hybrid" builder) and decided to go with a "hybrid" builder called Colorado Engine in Arvada, Colorado. My reasons were based on weighing the above criteria...and price. It also didn't hurt that CO Engine had a lot of great testimonials from "old car" guys and had framed pictures of all the old cars they had worked on including two recent builds on a '59 (390) and a '68 (472) Caddy.

One Friday my Dad and I packed Engine #1, (the original numbers matching block) and a BUNCH of boxes of parts into the back of his truck and took them over to Colorado Engine. The guys took a look at it and were a bit dismayed that it was in pieces. They said it might be okay, but it was going to have to be evaluated by the rebuilder to know for sure. They started doing an "inventory" of parts and found some things missing...most notably

one the main bearing caps, which is part of the "core." So, we headed back to the shed and my Dad scoured all the boxes of parts from the original owner.

All said and done, we ended up having what we needed. The guys at CO Engine were a bit concerned over the spun main bearing damage to the block and crankshaft and some surface rust in the cylinders and on the crank that had emerged from all the years of shed storage. Still though, it was surface rust and they were optimistic the engine could be rebuilt. But again...they'd have to ship it off to the builder (Motorworks / Hi-Tech Engines in Spokane, Washington) to know anything for sure. We left the engine in pieces on a pallet and waited.

In the mean time while we waited to hear back on the engine, we started getting all the "peripheral" engine stuff together. Some things like hoses, belts, etc. would be supplied by CO Engine, but the timing cover, water pump, and all tin-ware (crank pan, valve covers etc.) would need to be provided by us at the time of the swap. And...as you'll read later...don't forget paint! Those items do not qualify as part of the "long block" build.

Now, as I have said before, the timing covers on these 429's were a problem...and year-specific...and no-one makes a reproduction. Most guys have to use their original and hope for the best or search in vain and pay decent money for another used one off eBay that MIGHT or MIGHT NOT be better than the one they already have. Amazingly, my Dad found one...a "new original replacement stock" (NORS) one still in the GM box... '67 specific on eBay from Phillips Muscle Car Parts in Tulsa, Oklahoma. We snapped that up, but it wasn't cheap and we laid down several hundred dollars for it. Still though, we were glad to have obtained an original, and since it's such a vital part we could easily justify that purchase.

We also decided to rebuild the original water pump at this point. The 1967 429's came with either a "two port" or "one port" water pump depending on your model. Ours had an original "one port." Well, water pumps are reproduced but not in the "one port" variety (since one port can be blocked off if not used). So, I talked to another one of the Colorado RMRCLC Caddy aficionados, John Washburn, and he gave me the name

of "the Flying Dutchman." The "Dutchman" does very good work and it cost us right around \$100 to rebuild the original. It came back and was beautiful, primed, and ready to paint and bolt on.

Meanwhile, a week or so after the engine had been shipped off to the builder we got a call. The block was okay! They were going to be able to machine the block and the crank and cylinder rust was just on the surface. A small bore was all that would be needed! We were so excited. My numbers-matching car would be a reality again. We called Motorworks directly and talked to Russ who was very knowledgeable about the engine, the build, and everything in general. He said that the block certainly didn't have too much wear overall and he could tell it has been lower mileage. It had plenty of "meat" on it and he said he had seen much worse. We had a great conversation with him and learned a ton. We felt great after getting off the call and knew the engine had been built by a great rebuilder. So great news! Again, Russ laid out the specs on the engine so we know exactly what was machined, replaced, etc. Most rebuilds also come with a packet of all this info, but he gave us a bunch of tips and specs and here are the highlights:

- .30 over cylinder bore
- .30 over (or under actually) rods
- .20 over (or under actually) mains
- Re-machined/milled block, heads, crank rods
- New camshaft, valve train components, timing gear & chain
- All other consumables replaced with Federal-Mogul and Hastings parts
- Original 10.5:1 compression ratio
- And again...the warning to ALWAYS run the right amount of zinc in the oil. ALWAYS. Not just when it's new. ALWAYS. We got the point.

We left that conversation with the builder telling us the engine would be back at the shop in a week or so!

Part 5 – The Swap

As promised, my newly rebuilt (original) engine arrived back at the CO Engine shop about two weeks later. It was crated up and ready to be unleashed...but there was still a LOT of work to be done with the swap to get my Caddy back and get the wind back in my hair.



I worked with CO Engine, and we set a date to bring the Caddy over to the shop. It being February, I wanted the car inside at all times (well it IS a convertible and has ALWAYS been garaged). CO Engine keeps their classic car projects inside always as a rule anyway, but this does require them to make sure they have everything lined up...a rack for the car, the mechanic, all parts, etc. With all that figured out, I drove my Cad over to CO Engine which was thankfully within my 20 minute driving time (with the old engine) on it's own power and turned that engine off for the last time. I gave them the car, some extra parts (so they could pick the best of them for use on the final engine) and a '67 shop manual which is a good idea. These guys know what they're doing but it's nice to have that for them as a reference.

By the next day, the mechanic (Josh) already had the old engine out and the new engine was being prepared. We went over to take some pictures and it was exciting to see the "hole" under the hood...well, exciting and a little scary. The brand new beautifully rebuilt engine was almost ready for deployment.

Now, things went very smoothly at CO Engine thanks to Terri, George and the crew, but any undertaking of this magnitude possesses the inherent possibility for unknowns. We had anticipated that a few variables would come up and a few did begin to surface at this point in the project.

First off, we compared the original valve covers to the new engine. CO Engine had already put a base coat of paint on it. They had looked for the closest match to the older "Cadillac Blue." This is a dark, navy blue. They had found a contender...but it wasn't exactly right. My Dad and I "hemmed and hawed" over it but you've got to do stuff like this when the engine is out. So, we began the hunt for a reproduction of the exact color. This would delay things. We found the paint finally through a tip on a forum on the National CLC club site. It's getting really hard to find but they had it at USA Parts. Perfect. We'll just pay and overnight it so we don't delay the project right? Nope. It's an aerosol...it can't go next day air...it can't go on an aircraft. So, the quickest we could get it would be four days. This would delay the project, and we had to work with CO Engine on this since it was going to tie up the rack and delay the

mechanic as well.

The only good news about this "blue blunder" was that it left time to make sure we had everything else we needed and it gave us time to really think and talk through it all. The mechanic had noticed some other things with the engine out...some leaking with the transmission, a bad steering gear, etc. So, although it meant more money, we opted to have him do a lot of this stuff during the "down" time and it made sense anyway since a lot of these things were either necessary or simply a heck of a LOT easier with the engine removed from the car.

During this time we also began to realize there would be a lot of incidental part costs. We knew this would be the case but some surprised us. CO Engine did a great job of sticking to their original quote on the engine rebuild and the swap labor, but these parts were known extras. Here's a general list of them for anyone planning such a project. These are things to budget for and/or replace when doing the engine. It just makes sense. (And...these do not include extra things you might see once the engine is out...like some of the things I explained in the aforementioned paragraphs. You might want some extra budget for these "unknowns" as well.) The "knowns" are:

- Hoses (Radiator etc.)
- Belts
- Transmission seals & gaskets
- All other seals & gaskets (water pump, timing cover housing, carburetor)
- Fan clutch
- Condenser & Coil
- Motor mounts
- Fuel filter
- Fuel pump
- Water pump
- Thermostat (for our "toys" you might want to consider a cooler one....180 degree vs 190 etc.)
- PCV valve
- Oil pressure switch/sensor
- Vacuum advance valve
- Fluids (oil, zdp, tranny fluid, coolant)

A few days later, the correct paint color arrived and the rest of the project went great. The engine looked the part with that color and it was a sight to behold. It's almost a shame to cover it up with the hood and although it's not a "rod" in any way I think

I'm going to have to show this power plant off at the summer car shows this year. The mechanic, Josh, did an outstanding job and we chronicled the rest of the project in pictures and had a few other last minute decisions come up. After two weeks "on the rack," we got the call one Friday...it was done and ready for pickup.

Part 6 – On The Road Again

The car was sitting out front of the CO Engine shop when we came to get it. They had it out there to take some pictures of it in front of the shop with their sign etc. It looked great! We went in and talked over the job with the mechanic and the other managers. They were all very informative and gave us the follow up schedule for the engine. (It has to get checked at 500 miles, 3000 miles etc.) We were told to take it on a few decent long and somewhat sustained highway drives when we could and let them know if anything seemed out of the ordinary.

I went out to my Cad and turned the key. The new engine roared to life and idled great! I had to check it out a bit before actually driving it but then I got in, put it in drive and eased away. I immediately noticed it ran smoother and I also noticed the tighter steering (that steering gear was pretty bad). I drove it home no problem although I admit I was a bit apprehensive and kept listening and checking things since everything was so new.

I now have a few hundred miles on it and things are going well. It runs, drives, and idles like a champ. It can go hours and no problems, no dying in an intersection. The open road is again mine.

Part 7 – Lessons Learned

So, people have been asking my advice on all this since having to do an engine rebuild on an old Caddy is not something people do every day. I found it's not even something CLC Club Members do all that often. Many of us are excellent "custodians" of our vehicles. We have a passion for these cars and certainly some mechanical knowledge. But, these cars represent days gone by and much of the intimate knowledge of the mechanics have not been well preserved. We find ourselves treasur-

ing our cars but things do and will happen. Things that are big in scope and budget. Things where we just have to cry “uncle” and seek help.

When embarking on such journeys I found a few things helpful:

First, use the skills you have. Many of us are not mechanics by trade and even if we dabble in the mechanical arts, it’s good to know your limits and a full engine rebuild and swap is where many of us have to draw the line. But, many of us are professionals in other areas. Use those skills. If you are in business, use your business-savvy, communication, financial, research, and other skills to find the “right guys” and make good decisions. Find the guys that are not just willing, but want to work on old cars. The guys with a passion for it are the right guys. Also, just like in business at large, the adage of “you get what you pay for” is typically true.

Second, network. Accept that you need help. This has been good for me in my professional life, my marriage, and in classic car restoration. Jump on the forums, look at your directory for people that have your same year car and reach out and call them or e-mail them. Talk to your local club members. I have found situations where fellow club members and enthusiasts are open to doing things for club members they normally would not do for “outsiders.” Once connections are forged, people like to help each other out.

Third, do your homework, record your notes, and plan it out. Research, research, research. When you get tired, give it a day or so and then, get back to it. Keep good records and notes. I keep everything on my car in a few Excel spreadsheets. Personally, I would not jump into a project without having a decent idea of what it was going to cost. Also, a decent plan on paper and even a “project plan” of chronological sequences and steps is good. I do project management in my profession so you’ll have to forgive me if this one is a bit over the top for some of you.

Fourth, don’t get in a hurry. Hopefully this is a hobby for most of us. It should be “mostly” fun. Take your time and do it right. If you have to set it aside for a few days, a week, or even a month it will still be there. We all know hurrying

leads to mistakes. In our professional lives there is often no choice. But in our hobbies, hopefully we can take our time a bit more.

Fifth, have fun. Know you are preserving a part of the past for yourself to enjoy and even future generations. I love history and I bet a lot of you do too. For those of us preserving these cars, we are preserving history. At the end of the day, they are just perishable things, but they are powerful to remind us of a different time and they tell us a lot about the time period and people who designed, built, and bought these moving works of art.

Finally, share. Just like I am doing with this article. Let’s share the knowledge we gain in our endeavors. This should be an iterative process. That is what the CLC is for. Write an article, take pictures, get on the forums. I am a young guy and I have to learn all of this stuff from scratch. We all gain from learning from each other and the overall knowledge about these cars is maintained and passed on. And this is essential to keeping old Caddy’s on the road.

Part 8 – Winding it Down

We are Cadillac people. Some guys like hot rods, some perhaps lean toward the European makes. But we are a discerning bunch that would rather have “the standard of the world” when it comes to our automobiles. One of my friends at work said it best. “When you drive around in the Caddy you don’t have to say anything. The car makes a statement.” After this project I have to confess...old Caddy’s are not the cheapest cars to buy, own, or restore. I was told that a similar Ford or other make would have been about half the cost to rebuild. But then...it’s not a Caddy is it?

To this end, I’d like to end the article with a story about one of our beloved Rocky Mountain Region CLC members who just passed away. Harry Tiffany was a wonderful guy and always a stitch. He hosted our annual club banquet at the local Mount Vernon Country Club. As time went on, the prices for the country club had risen and as a result, the price for people to attend the annual meeting rose a bit as well. As this cost neared the \$30 mark there was a bit of discussion one night at a club meeting about this. Some were concerned about the new cost of attending the event. This

went on for a good twenty minutes or so with both sides engaging each other in animated conversation. Many felt the country club was the only appropriate place to hold a proper Cadillac Club banquet. But, the opposition launched a few passionate speeches about the necessity of lower costs in today’s economy. Bickering ensued and just as things were reaching a feverish level Harry spoke up. With a casual disposition about him he said, “People...I’m sorry, but the way you’re carrying on about a few dollars difference for the cost of a dinner was leading me to believe I was sitting in the Chevy Club meeting.”

We laughed so long and hard that I doubt any of us even remember the rest of the meeting. It’s that kind of humor that keeps us going even when things with this “hobby” get expensive and frustrating.

Part 9 – References

In the spirit of sharing knowledge with my fellow club members I initially decided to disclose a financial breakdown of my engine rebuild and swap project. After putting it down on paper and seeing those numbers staring back at me...I decided otherwise. But, if anyone is looking at a similar project in the near future and wants more detail on my costs for this project, please contact me and I’ll share that information with you.

— END —

Editor’s Note: The complete article has been submitted to Steve Stewart for future publication in *The Self Starter*.

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