

THE DIPSTICK



President.....Ken Bingham
 Vice President...Bob McClaren

Secretary.....Cynthia Faschini
 Treasurer.....Jim Villers

Editor....Chris Holcomb

Vol XX No. 1

February 1993

MARQUE TIME:

Once again I'd like to take this opportunity to thank Libby and Bill Keeler for hosting the Annual Christmas Party. A super time was had by all! **Thanks!** Its always great to get the club together en mass and chow down! (I hope Bill has gotten the dust off his Allen Wrenches!)

The New Year was off to a great start at the Ash's with the monthly meeting on January 6th. A great turn out of old members, lots of new members and some guests too! **Thanks**, Jennifer and Mike for hosting the meeting!!! If you stayed long enough...Mike finally let us in his garage to admire one of this latest restoration projects!

A new updated and readable Club Roster will be on the street shortly; if not in this issue of The DIPSTICK, they will be handed out at the next meeting.

Mark your calendar and call Jennifer or Carol and plan on coming to the Chili Cook-off this Saturday. I can promise you lots of good chili to taste and a good time! Please see enclosed flyer for further details. The Richmond MG Club has accepted our challenge, so lets bring out our best and hottest chilies!

If you haven't had a chance to sign up to host or help host an activity there are plenty of slots still open. You can come up with your own ideas or even change the dates and times! So please call our Activities Committee Persons and help keep OUR Club active!

From the last meeting I've gotten several suggestions for our 20th Anniversary Dinner on the 15th of May. I will check into them and give you a report at the next meeting. I am also soliciting volunteers to be part of the Anniversary Party Committee - I will chair the committee but I don't want this to be my party its OUR Club and I'm looking for help. So please give me a call if interested in helping plan a 20 year celebration of The Tidewater MG Classics!

I'm looking forward to seeing each of you at the Second Annual Chili Cook-off! Yee Ha!



Safety first!

Ken Bingham

MEMBERSHIP NEWS

Welcome to the new members who joined our ranks during December 92/January 93. To name a few:

- Tom Rosendale..... '62 Spridget
- Daryl & Cheri Bishop.... '53 TD
- Karl Herbert '77 B
- Steven & Lynette Gold... '53 TD

At the January meeting, Stan Winner ('76 Midget) was one of our guests who seemed to enjoy the good hospitality and nice people at the Ash's. Welcome to all! (My apologies to any and all new members and guests that I have failed to mention.) Ned Kuhns has taken over as the membership chairman for the new year. It has been fun as your membership chairman.

Bob-ME

If the past few weeks are any indication, 1993 promises to be a banner year for new members in our Club. **Louis Tayon** was acknowledged in the December **DIPSTICK** and I understand many of you got to meet him at the last meeting. Another new member who joined at the last meeting is:

Karl M. Herbert

669 Lord Dunsmore Drive
Virginia Beach, VA 23464
523-4827

We'll get info on his MG models at the next meeting.

Just received a membership application with annual dues from:

Steven & Lynette Gold

1429 Birch Leaf Road
Chesapeake, VA 23320
479-1805

53 TD (Restoring); 80 MGB ("pristine" For Sale)

Bob McClaren has also sent membership applications to:

Jim & Kit Sycks

5617 Jagger Ct.
Virginia Beach, VA 23464
479-5223
73 MGB; 78 MGB

Stan Winner

5321 Brockie St.
Virginia Beach, VA 23464
479-4329
To be provided.

Bob and I are working to transfer his membership files to my computer so we should be able to produce updated membership rosters in the near future. In the interim, I'll keep you updated in **THE DIPSTICK**. If you have candidates for membership, please contact me at (O) 423-2832, X357 or (H) 552-0292. Ned Kuhns

HALF SHAFTS IN A BLANKET

1 pk. Hillshire Farms Little Smokies
 1 can (10ct.) Hungry Jack Biscuits
 Lawrys Garlic Salt

Divide each biscuit into thirds.
 Wrap a smokie in each one.
 Put seam side down on ungreased cookie sheet.
 Spritz tops with a little water.
 Sprinkle on a little garlic salt.
 Bake 400° - 10 minutes

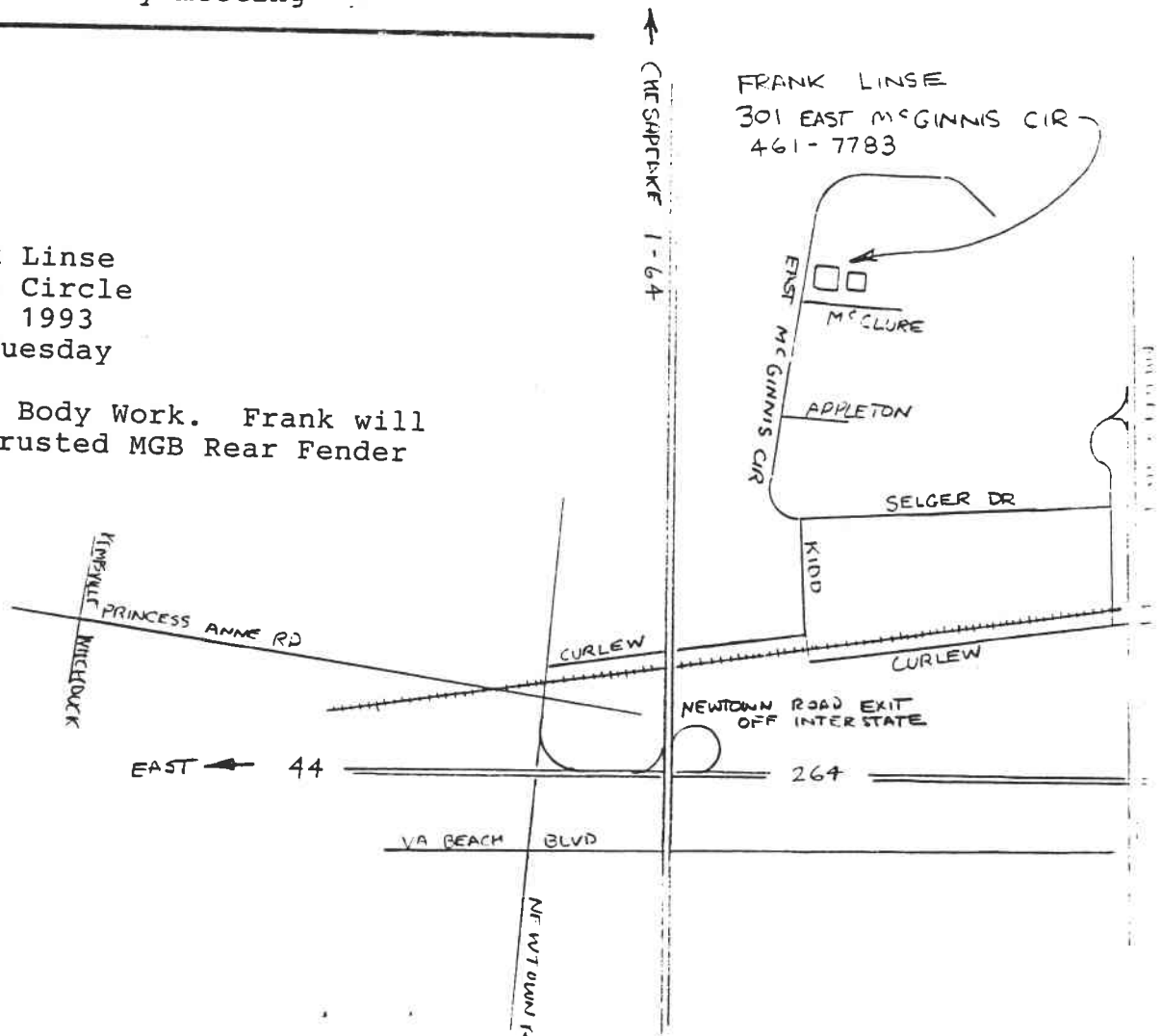
Carol Bingham

UPCOMING EVENTS

Jan 30 Sat	Chili Cook off at Bingham's
Feb 2 Tue	Monthly meeting at Davis's
Feb 20 Sat	7:30p.m. dinner at spaghetti warehouse details at meeting and to follow.
Feb 28 Sun	Tech Session - Frank Linse
Mar 3 Wed	Armand and Paula Escobio Monthly meeting

Tech Session:
 Hosted by Frank Linse
 301 E. McGinnis Circle
 Sunday Feb. 28, 1993
 10:00a.m. til Tuesday

Special Topic: Body Work. Frank will
 be repairing a rusted MGB Rear Fender



ORPHANAGE RAMBLINGS by Bob McClaren

The "Orphanage" has been real quiet of late, too many holiday season distractions not to mention night school homework. However, I do want to pass on a safety tip and a tech tip while the computer is running.

Frank Linse was over one weekend helping me reinstall the engine in the '67 B coupe. I had pulled it out due to a bad ring gear on the flywheel. A chewed-up ring gear can cause the early "B" starters to jam in the engaged position. While it was out, the engine got a new flywheel, a new clutch assembly, and a new starter and with Frank around, the motor also got a new coat of paint and some of the shiny parts polished.

We were handling the engine and transmission as a unit using the factory lifting attachments on the valve cover studs. The motor and transmission must be raised quite high to clear the bonnet locking platform before being lowered into position. All went great until I had to re-raise the motor to a few inches above the motor mounts to allow some minor position adjustment. "POW!" - the front stud snapped off, sending the lifting lug and top of the broken stud ricocheting around the "Orphanage". This left the front of the engine unsupported and "Bang!" was the sound it made dropping back onto the motor mounts. Luckily, neither Frank or myself nor any of the nearby orphans were hit by the shrapnel. It happened fast and definitely got my attention!

Also luckily for me, no damage was done to the motor aside from needing a new valve cover stud; however, an accident like this could easily have resulted in crushed limbs (ours), serious facial injuries from the shrapnel, or damage to the car, the engine or both. So, the next time I hoist a motor for one of the orphans, I will use a fabric (nylon?) safety strap passed around the motor several times and securely fastened to the engine hoist. It should minimize the danger of someone getting seriously hurt should the primary lifting rig break. The strap should also serve as low-cost insurance for the motor/transmission. Dropping an engine or an engine/transmission unit onto a concrete floor, a bonnet locking platform, or one's foot could ruin your whole day. A nylon towing strap (about \$8.00 at Pep Boys) should work just fine.

Now for a short tech tip. I was getting tired of having to use two hands to activate the choke on the "B" coupe. Frank Linse suggested that I lubricate all of the friction points on the choke linkage with oil rather than WD-40. After lightly oiling each pivot point and working the choke lever by hand a few times, the choke freed up and now works easily with only one hand. If your choke cable is hard to pull, try oiling it. It worked for me.

" 'B' 'C-ing' you!"

Bob Mc

TIDEWATER MG CLASSICS
 SECOND ANNUAL
 CHILI COOK-OFF!!!

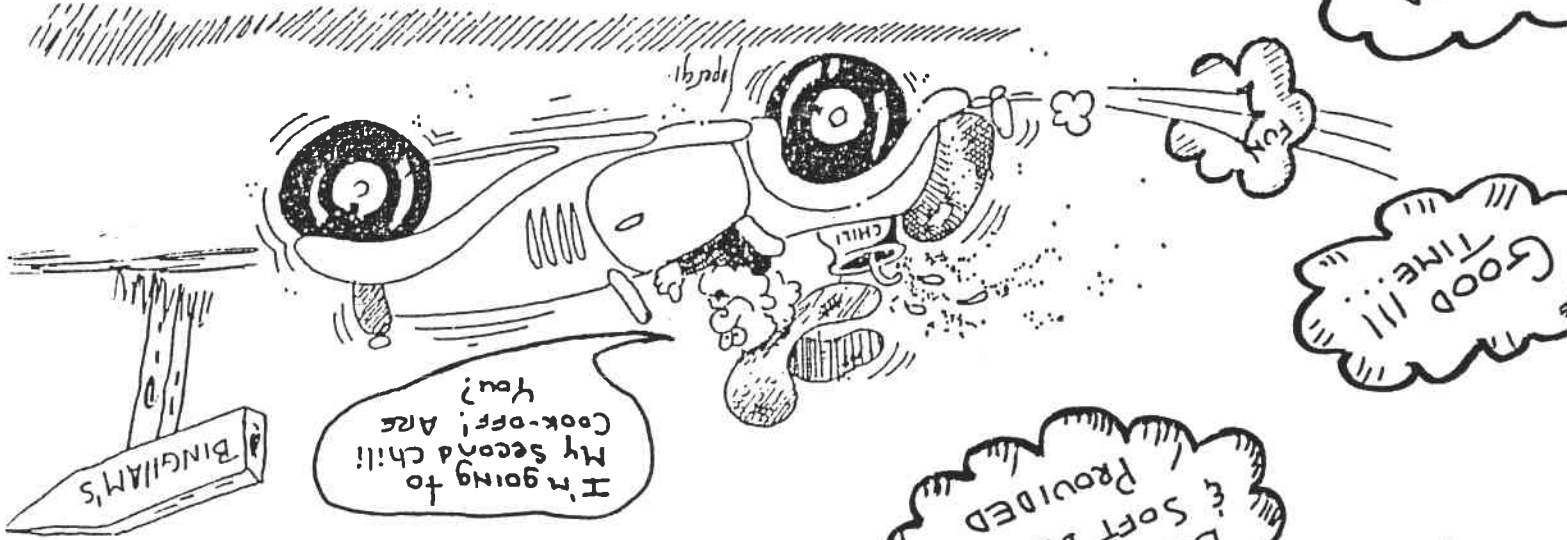


Hosted by
 Mike & Jennifer Ash
 Ken & Carol Bingham

BEER & WINE
 & SOFT DRINKS
 PROVIDED

Saturday 1993
 30 January
 7:00 PM

GAMES
 &
 PRIZES !!



PLEASE R.S.V.P by 27 Jan 93
 721-3034 or
 495-0307 (after 5pm)
 LET US KNOW IF YOU WILL BRING:

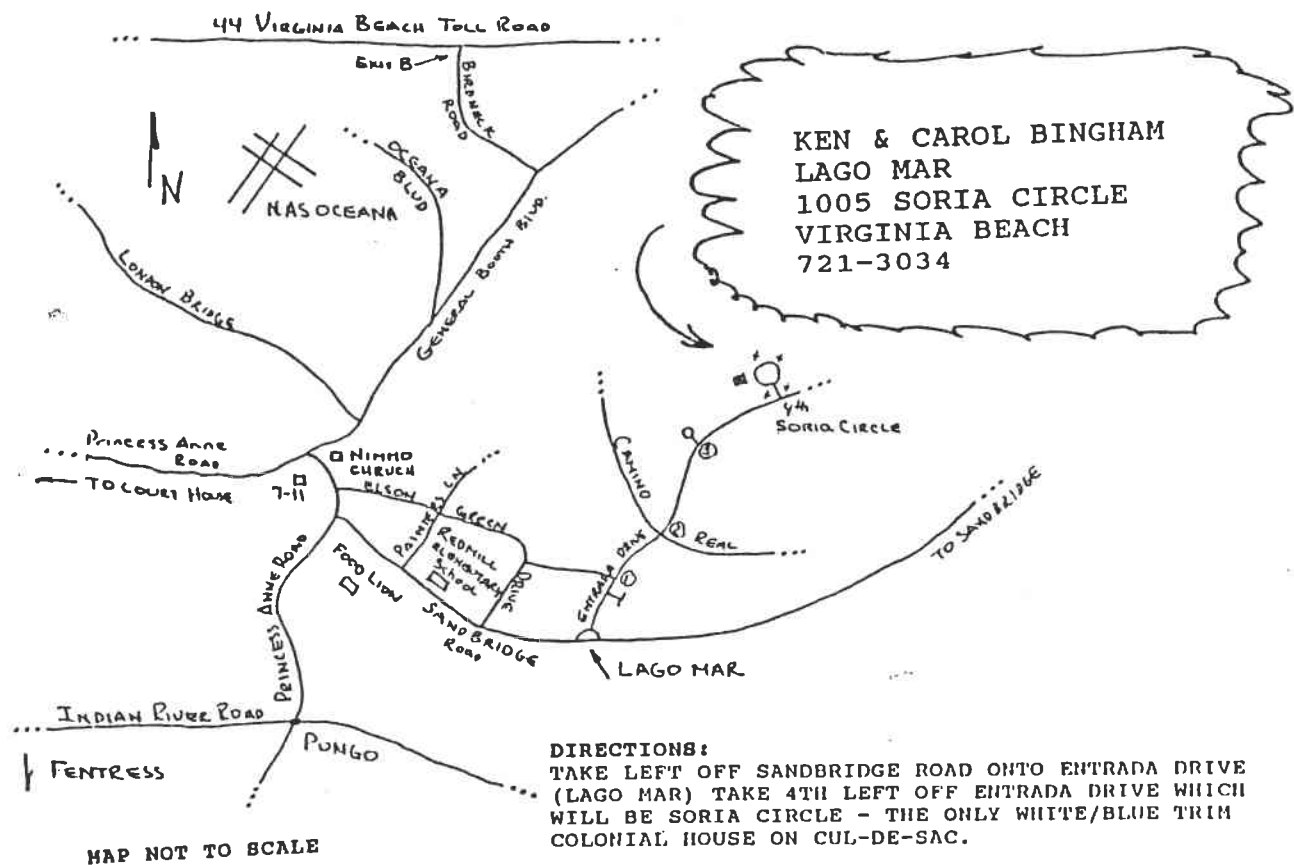
- Yours FAVORITE Your CHILI
- MUNCHIES
- CORN BREAD or RICE
- SALAD
- SIMPLE DESERT

RICHMOND You might have won last year...
 But try Again - We Challenge You!!!

TIDEWATER MG CLASSICS SECOND ANNUAL CHILI COOK-OFF!!!

AT THE BINGHAM'S

FROM RICHMOND TAKE I-64 TO 44 (VIRGINIA BEACH TOLL ROAD) GO EAST TOWARDS THE BEACH THEN TAKE EXIT EIGHT (8) AND A RIGHT ONTO BIRDNECK ROAD GOING SOUTH UNTIL IT MEETS GENERAL BOOTH BOULEVARD TAKE A RIGHT ONTO GENERAL BOOTH AND FOLLOW THE MAP - SEE YOU THERE!!!



***** SPECIAL NOTE...SPECIAL NOTE

All ladies are requested to bring a pair of high-heeled shoes wedges, platforms, spikes, whatever you have.

Well, it has been some time since I wrote a tech article for The Dipstick. Robert Davis took over for a while back in the Spring to regale you with tales of engine swaps and her "upgrades" to his fleet of MGs, and I got out of the habit of writing an article every month. Now that Robert is into his fleet of Land Rovers and we are under new management, I suppose I had better get back into the habit! I haven't done much in my garage for some months, so I have no recent personal experiences to provide inspiration for an article. However, I did have occasion to check out a problem with a generator and replace the rear bushing, and I used that as a partial basis for my latest article for the North American MGA Register magazine. So, if the NAMGAR members can suffer a re-run, actually its a preview, I'll use the same material here.

GENERATOR SERVICE

I have entitled this topic "Generator Service" rather than "rebuild" because the most common causes of generator failure are the brushes and the rear bushing; both of which are relatively easy to fix. There are other causes of generator failure that can be remedied by a complete rebuild, but these are not easily diagnosed or corrected without specialized equipment.

This particular generator was not charging, and all of the "by-the-book" checks indicated that the generator was the culprit. It turned out that the brushes were in good shape but, since the generator had been lying around unused for some years, the brushes were tight in their housings so that the spring pressure could not easily keep them in contact with the commutator. That problem was easily solved, but while I had the generator apart I noticed that the rear bushing was in hurting shape. This particular generator was on a TD, but the same basic generator design applies to all T-series, MGA, and early MGB and Midget.

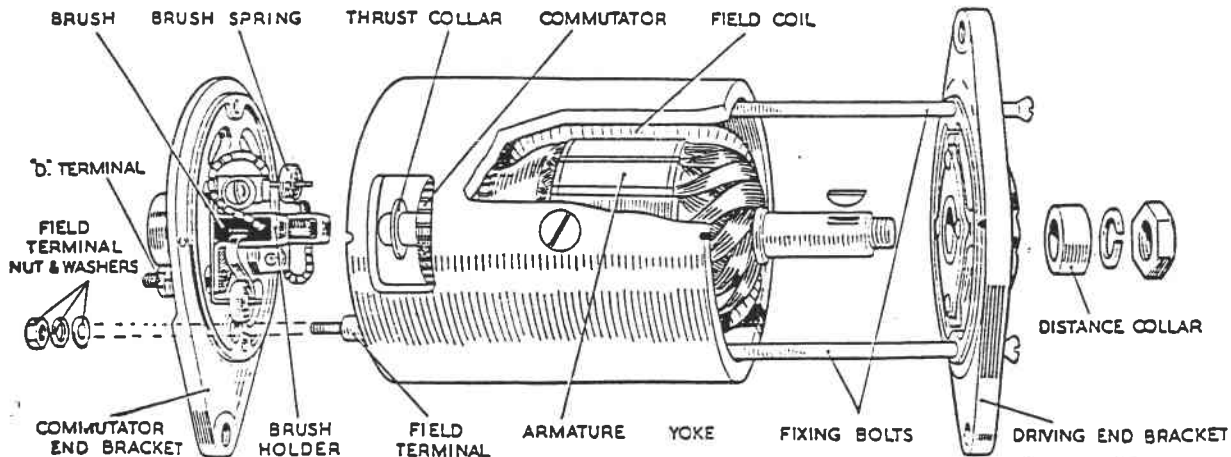


Fig. N.2
The dynamo components.

Generator Dis-Assembly

With the generator removed from the car, the first step is to remove the pulley from the front. The pulley is attached by a large nut threaded onto the armature shaft. The nut will (should) be tight, and the pulley can be held from rotating with a large pair of channel-lock pliers, or a fan belt wrapped in the pulley groove. Under the nut there should be a large split or serrated lock washer. With the nut and washer removed, the pulley can be pulled off the shaft. It may slide off easily, or you may need a gear pulley. Whatever method you use to remove the pulley, be sure not to damage the pulley or its fan. The pulley is keyed to the shaft and is generally separate from the fan. After the pulley and fan are removed, tap the key out of its groove in the shaft using a small screwdriver. Remove the nut and washers from the field terminal at the rear of the generator.

Dis-assemble the generator itself, slacken and remove the two long fixing bolts. These bolts are counter-sunk into the face of the front bracket, and have a screw driver slot. Use a large screwdriver to avoid damage to the slotted head. Withdraw the screws and pull the rear bracket away from the housing and off the end of the armature. When you do this, you will probably hear a "click" as the brushes come off the end of the commutator and

their springs push them toward the center. Next, carefully pull the housing off from over the armature, leaving the armature attached to the front bracket.

Examining the components

As I said above, the two easiest areas to service are the brushes and the commutator, both of which are attached to the rear bracket. In operation, the brushes are held in their holders and in contact with the commutator by the pressure of the springs. The position of the commutator is such that, when in contact, the brushes just protrude from the inner side of their holder, and a new brush will protrude about an eighth to a quarter inch from the outer side of the holder. As the surface of the brush in contact with the commutator wears, the spring pressure feeds the brush through the holder until eventually (probably a couple of hundred thousand miles) the outer edge of the brush sinks below the level of the edge of the holder and the spring can no longer exert any pressure on it.

Examine the brushes for wear by comparing their length with the "length" of the holder. If the brushes are less than an eighth of an inch longer than the holder, they should be replaced. They should also be replaced if there is any sign of chipping or other damage to the edge that is in contact with the commutator. Remove the brushes by moving the spring out of the way, sliding the brush out of its holder, and disconnecting the lead from the screw terminal.

Next, examine the bronze bushing that is pressed into the center of the rear bracket. The inside will probably look slightly oval, with signs of wear to one side. If the bushing shows obvious wear, and it may well be worn completely through on one side, it should be replaced. The shop manual says to press out the bushing but, since it is in a blind or shouldered hole, that is easier said than done. The bronze material with which the bushing is made is quite thin and brittle, so I find it easiest to gently chip away at the old bushing with a hammer and small sharp chisel. Cutting a couple of longitudinal grooves in the inside of the bushing with a piece of a hacksaw blade also helps.

After checking the brushes and the rear bushing, examine their counterparts on the armature. The commutator should be a clean, copper color, but will probably be discolored with black streaks from the action of the brushes, and there may be some scoring. Clamp the armature gently in a vise and clean up the commutator surface with fine sandpaper until it is a bright copper color. Examine the commutator for signs of damage. Some scoring will not hurt as long as it is not too deep. If any of the commutator segments are loose or if any wires from the armature winding have become unsoldered or detached, the entire armature is not useable. After cleaning up the commutator, clean out the insulation grooves between the commutator segments with a hacksaw blade. I am not sure that this is as critical as the shop manual suggests, as long as the insulation is below the level of the commutator segment faces.

Examine the stub end of the armature shaft that runs in the rear bushing. It too may be scored, possibly deeply if the rear bushing had worn completely through. If necessary, clean the shaft up with fine sandpaper to remove any rough spots. Again, some scoring will not do any harm.

Clean-Up and Re-Assembly

Clean up all the pieces as best you can without immersing the field coils or armature windings in any cleaning fluid. If available, use a compressed air gun to blow out any dust or dirt in the field and commutator windings. Press the new bushing into the rear bracket, after soaking it in engine oil for about 24 hours to fill the pores in the bronze with oil. Fit the new, or re-fit the old, brushes into their holders and attach the leads by the terminal screws. Make sure that the brushes are an easy sliding fit in their holders by, if necessary, gently filing the brush or holder. Position the brushes in the holders so that the inner ends that run on the commutator are NOT protruding from the holder. Lock them in this position by wedging the spring against the exposed other end of the brush. This will temporarily secure the brushes clear of the commutator for re-assembly. Remove the distance collar from the front of the shaft to expose the front bearing, and pack the bearing with a high melting point grease. With the front end bracket still attached, or re-attached, to the front of the armature shaft, you are now ready to assemble the complete generator.

Slide the field coil housing over the armature and up to the front end bracket. Note that there is a small notch in the front edge of the housing that engages with a small peg set into the rim of the front bracket. If the peg is missing, which is not unusual, locate the hole in the rim of the bracket where the peg was and align the hole with the notch in

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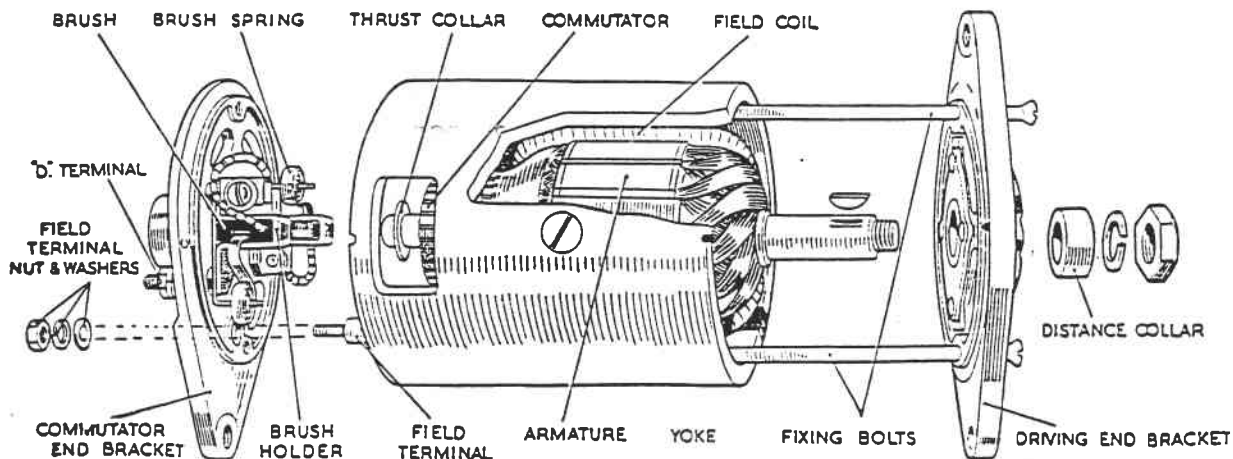


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the housing. Insert the two long fixing bolts through their holes in the front end bracket and on straight through the housing. Slide the fiber thrust collar onto the rear end of the armature shaft, followed by the rear end bracket. Be sure that the brushes are firmly held clear of the commutator. The terminal of the field coil must pass through the brush bracket, the peg in the rim of the bracket must locate in the notch in the housing, and the threaded ends of the two fixing bolts must enter the threaded holes in the end bracket. With everything in position, fully tighten the fixing bolts.

Attach the appropriate nuts and washers to the field terminal and the "D" terminal. Slide the distance collar over the front end of the shaft, and up to the front bearing. Place the key in its slot, push the fan and pulley onto the shaft, and secure with the locking washer and nut. Make sure the nut is really tight. If it comes loose, the pulley can wobble slightly on the shaft which will eventually cause considerable, and expensive, damage to the shaft and pulley.

That completes the re-assembly, except for setting the brushes. The early (original T-series and early MGA) generators had a window, as shown in the diagram, in each side of the field housing to provide easy access to the brushes. The later generators provided more restricted access to the brushes through holes in the end bracket. Whichever type you have, poke around through the hole with a screwdriver or similar tool to move the end of the spring from its wedged position at the side of the brush to the top of the brush. Make sure the end of each spring is resting neatly on the top of each brush to hold the other end of the brush in contact with the commutator.

Install the generator on the car, and adjust its position to tighten the fan belt. Do not overtighten the fan belt. An overtight belt will considerably shorten the life of the generator rear bushing, as well as place undue strain on the water pump bearings. It is very important to use the correct fan belt, both in length and width. The V-shaped belt should ride on the edges of the V-grooves in the pulleys to provide the friction to drive the pulleys. If the belt is badly worn, or incorrect, so that it rides in the bottom of the pulley grooves, it should be replaced with the correct belt. The belt should be sufficiently tight so that it will drive the water pump and generator without slipping. The belt is tight enough if the fan can be rotated by hand, but with appreciable resistance. When on the car, the only required maintenance is to periodically check the tightness of the belt and to periodically lubricate the rear bushing with engine oil. On generators without the tachometer drive, the bushing is oiled through a hole in its housing in the center of the rear bracket. A felt pad behind the hole retains the oil. On generators with a tach drive, the bushing is oiled from the side by a spring-loaded felt pad in a brass retaining sleeve.

BEFORE RESTORATION

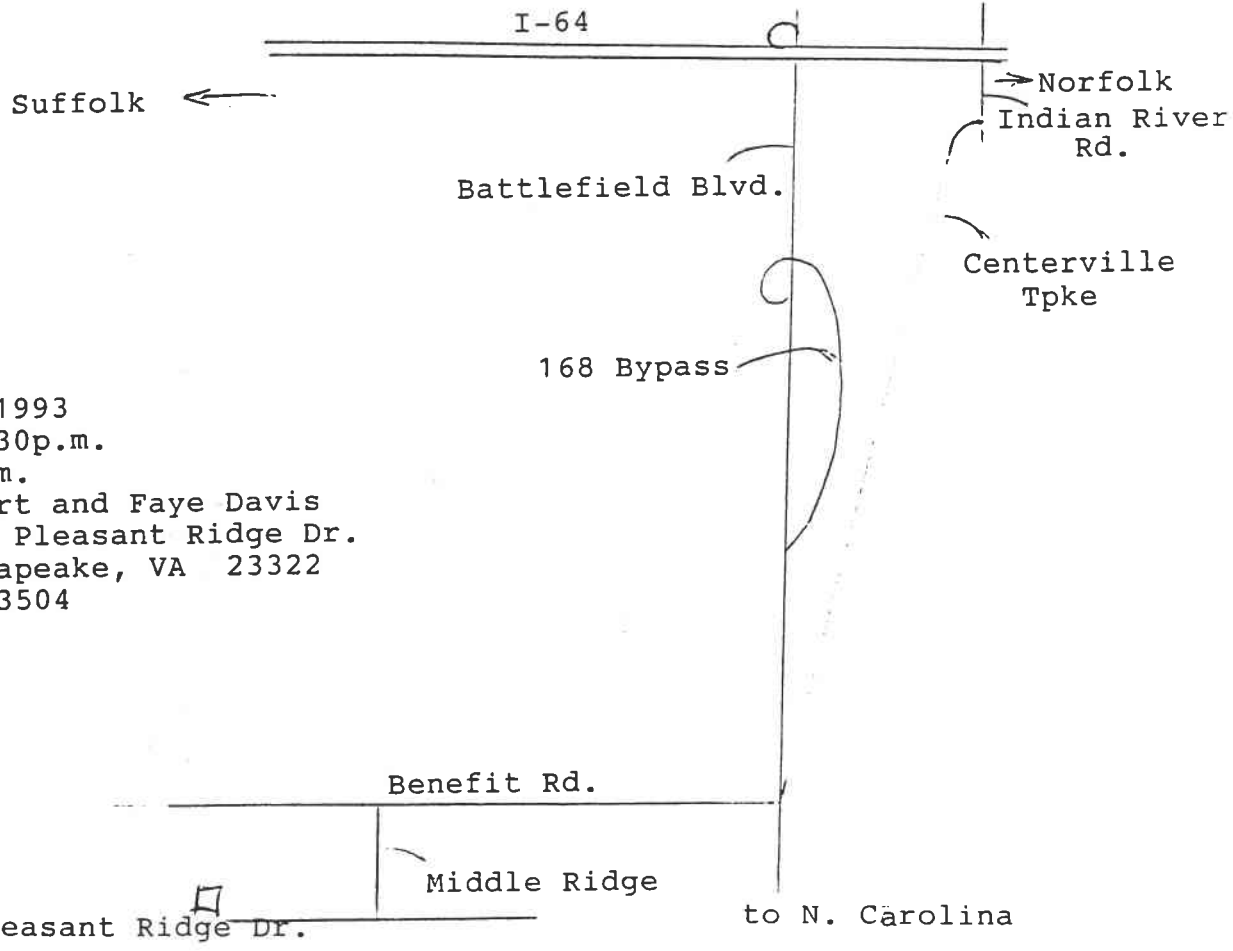
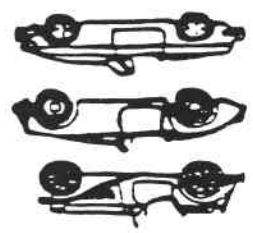


AFTER RESTORATION





First Class



Monthly meeting
 Tuesday Feb 2, 1993
 Kick Tyres: 7:30p.m.
 Business 8:00p.m.
 Hosted by: Robert and Faye Davis
 1016 Pleasant Ridge Dr.
 Chesapeake, VA 23322
 421-3504