



# MORRIS GARAGES INFORMER



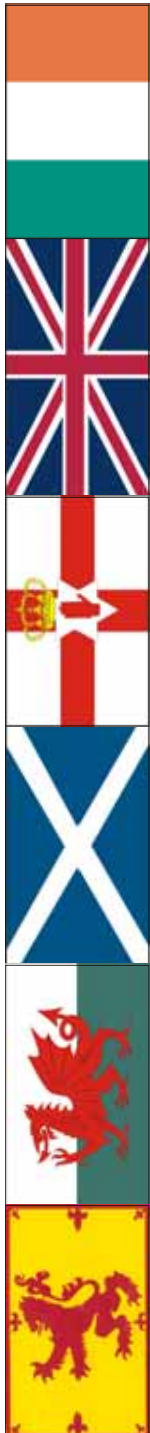
Volume 31, Number 11

“It’s Gotta Be Fun”

November 2011

## An Uplifting Day at Glenn’s MG Repair

by: Gail Lenhard



There were some beautiful cars coming down 39th Avenue North in St. Petersburg on a gorgeous Saturday morning. They lined up and down the road and some brought their cars into the shop so they could be lifted up on one of the shop’s three lifts. It was interesting to see that even the women liked to look at the cars underbelly and listen to what Glenn or one of the other technicians, James, Cory, or Chuck had to say about what they saw.

Club member, Jay Waldo, did the honors and acted as head chef grilling the bratwurst and chicken for lunch. Thanks Jay! The group descended on the grilled meat, chips, fruit, and soda all the while talking about their cars and some of the trips they had taken with them. As this was an interclub event, there were club members from the Austin Healey Club, the Tampa Bay British Car Club, the Florida Suncoast MG Car Club, and even some from the Alfa Romeo Club. All in all, an informative, fun-filled event.



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**Important Notice**  
**Meeting Location Change**

**Technical Updates—Only available in electronic edition**

## 2011 Club Officers

### **President**

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727-521-9890  
glenn@glennsmg.com

### **Vice-President** **Vacant**

### **Secretary**

**Gail Lenhard**  
727-521-9890  
gail@glennsmg.com

### **Treasurer**

**John Lester**  
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ladylester@verizon.net

### **Board of Directors**

**Bruce Rauch**  
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**Barrie Carson**  
**and Regalia Chairman**  
727-791-8682  
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**Web Site**  
www.fsmgcc.com

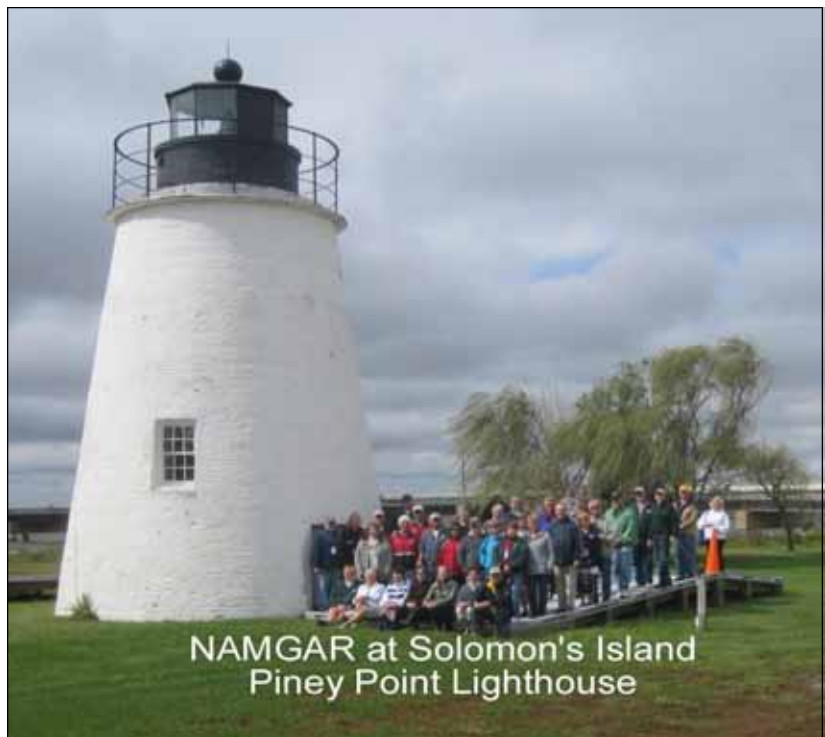
### **Newsletter Editor**

**Dennis J. Magee**  
It is the policy of this editor to review  
all articles submitted and make  
changes as necessary.

## **Fall 2011- NAMGAR at Solomons Island**

*by RoBERTa Rauch*

NAMGAR designs its Regional events to be smaller gatherings of MGA aficionados just for fun and fellowship. From September 28 to October 2, the Mid Atlantic Chapter hosted an event that filled the bill. They chose Solomons Island, Maryland, a small island 55 miles south of Washington, DC, where the Patuxent River meets the Chesapeake Bay.



About 30 MGs came from as far as Michigan and Florida for this event. Activities of the week included a cruise around the waters surrounding Solomons Island on a Chesapeake Bay bug-eye-style oyster dredge boat, a visit to the Calvert Marine Museum, a British Car Rallye from the village of Solomons to Leonardtown (8 miles, but the rallye was 77 miles!), kayaking along the McIntosh Run into the Chesapeake Bay, an indoor-and-outdoor visit to the Patuxent River Naval Air Museum and a drive out to the Piney Point Lighthouse. Eating opportunities were seafood-laden at such places as Vera's White Sands Beach Club, Captain Billy's Crab House and the Island Bar & Grill.



Mr. Blue, our '62 MGA MkII, was up and running for the journey. We took him on the AMTRAK Auto Train to Lorton, Virginia where we were met by friends from the Mid Atlantic Chapter who led us on a tour down to Solomons Island for the event. We drove home after the event on a 3-day drive with a super ride across the Blue Ridge Mountains on "The Crooked Road", Virginia's Heritage Music Trail. We were able to stop and visit Dave and Dianne Tietz at their new home in Loudon, Tennessee. Arnie & Sue Anderson, former FSMGCC members, joined us for lunch.

When we left St. Petersburg, there were 53 miles on Mr. Blue's newly-rebuilt engine. When we got home, we had put 1,848 trouble-free miles on the car.

## Home for Noddy, the wandering MGB

*By John Lester*



We are now home in Florida, and just as we got home about two weeks ago, a big cold front came down Florida and lowered the temp from the 90's to the high 70's. It was a great weekend when we returned.

We came back through central Oregon via Crater Lake to Carson City and then across US 50 (the loneliest road). We stayed in Great Basin National Park to visit Lehman Caves, then through Green River, UT to Black Canyon of the Gunnison Nat. Park in Colorado. Then we went Northwards to Aspen and spent a couple of nights in a Forest Service Park just outside of Aspen. There are NO RV parks in Aspen. The millionaires and billionaires would not allow it! Two tents had been roughed up by a couple of Black Bears in the Forest Service Park where we stayed and we were the only

RV in our section of the campground. We lit a big fire and kept a sharp lookout. Did not see any, DARN!!!

From there we went over the highest pass in the U.S. Independence Pass, 12,095 ft to Manitou Springs. The Motor Home panted a bit and complained about having to pull the Noddy! While we were there we took the railroad up Pikes Peak. COLD!!! No we did not think about driving Noddy up Pikes Peak! Noddy suffers from altitude sickness, as at any altitude she refuses to idle. I have been told that I need to adjust the air/fuel mixture, but it is easier to catch the train! We also visited Garden of the Gods which is a Manitou Springs City Park with

some incredible red rock formations.

From there to Dodge City and Boot Hill, then to Oklahoma City where we visited the Memorial and the State Capital Building. Then meandering through AR and MS to Santa Rosa Beach on the Gulf in North Florida. Topsail Hill is a resort State Park there and it is the best park we have ever been in, bar none! Fortunately for us being FL Residents and over 65 we get a 50% discount off the \$44 price.

We made one more stop where I-75 and I-10 meet at Steven Foster Folk Center, another beautiful State Park. We do tend to stay at State Parks, Corps of Engineering Parks, Forest Service and National Parks as we usually can get 50% discounts there which suits us, as we are thrifty!



This year we did 8,400 miles on our trip across America. Noddy did the same mileage even though she was towed most of the way. Noddy has now done about 30,000 being towed “All Wheels Down”. Gearbox still seems OK.

I now have over 100,000 miles on my RV and am hoping it will keep going for a few more years yet.

There is a footnote to the article I did on “Three in an MG” while we were on the way out west and my Sister, Ann, was with us. Well, we were on the way back from a river trip in the Wisconsin Dells in Noddy, all three of us, when a State Patrol Officer pulled us over. When he got to the MG and saw

three 70 plus seniors crammed into a small space he could not stop laughing! He lectured us and then let us off with a warning!

## **The Florida Suncoast MG Car Club October 12, 2011: Board of Directors Meeting Summary**

Secretary, Gail Lenhard called the meeting to order at 6:15 p.m. Mike Silvernail agreed to be the interim Vice President. A quorum was present.

The Secretary's Report and the Treasurer's Report were accepted as presented.

Membership Report: There are currently 80 member families.

Activities: Gail briefly went through the upcoming activities. See Activities in this Informer. She asked the Board members and officers to think about activities for the first few months of 2012. Some suggestions were:

- > An overnighter fun run in Pasco County staying in Mt. Dora.
- > An overnighter/canoe trip in Punta Gorda
- > A get together at the Brunson's Horse Farm near Ocala – a possible February or March event

Newsletter: Articles are due by October 20th.

Old Business:

Northeast High Project – There is no recent update.

NAMGAR Regional: The dates are set for April 10 – April 14, 2013 for our Club to host NAMGAR 2013 Spring Regional of Tampa Bay. We were able to secure the Safety Harbor Resort & Spa for the host hotel with a great rate. This event is usually limited to around 30 cars with plenty of driving events, fun, and no formal car show.

New Business: The Board decided to not to take over the Davis Island Festival Car Show in 2012.

2012 Officers & Board of Directors: The Board nominated:

President:	Glenn Lenhard
Vice President:	Bruce Rauch
Treasurer:	John Lester
Secretary:	Gail Lenhard
Board of Directors:	Mike Silvernail, Dennis Magee, Ted Badger – with one more Board member to be decided.

The meeting adjourned at 6:45 p.m.

Gail Lenhard, Secretary

## **The Florida Suncoast MG Car Club September 14, 2011: Monthly Minutes Summary**

Secretary Gail Lenhard called the meeting to order at 7:35 p.m.

The Secretary's Report and The Treasurer's Report were accepted as presented in the Informer.

Membership Report: There are currently 80 member/families.

Regalia: Contact Barrie Carson if you would like to purchase any Club regalia.

Past Activities:

September 17 – Breakfast at Skidders & tour of the Gulf Beach Historical Museum was a fun event with many members present. A motion was approved to donate \$25 to the museum.

October 1 – Lift Day @ Glenn's MG Repair – although there were more Austin Healey Club members present, this was a great event with plenty of good food, nice cars, and fellowship.

Future Activities: Gail briefly outlined upcoming activities. See Activities in this Informer.

Fellowship: Longtime member Martha Robinson passed away September 24th. Bob Cannarella is recovering from neurosurgery and subsequent radiation therapy. Don & Phyllis Graham are doing better and enjoying their new "digs."

Newsletter: Deadline for articles is October 20th.

Old Business:

Northeast High Project – There is no recent update. Bruce will make an effort to visit. The Club still is holding funds to donate to the school. We would like to present this to Don Muhleman at a meeting.

2012 Officers & Board of Directors:

President: Glenn Lenhard  
Vice President: Bruce Rauch  
Treasurer: John Lester  
Secretary: Gail Lenhard  
Board of Directors: Mike Silvernail, Dennis Magee, Ted Badger, & Dave Wilgus

Davis Island Festival Car Show 2012 – The Board decided not to take over the Davis Island Festival Car Show in 2012.

NAMGAR Regional event for April 10-14, 2013 – The host hotel will be the Safety Harbor Spa which offers huge rooms, view of the bay, good meeting rooms and a favorable rate, which includes breakfast for two, and no parking fees. Bruce said that the Safety Harbor Spa is centrally located to the events that they want to have. If you would like to volunteer to help with this event, contact the Rauchs.

#### New Business:

The members discussed the low attendance for the summer meetings. Gail stated that attendance had been low last year and this year. She wondered if it would be feasible to NOT hold meetings for those months. A motion was approved to have the monthly meetings for July and August during the Breakfast Club event. With this change, the by-laws do not need to be revised.

The meeting adjourned at 8:00 p.m. to view Bert & Bruce Rauch's summer adventures, which they will be showing again at the November meeting.

Gail Lenhard, Secretary



**Bold type is a club sponsored event**

## November

**5:** Guy Fawkes Bonfire Celebration, 2 pm to 10 pm, Camp Keystone, 19215 Crescent Road, Odessa, Florida 33556; \$10.75 per Person (children under 12 Free) (or \$10.00 if you pay by check or via the dealership). Includes: Hot Dogs with Buns, Baked Potato, Soda, Water, Marshmallows, Sparklers and one huge Bonfire. See further details at [www.minibonfire.info](http://www.minibonfire.info)

**6:** Winter Park Concours 10th Anniversary Show.

**9: Regular Business Meeting 7:30 pm. @ The Hangar Restaurant & Lounge, 540 First Street SE, St. Petersburg, FL 33701. 727-823-7767**

**12:** Cars and Coffee at Ferrari of Tampa Bay, 7:30 to 11 AM, 2420 Tampa Road, Palm Harbor 34683 727-784-3377

**12:** St. Petersburg Yacht Club Vintage Motor Classic Welcome Reception 7 to 10 PM, 200 Central Ave., St. Petersburg, One Progress Plaza Building Lobby - a reduced admission donation of \$10 per person at the door.

**12:** The British Car Club of Southwest Florida Annual Car Show. Ft. Myers, Florida. [www.bccswf.com](http://www.bccswf.com)

**12: FSMGCC Luncheon at the Moon Under Water—A British Colonial Tavern—11:30 am; RSVP required. [www.themoonunderwater.com](http://www.themoonunderwater.com) for additional information and menu.**

**13: St. Petersburg Yacht Club Car Show [www.spyc.org](http://www.spyc.org)**

## December

**3: Santa Parade, St. Petersburg followed by lunch at Chattaways Restaurant**

**10: The Brits By the Bay Picnic.** The Tampa Bay British Car Club invites all area British Car Clubs to its semi annual picnic. Phillippe Park, Safety Harbor Fl. Starts at 10:00 AM. Food at noon.

**11: Christmas Party at Daddy's Grill, Oldsmar at 4 pm. RSVP Bruce Rauch.**

## January 2012

1: The President's 2nd annual First Drive. Details to come. Fiona and I are planning to attend, in fact we are putting this one on.



**Join the Florida Suncoast MG Car Club for Lunch**

**Saturday, November 12 11:30 am**

**At the**

**The Moon Under Water  
A British Colonial Tavern  
332 Beach Drive, St. Petersburg  
727-896-6160**

**Please RSVP Dennis Magee at  
[dmagee@ij.net](mailto:dmagee@ij.net) by November 10th**

### November 2011 Fellowship

#### November Anniversaries:

November 12 Gregg & Darlene Miller  
November 13 John & Nancy Nick  
November 25 Ted & Marilyn Badger  
November 25 Lowell & Joyce Lutz

#### November Birthdays:

November 8 Glenn Lenhard  
November 8 Claire Matthews  
November 9 Nancy Williams  
November 13 Irbye Giddens  
November 15 Richard Weintraub  
November 18 Ellen Bucchino  
November 25 Becky Waldo  
November 27 Sue Broadhurst

#### Fellowship News:

Bob Cannarella is recovering from recent neurosurgery and subsequent radiation therapy.  
Don & Phyllis Graham are well and happy at their lovely home in Regency Oaks, Clearwater.  
Longtime FSMGCC Member Martha Robinson died on September 24th. She was a friend to all of us in the Club and we wish John well.

# Welcome Reception Vintage Motor Classic

Owners & Guests

Get ready to enjoy a memorable evening

**Saturday, November 12th 2011  
7:00 pm – 10:00 pm**



*Live & Silent Auction ~ Live Entertainment ~ Appetizers ~ Cash Bar*

Pre-register on-line for the Vintage Motor Classic: [www.spvc.org/classic](http://www.spvc.org/classic)  
You will immediately receive a receipt by email.

Print your receipt and bring it to the Saturday evening Welcome Reception.  
Receipt provides owners and their guests  
a reduced admission donation of \$10.00 per person at the door.

**Dress:** Business Casual

**Location:** 200 Central Ave. St Petersburg  
One Progress Plaza Building Lobby  
(former Bank of America Tower)  
on the corner of 3<sup>rd</sup> Street & 1<sup>st</sup> Ave S.

**Parking:** 1<sup>st</sup> Ave S. and 2<sup>nd</sup> Street parking garage

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St. Petersburg Yacht Club

# Vintage Motor Classic

The Most Prestigious Show on Florida's West Coast  
A premier event since 1996



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TAMPA BAY

**Show:  
Sunday, November 13th 2011**

11 Central Ave. St. Petersburg, Florida  
On The Waterfront ~ Under The Trees ~ On The Lawn

If you own a 1979 OR OLDER vintage car, truck, motorcycle, or boat you're invited to enter.

Show Schedule	
Arrival:	8:00 am – 10:30 am
Show Hours:	10:30 am – 3:00 pm
Award Ceremony:	3:00 pm – 4:00 pm

Judging based on "CLEAN & SHINE" with emphasis on "ORIGINALITY"  
The first 100 to register receive a discount, commemorative t-shirt & dash plaque.

## WELCOME RECEPTION:

**Saturday, November 12th 2011**

One Progress Plaza Building Lobby 7:00 pm

\$10.00 Donation at the door with vehicle registration.

Live & Silent Auction ~ Live Entertainment ~ Appetizers ~ Cash Bar

VISIT WEBSITE REGULARLY

for updated information, registration, show history & photos:

**[www.spvc.org/classic](http://www.spvc.org/classic)**

\*\* REQUEST TO BE ADDED TO THE SHOW MAILING LIST \*\*

Contact: Bill Waters (727) 580-1804 | [Bill.Waters@RaymondJames.com](mailto:Bill.Waters@RaymondJames.com)



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Mr. MOLY Engine Oil Supplement plates onto engine surfaces providing a protective barrier that will sustain loads in excess of 200,000 psi

This thin film of Mr. MOLY prevents metal-to-metal contact between moving parts and effectively eliminates wear. The low coefficient of friction of molybdenum disulfide (MoS<sub>2</sub>) allows the plated metal parts to glide by each other with reduced friction and heat. The plating action of MoS<sub>2</sub> ensures that the protection is there even when the oil has drained off. This is particularly important at startup or in the event of oil or coolant failure.

**Break-In New/Rebuilt Engine Oil Supplement**

Break-In is a soluble molybdenum together with anti-foaming agents and corrosion inhibitors specifically designed to increase the load capacity of oil in the initial and critical first hours of operation in new and rebuilt engines.

Even with extensive machining and honing of the surfaces on new or rebuilt engines, under microscopic view these surfaces (i.e. rings to cylinder wall, cam to lifters) look like two mountain ranges passing over each other. As these peaks pass over each other, they actually weld together and then shear apart, creating tremendous friction and heat. This is the reason why new or rebuilt engines will run at higher than normal temperatures during the break-in period. Break-In helps to eliminate scuffing and scoring and promotes the flowing out of metal high points. These high points are flattened, not broken away.

Break-In is ideally suited for performance type engines in cars and boats where the luxury of a normal break-in period at low speeds is not available. In normal everyday use, the benefit of using Break-In in the engine's early life will ensure a longer life and delay, by thousands of miles, the inevitable costly rebuild.

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727-385-1188  
And  
Glenn's MG Repair 3130 39th Ave N  
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[glenn@glennsmg.com](mailto:glenn@glennsmg.com)

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## tech feature

by Larry Carley  
Technical Editor



# BRAKE ROTORS: WHEN TO RESURFACE OR REPLACE

**L**ike brake pads, brake rotors don't last forever. The rotors wear every time the brakes are applied. The rate at which rotors wear depends on a lot of variables: the type of brake pads on the vehicle, the metallurgy (hardness and quality) of the castings, how efficiently the rotors cool themselves, the type of driving the vehicle is subjected to, the braking style of the driver (aggressive or easy) and exposure to moisture and road salt.

Semi-metallic brake pads usually contain a very high percentage of chopped steel fiber, so they typically cause more wear on the rotors than most ceramic or nonasbestos organic (NAO) brake pads. On vehicles where rotor wear is a problem, switching to a "softer" friction material (such as ceramic or NAO) may solve the problem — provided there's a choice of friction materials available for the application.

The quality of original equipment rotors can vary from excellent to questionable. Most carmakers insist rotor quality is extremely important. After all, the rotors are part of the brake system and safety is paramount. Yet some original equipment rotors come from the factory with hard spots, inclusions, impurities and other junk in the cast iron that undermines their durability, wear resistance and performance. Good metallurgy is critical because it affects the friction qualities of the rotor as well as its strength, hardness, sound characteristics and even its corrosion resistance.

### **ROTOR THICKNESS**

As a rule, most original equipment rotors used to be designed with enough thickness to go two or more pad replacements. But on some cars today, the rotors are thinner to save weight and cost. Consequently, the rotors may be worn down to minimum thickness specifications (which is usually marked on the casting itself) by the time the first set of brake pads need to be replaced — or even sooner in some cases.

The minimum thickness specification is an important dimension because it is the minimum thickness that provides safe braking. As a rotor wears and becomes thinner, it has less mass. This reduces the rotor's ability to absorb and dissipate heat. It also reduces the strength of the rotor, in-

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creasing the risk of cracking or even breaking (rotor failure). That's why the thickness of the rotors should always be measured every time the brakes are serviced. If a rotor is worn down to the minimum thickness specification, or cannot be resurfaced without exceeding the dimension, it must be replaced. In some states, this is the law.

Replacing one worn-out rotor usually means replacing both rotors on the vehicle, since they usually experience the same amount of wear. Many brake experts recommend replacing both rotors at the same time (even if one is still "good") to maintain even braking side-to-side. A significant difference in rotor thickness may cause the brakes to pull toward one side.

### **UNEVEN ROTOR WEAR**

Uneven wear is another problem that can ruin a rotor. As long as a rotor runs true and has minimal lateral (side-ways) runout (less than .002 inches of wobble as it rotates), it should wear fairly evenly. But several things can cause a rotor to wear unevenly, resulting in thickness variations that produce an annoying pedal vibration when the brakes are applied.

Excessive runout in the rotor or hub can result from a stack up of manufacturing tolerances (or poor quality control). Runout can sometimes be reduced by reindexing the rotor position on the hub, or if that doesn't work, by resurfacing the rotor on the vehicle with an on-car brake lathe or by installing thin tapered shims between the rotor and hub.

Rotor runout also can be corrected using a conventional bench lathe, but it requires a multi-step process. First, you have to measure and mark the point of maximum runout with the rotor on the vehicle. Then, you have to mount the rotor on the lathe arbor and attempt to duplicate the same amount of runout on the lathe. Then, you can cut the rotor true and remount it on the car in the same index position as before — and hopefully the runout will be gone.

Rotor distortion and runout also can be caused by overtightening or uneven tightening of the lug nuts. If

somebody zips on the lug nuts with an impact wrench, the uneven loading of the lug nuts can twist and distort the hat section of the rotor, causing the disc part of the rotor to wobble as it rotates. Using a torque wrench to final tighten the lug nuts prevents this kind of distortion.

Dirt or rust between the rotor and hub also can create runout. Cleaning the face of the hub and the inside face of the rotor hat section with a drill-powered circular brush can eliminate this cause of runout.

Hard spots in a rotor casting also can cause uneven wear. The hard spots resist wear while the surrounding softer areas experience more wear. It only takes about .001 inches of thickness variation to cause a noticeable pedal vibration. Resurfacing doesn't get rid of the problem because the hard spots usually extend far below the surface. Shaving off the high spots may allow the rotor to run true for awhile, but sooner or later uneven wear will cause the high spots to return. The only cure is to replace the rotor.

### **CORROSION**

Corrosion also can kill rotors. All rotors rust to some extent when a vehicle is parked and is not driven for a period of time (like a week or more, especially in a damp environment). Some rotors are worse than others when it comes to rusting. To reduce costs, General Motors reportedly deleted chromium (a rust-inhibiting ingredient) that has been used in some of their cast iron rotor alloys. The result has been some severe rusting problems with GM original equipment rotors. Rust is bad because it weakens rotors over time, and makes the brakes noisy when the vehicle is first driven after being parked. Rusty rotors also increase brake pad wear. The pads will usually scrape the rust off after a few stops, but until then the rust is interfering with the pads and reducing their stopping ability.

### **HEAT EFFECTS**

Heat management is another factor that affects both rotor wear and braking performance. When the brakes are

applied, friction generated by the brake pads rubbing against the rotors creates a lot of heat. The heat is absorbed by the disc portion of the rotor, and is dissipated by the cooling fins (slotted vents) between the faces of the disc. Vented rotors are almost always used for the front brakes, while vented or non-vented rotors may be used in the back where braking loads (and heat) are usually less. The number, spacing and shape of the cooling fins also is important because some designs are more efficient than others. Replacing original equipment rotors with ones that do not cool as efficiently because of reduced fin count or fin design may cause the brakes to run hot and increase the risk of brake fade.

Aggressive driving, pulling a trailer, hauling heavy loads or mountain driving all can cause brake temperatures to soar. Over time, this will increase both pad and rotor wear, requiring the brakes to be serviced sooner than would be necessary with more normal or light use highway driving. The pads and rotors on vehicles that spend most of their time driving in stop-and-go city traffic will always wear out much sooner than vehicles which are driven mostly on the highway or in light city traffic.

### **ROTOR INSPECTION**

When brake pads are replaced, the rotors should always be measured to see if they still have enough metal left for safe braking. As we said earlier, if the rotor is worn down to the minimum thickness specification, or cannot be resurfaced without exceeding this specification (or the minimum "machine to" spec if one is provided), the rotors must be replaced.

On the other hand, if the rotors still have plenty of metal and show no evidence of hard spots, cracking, severe grooving or rusting, and there are no complaints about pedal pulsations, the rotors can be resurfaced as needed to restore a flat, smooth friction surface.

### **RESURFACING ISSUES**

In some cases, rotors may not have to be resurfaced when the pads are replaced. If they are relatively smooth

with minimal grooving, they may not need to be cut. However, most professional brake technicians won't take a chance on not resurfacing the rotors for fear the brakes may be noisy or not feel right until the pads are fully seated in.

Resurfacing a rotor obviously removes metal, making the rotor thinner and reducing its remaining service life. Because of this, some consumers as well as some vehicle manufacturers say rotors should not be resurfaced every time the pads are replaced (unless the rotors are badly grooved or uneven). Okay, some people are cheap and are trying to save a buck. We'll grant them that. But do they really want to cut corners on their brakes? Resurfacing restores a flat, smooth surface that provides the proper friction characteristics, minimizes noise-producing vibrations and allows for maximum pad contact.

Installing new pads on a grooved rotor causes the pads to ride on the high spots of the rotor. Eventually, the pads will wear down and make full contact with the rotors as they seat in. But this increases pad wear and decreases overall pad life. So it could also be argued that not resurfacing the rotors is counterproductive to maximizing brake life.

The surface finish on the rotors also is important because it affects the friction characteristics of the brakes, pad seating, break-in, wear and noise. Most new OEM rotors today have a surface finish between 30 and 60 inches RA (roughness average), with many falling in the 40 to 50 RA range. Some OEM specifications say that anything less than 80 RA is acceptable. If rotors are resurfaced, they should be cut to meet these specifications using sharp lathe bits and proper rotation and feed speeds (not too fast!).

Composite rotors (those with a stamped steel center hat and cast iron disc) that are being resurfaced must be supported with bell caps or adapters to prevent them from flexing while they are being cut. A vibration dampener should also be used on all types of rotors to reduce noise and tool chatter.

### **JUST REPLACE THEM?**

As inexpensive as many aftermarket rotors are today, it's quite affordable to simply replace the rotors rather than

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surface them. Some auto parts stores offer free resurfacing to customers who purchase pads, while others charge a nominal fee for resurfacing (10 to \$20 per rotor).

New rotors should be ready to install right out of the box. There should be no need to "clean them up" with a shallow cut on a lathe. This may actually produce a worse surface finish and/or runout on the rotors if they are not resurfaced correctly. It will also reduce the thickness of the rotors, shortening their useful service life.

For customers who are more concerned about braking performance and safety than saving a few bucks, I recommend premium-grade replace-

ment rotors. Premium rotors typically use the same casting configuration as the original (same number of cooling ribs between the faces and same pattern). If replacement rotors with a different rib design or configuration are installed, it may create cooling and/or noise problems. Premium rotors also have better metallurgy, and are manufactured with tighter quality controls.

Watch out for "thin" rotors that have a wider space and thinner disc faces to reduce weight and cost. These rotors may not cool as efficiently as the original equipment or premium aftermarket rotors.

If a vehicle was originally equipped with composite rotors, the original rotors can be replaced with similar

composite rotors or cast rotors. Cast rotors are less expensive and more rigid than composite rotors. But the center hat section of a solid cast rotor is thicker and changes the steering geometry (scrub radius and toe alignment) slightly. This may or many not affect steering and handling on some vehicles. For now, some OEMs (GM) still recommend replacing same with same while others (Ford) say its okay to replace composite with cast.

Finally, whether a customer is having their old rotors resurfaced or are replacing them with new rotors, don't overlook related sales opportunities such as brake fluid, brake hoses, calipers, brake lubricant and any specialty brake service tools that may be needed to service the brakes. ●



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## Upcoming Events

### November

- 5: Guy Fawkes Bonfire Celebration**
- 6: Winter Park Concours 10th Anniversary Show**
- 9: Regular Business Meeting, New location at The Hangar @. 7:30 pm.**
- 12: FSMGCC Luncheon at the Moon Under Water—A British Colonial Tavern—11:30 am; RSVP required.**
- 12: St. Petersburg Yacht Club Vintage Motor Classic Welcome Reception 7 to 10 PM, 200 Central Ave., St.Petersburg, One Progress Plaza Building Lobby - a reduced admission donation of \$10 per person at the door.**
- 12: The British Car Club of Southwest Florida Annual Car Show. Ft. Myers, Florida. [www.bccswf.com](http://www.bccswf.com)**
- 13: St. Petersburg Yacht Club Car Show [www.spyc.org](http://www.spyc.org)**

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