



HORIZONS

July - August 2002

June Meeting Minutes

Despite really poor weather on this date, a few die-hards and some newer members made it to the meeting to eat and talk.

Meeting called to order at 7:15 pm by Bill B.

- 17 members, guests in attendance.
- Bill passed out newsletters to any who needed or did not receive them.
- Kathy to create "package" to get dealer sponsorship. "Package" to include perks to get dealers to sign on and pay minimum \$350.00 to be active sponsors of club.
- Insurance for club is going up. Insurance increase will affect club account but not individuals.
- The trailer will be kept at Just Miata.
- We need to schedule a painting party at Stuarts new shop. Basil has 2 compressors and paint gun to lend.
- Reminder of Aug board meeting at Bills office on Sunday before next club meeting.
- See newsletter for events. Need people to schedule more.
- July nite autocross coming up.
- LoAn is sick, keep her in your thoughts.
- Meeting closed and we ate.



Now here is a tattoo worth having!
No, it's not real...it washed off in 10 days but it sure got a lot of attention! I think my enthusiasm for my car shows a little too much sometimes!

Kathy - July 2002

**-Board meetings - 1 week
before general meeting
(Tuesdays) at the Rowe &
Newbury office at 7:30 (May,
Aug and Nov)**

All club members are welcome to attend



The Picture Page

Various pictures from the Gap, and a new car!



For those interested, the SunRiders now have an "advertising" page on www.pinellaslife.com . If you would like to see it just go to **www.pinellaslife.com** and scroll down to the bottom right corner. Click the link that says SunRiders and you will find some of our favorite members cars, and some of our favorite members there. If any of you have photos you think would be better on that page please let me know and I will consider changing them out.

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Fritz Kloepfel
Vice President
Xikoh, Inc. - www.xikoh.com
Marketing, Web Site Development,
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(727) 510-2739
www.pinellaslife.com "A must if you
live, work, or play in Pinellas County,
Florida."

What's in store?
by Cherie Turner

The proposed 2003 colors of the Miata are:

Splash Green
Garnet Red

Crystal Blue is no longer listed as a color. The LS models are available with Black leather on Red, Black, Splash Green and Silver. Tan leather is now listed as Beige.

Posted by Dwaine and Molly
Ukraine

Thought you might like to see that we have not dried up and blown away!!!

The attached picture was taken at the residence of US Ambassador to Ukraine Carlos Pascual last Saturday night, 13 July 2002. Molly and I were among a group current Peace Corps Ukraine Volunteers and one former PCV now working with the UN that were asked to meet with US Secretary of the Treasury Paul O'Neill during his two day visit to Ukraine. He was very interested in our impressions (as a group) of Ukraine, our programs, and what we were accomplishing. In addition he had several key members of his staff that took part in the meeting. It was very interesting and enlightening, I think, from both sides and a very enjoyable evening. (It was also the few times I have had on a suit since I have been here.)

There will be an update soon, but we have been incredibly busy, too much at times I think... I really am sorry the updates have not happened on a more regular basis.

Regards and best wishes...

Dewaine

Business Development Volunteer
US Peace Corps Ukraine, Group 20

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"Whatever you can do or dream you can, begin it. Boldness has genius, magic, and power in it. Begin it now!" *Johann Wolfgang von Goethe (1749-1842)*



Miata Suspension 101: The Parts

By Loren Williams (reviewed by people with more knowledge than him, proofread by people smarter than him)

After purchasing my Miata in December 2000, it didn't take me long to decide that I had to do something with the suspension. Yeah, the Miata handles gloriously as delivered from the factory... but the amount of body roll designed into the car was just too much for me. And thus, I started tweaking things...

Since then, I've asked lots of questions, done a fair amount of research, and did my fair share of experimentation. I generally can't resist sharing some of what I've learned whenever someone asks about it. Somewhere along the line, someone suggested that I write an article about it to share my vast <cough> knowledge and experience. And thus, here I am.

I'm just getting started, but it already seems to me that this should be a series of articles rather than one big article. This first article will be your introduction to the Miata suspension. If you're already familiar with the basics, this will surely bore you to tears. It might anyway!

If the whole idea of modifying a car's suspension is new to you, you really should become familiar with all of the parts of the suspension and the available adjustments to the suspension before you even consider buying any parts.

The Parts

The Miata suspension is really pretty simple in its complexity. The front and rear suspension are nearly identical in their basic design. These are the basic parts. (go ahead, pull off a wheel and give 'em a look!)

Wishbones

You've probably heard of the "double-wishbone" suspension. Well, guess what? You've got 8 of those little wishbones under your car, two for each wheel. The technical term for these parts are upper and lower control arms, they are more commonly referred to as A-arms. (nothing like having three names for the same part just to keep things simple, eh?) The inboard end of each pair of control arms is mounted to the chassis, via rubber bushings. The outboard ends attach to the wheel hub via ball joints.

These A-arms are one of the key features that make the Miata suspension what it is. The big thing that they do that a simpler suspension like the McPherson strut that you'll find on most front wheel drive cars does not do is control the camber of the wheel throughout the range of suspension movement. On the typical front driver, as the suspension compresses (when you dive into a turn or hit a bump), the camber becomes more positive (the top of the wheel tips outward), greatly compromising the contact patch of the tire. The Miata's good ol' double-wishbone suspension does not do this. In fact, because the upper and lower A-arms are unequal in length, it does just the opposite and creates just a little bit more negative camber (top of the wheel tips inward) when compressed, which is a really good thing when you're wanting the tires to hang on in a corner.

Now, unless you're building some sort of exotic race car, you really shouldn't need to do anything with your A-arms other than make sure they're not bent. You can change the rubber bushings on the chassis end with either fresh factory rubber or stiffer after-market polyurethane bushings, that's about it. We'll discuss that more later along with the alignment adjustments that are also made right there at the inboard end of those A-arms.

Springs and Shocks

Okay, let's get the basic function straight first. The concept is simple, but a lot of people get it wrong. Springs support the weight of the car. Shocks (also called dampers... similar to struts if you're itching for a third name for the part!) control the movement of the spring. Without good shocks, your car would "pogo" like that 1974 Ford LTD that you were almost scared to pass on the way home yesterday. Springs want to bounce, that's what they do. Shocks control that bounce.

The Miata spring/shock assembly (sometimes called a coil-over shock assembly) is mounted to the chassis at the top and to the lower control arm at the bottom. It fits through, but does not attach to, the upper control arm. Pretty darned simple.

The Miata's springs are very soft. (this is what I hated about the stock suspension) It makes for a nice smooth ride that can handle just about any road without complaint. Keep in mind that the Miata, like most other cars, is designed to appeal to the mass market. People like me who really appreciate firm and precise sports car handling at the expense of ride quality are the minority.

Now, the truly curious thing about the Miata spring/shock assembly is the "bump stop" incorporated into the dust cover of the shock. On your typical sedan, the bump stop is just that, a bump stop. It's there to keep things from going "clunk" when you hit a big bump. The Miata "bump stop" is more accurately defined as a highly-engineered progressive rate rubber spring. If you hit a bump, it acts like a bump stop. If you dive into your favorite freeway ramp at twice the posted speed (not that I would ever advocate such a thing), your soft springs will allow the body to roll right over until the bump stop is reached. Then the bump stop takes over and effectively increases the spring rate from about 100 pounds per inch to 500 or 1000 or more depending on how hard you're pushing it. The Miata is actually designed to corner on the bump stops!

We'll get deep into the really fun stuff you can do with replacement springs and shocks later.

Sway Bars

Okay, they're really "anti-sway" bars. Yeah, they have another name... stabilizer bars. A sway bar is typically a U-shaped bar. The bottom part of the U is about 4 feet long, and the legs are about 8 inches long. The long part is mounted to the chassis in rubber bushings (more on that later), the ends are attached to the lower control arm via a pair of "end links" that have rubber bushings (again... more on that later). Simply put, they are additional "spring" in the suspension that does not effect straight-line ride quality. They only come into play when you either start to turn or hit a large bump with one wheel. (going over a speed bump where both wheels go up at the same time would not effect the sway bar)

The Miata has one sway bar on the front and one on the rear. The front bar is mostly hidden by the plastic splash shield under the car. But if you get under the back of the car, the rear bar is readily visible.

They're primary purpose is to decrease body roll when the car is in a turn. Or is it? They actually do a lot more than that, and understanding what they can and can't do can help you make good decisions on what to do with your suspension.

Like the springs, the bars on a Miata are relatively small. They really don't need to be that big to fulfill their "other" purpose, which is to tune the handling balance of the car. The way sway bars work is by transferring weight to the opposite corner of the car. For instance, if you turn left, the weight of the car shifts to the right, body roll happens, and the front bar tends to transfer some of that downward force from the right side back to the left to keep the left side of the car planted. There's got to be a better way to explain that. When we get to discussing actual modifications, I'll explain it better, I promise.

Tie Rods

Okay, they're not really a suspension part, more of a steering part. I'm including them because when we start talking about alignment, you'll need to know about them. Tie rods are the links between the steering rack (the gear assembly that translates your rotational input on the steering wheel into linear left-right motion) and the front wheels. They attach to the steering rack on one end and to the front hub on the other via a "tie rod end", which is a sort of ball-joint.

There's really not much you can do with tie rods other than make sure they're straight, have good boots on the steering rack (to keep crud out of the rack) and have good (not loose) tie rod ends. The length of the tie rods can be adjusted to adjust the front wheel toe angle and center the steering wheel. Much more on alignment later!

Those are the basic parts. Like I said, it's pretty simple. The next article will talk about alignment and all of the fun things you can do without changing a single part on your car. From there, we'll move on into the black art of suspension modification.



Dealer Notes...

by Kevin Morrison

Courtesy Mazda of Tampa Supports the Club in a Big Way...

In case you haven't heard, Courtesy Mazda of Tampa has signed on as the title sponsor for our autocross series this year. Their sponsorship of \$1800 is enabling us to make many improvements in the autocross program.

The first improvements happened to our trailer, which the club has owned for about a year now. A tech session was held in which the lights were replaced and rewired, storage shelves added, and some new steps for the front door were obtained. Some ongoing repairs and improvements are being made to the timing system and the PA system.

For this entire year, the autocross series is known as the Courtesy Mazda of Tampa/Sunriders Autocross Series. It's a mouthful, but it rightly calls attention to those who have helped make the whole thing possible. Courtesy is also sponsoring the club as a whole by buying one-year memberships for all their customers who purchase a Miata. So far, they have sent us quite a few new members. They are also offering us a 20% discount on parts and service!

Stop by their showroom on Dale Mabry in Tampa and say hi to club member and officer (Secretary) Cherie Turner - she's a salesperson there!



**COURTESY MAZDA
OF
TAMPA**



Lindell serves our St. Pete people...

Don't forget long-time club sponsor Lindell Mazda in St. Pete. They've been buying memberships for Miata buyers for several years now and it seems a large proportion of our current membership came to us through them. Lindell also offers a 20% discount in the parts and service department for club members. Visit the web site for some great on-line specials too. <http://www.lindellcars.com/online-specials.htm>



Shifter Knob Psychology

by Loren Williams | Loren@InvisibleSun.org '96 Mazda Miata | <http://InvisibleSun.org>

Driving to work this morning I suddenly realized that my car felt different. It felt a little more aggressive. A little more in my control. A little more... something.

Then I remembered that I'd changed the shifter knob the other day. How much of this is psychological???

The knob that was on the car was a nice leather-wrapped aftermarket piece that my dear wife bought me for Christmas. I put it on there shortly after I bought the car 18 months ago because I like the warm feel of leather on a cold winter morning rather than the cold feel of aluminum. At the time, the Miata shifter felt so much better (understatement!) than what I had in the Saturn that I really didn't realize what I was giving up.

The leather knob was rather tall and the "core" of it was a light-weight hollow plastic affair which transmitted, perhaps even amplified a lot of vibration. But it felt good (mmmm... leather) and it looked nice.

The knob that I put back on the car (thank you, Tim Harmon) is very different. It's a black crinkle-finished sphere of aluminum with a very deep hole in it that essentially places the knob as low as it can go without modifying the shifter shaft. (about an inch shorter than the leather knob that I took off!) Okay, so the knob is shorter... basically fits the hand a little lower than where I was grabbing the other shifter most of the time and it takes a little more engage a gear. But there's more to it than that. This knob, being a hefty hunk of aluminum has MASS and actually vibrates a lot less than the other knob did. Less distracting vibration, but more of the good "feel" that you do want.

I now understand why they call this a "Voodoo Knob". (maybe now I can drive the car as fast as Tim used to?).

Posted by Paul Williamson:

Mazda Names Executive Director of Miata Owners Club

-- Organization Devoted to Popular Roadster to be Independently Run --

Irvine, Calif. - Mazda North American Operations (MNAO) today announced the appointment of Maurice Q. Liang as executive director of the Miata Owners Club. In addition, the automaker also announced that Liang's appointment will be the first step in soon having the Miata Owners Club managed as an independent organization. The operation of the Miata Owners Club presently falls under the MNAO umbrella.

"We're thrilled to have someone of Mr. Liang's experience run the Miata Owners Club, as it is extremely important to Mazda as a way to build both brand loyalty and a closer relationship with our most enthusiastic customers," said Kristen Simmons, vice president of marketing for MNAO. "By having the club operate as an independent organization, we can more effectively support and sponsor it, and the club's autonomy will encourage the unique personality of this close-knit, passionate community to flourish."

A life-long automotive enthusiast who says he possesses a special fondness for the Mazda Miata, Liang has been involved as a member, an officer and a founder of various car clubs for many years. Liang also maintains an extensive background on the corporate level, having served as director of marketing for a division of Hewlett-Packard.

"I've always liked the Miata as an all-around, fun-to-drive sports car, and I'm looking forward to using my experience to enhance the Miata ownership experience for Miata Club members and make them feel more connected with Mazda."

Mazda North American Operations is responsible for the sales and marketing, customer parts and services support of Mazda vehicles in the United States. Headquartered in Irvine, Calif., MNAO has more than 700 dealerships nationwide.

Goodbye and good luck Kim!
Kim has accepted a teaching position in England. Though she will be far away in miles, she will be close at heart to all the Sun Riders.



MAZDA ONLINE
taken from ZOOM, ZOOM Magazine

What's new at my mazda....if you've already signed up at www.MyMazda.com, you know the site can help you keep track of your Mazda's recommended maintenance schedule. At the site you can also plan more than 50 scenic, check the current resale value of your car and download sceensavers. Learn more by visiting the web site and don't forget...enjoy the view! :)

EVENT IDEAS

POSTED BY RANDY:

If anyone is interested, some of us local Miata nutz are meeting up on every Tuesday Night right behind the Taco Bell on Lumsden Road (Brandon) in the parking lot, there is about 5 of us (Miatas)so far, the rest is a gathering of all other import makes/models.

Look for a RED, SILVER, or WHITE miata that are almost always there. We would like to swap parts, talk Miata, and just hang out.

WHEN: Every Tuesday from 8:30PM - 'til

WHERE: Parking Lot Behind Taco Bell.

(Lumsden Road, Brandon Florida)

WHY: To show off, Talk Shop, & Swap Parts.

CONTACT: email me for more info.

If you need a map you can go to <http://www.mapquest.com> and print out driving directions from you location, you destination address is listed below, hope to some new folks there!

11325 Causeway Blvd Brandon, FL 33511
(I also posted this thread on Miataforum.com, my screen name is Phatmiata.)

Newsletter Deadlines

The following are the deadlines I am setting up for the newsletter. Articles may be submitted via e mail to kathy@sunriders.com or snail mail at 11438 119th Terrace Largo, FL 33778.

Any and all persons of the club are invited to share/write an article but due to space, editing may occur. If this is a problem, please speak with the editor. Thanks and happy writing!! :)

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July - August Issue

deadline for accepting articles copy: July 12

send to printer: July 16

mail newsletter: July 18

September - October Issue

deadline for accepting articles copy: Sept 13

send to printer: Sept 17

mail newsletter: Sept 19

November - December Issue

deadline for accepting articles copy: Nov 15

send to printer: Nov 19

mail newsletter: Nov 21

For our charity - We would like to reach \$500 in cash support, and hopefully a ton (2000 lbs.) of donated cat and/or dog food.

To achieve this goal, we would like to strongly encourage people to bring a bag, box or can of pet food with them to every club event. Either Kathy Davis or Jonathan Skinner will then collect the food and log it. We need to actively promote this aspect more thoroughly, in order to get higher participation among the Club members. If people "forget" to bring food, we can also take \$\$\$ instead! Jonathan would also like to propose that we reinstate the 50/50 drawings, with the Club portion of the drawing going to our selected charity, (in this case, the SPCA).

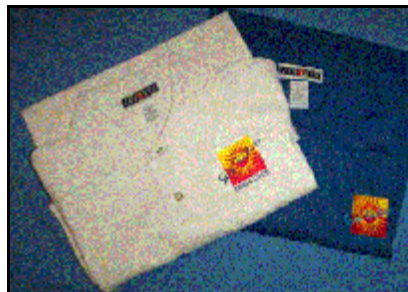
Sun Riders Club Merchandise For Sale

contact Iona Wessling
@ (H) 727.376.2484 (W) 727.937.8247



\$25

polo shirts
assorted colors,
racing stripe collars



\$25

polo shirts
assorted colors,
plain collars



\$15

t shirts
heavy weight white
cotton



\$15

magnets
approx. size 8 inches



\$6

buttons
made with your
name and car
color/style

The Events Page - Sun Riders Events

Tuesday, August 20, Monthly Meeting - 6:30 PM kick the tires, 7:00 PM dinner and meeting. Meeting location is Jimmy Mac's Restaurant located one block south of Gandy Blvd. in Tampa on Bridge Avenue, just west of Westshore. Look for the big Imperial Marina sign on Gandy.

Saturday, August 24, 9:15AM - Mote Marine Aquarium/Longboat Key - Meet at the Blackthorn Memorial on the Sunshine Skyway causeway at 9:15. We depart at 9:30. We will then drive to Cox Mazda (Palmetto) for refreshments and to meet up with any southern folks. From there we will drive West out to Longboat Key (our normal route). We will then stop for lunch at the Salty Dog (need to be there at 11:00 to get tables) and visit the Mote Marine Aquarium. After that we can drive down to St. Armand's Circle (for those who want to shop) or drive further South down to Siesta Key. Contact Don Reese (don@sunriders.com) for more info.

Tuesday, September 17, Monthly Meeting - 6:30 PM kick the tires, 7:00 PM dinner and meeting. Meeting location is Jimmy Mac's Restaurant located one block south of Gandy Blvd. in Tampa on Bridge Avenue, just west of Westshore. Look for the big Imperial Marina sign on Gandy.

Saturday, September 21 - Clearwater Marine Aquarium - meet at 11:00am at the Sams Club at US 19 and Hwy 60 (Aka Gulf to Bay Blvd). Contact Geena Giacometti (lunagirl@tampabay.rr.com) for more info.

Sometime in October - Tech Session - Just Miata in St. Pete is going to host a club tech session. Members can do routine maintenance on their cars using the lift and get expert advice on everything from tires to timing belts. More details to come.

Other Events

September 19-22nd: OVERNIGHT EVENT - 2002 National Miata Event



It's being held in our nations capital hosted by the Mazda Sportscar Club of Washington DC and sponsored by the Miata Owners Club.

Event information and an application to the event can be found at www.mscw.com/miata2002 or call (703) 278-8005. There is a 200-car limit to the event.

Upcoming First Coast Miata Club Events:

Their new address is fcmcmiata.com/

Some additional info is at the website and the registration form can be found there also (look in the upcoming events section)

(registration form also found in this newsletter)

**October 11th – 13th: OVERNIGHT EVENT - Miata Monster Mash –
A Regional Event for Miata Owners in the Southeastern United States**

POC: Kathy Garvin (904) 879-7227 redmiata@aol.com or
Carol Easter (904) 389-3214 ceaster401@aol.com

The FCMC is going to do it again! We're hosting a regional club event at the Ponce de Leon Resort in St. Augustine, FL. Go ahead and make your room reservations! We've got a special rate of \$85.00 per night. Call the hotel directly at (904) 824-2821.

The registration fee will include a t-shirt and dinner both Friday and Saturday. There will be a Hospitality Room for unwinding, Karaoke, a Costume Contest for the cars, prizes, a Poker Run, and a great time for all!

If you'd like to be a part of the fun give Kathy or Carol a call. Volunteers will be needed.



PRESS RELEASE

Morrison Struggles but Regains Some Speed.

June 4, 2002, Tampa. - Flaming Blue Weasel Motorsports driver/car owner Kevin Morrison was back in action at Sebring's short course on June 1 and 2, marking his first racing action of the 2002 season. Following a test at the same track two weeks earlier that was somewhat slowed by rain, Morrison got off to a slow start during Saturday practice and qualifying. "The car felt good, but I just wasn't fast enough. I'm very rusty." said Kevin after qualifying on Saturday morning. Morrison qualified 12th out of the twelve Spec Miatas in attendance, falling some 4 seconds behind the pole qualifying lap of Joe Evans of Daytona Beach, Florida, but only 0.1 seconds behind the next fastest Miata.

The weekend's format of three sprint races gave Kevin the opportunity to redeem himself, though, and he did. In the first race, he gained one position and ran laps faster than his qualifying time. In the second race, run on Sunday morning, he gained four more positions and on his fastest lap was within 1.3 seconds of all but the winning car of Joe Evans. Kevin finished the race in 8th place.

"That second race was really good." Morrison said later. "I proved to myself that I can run with the fast guys, for the most part, and once the car is brought up to their level, I should be right on the pace. The car handles great, and the new Toyo tires are very grippy and consistent. I just need to do better in qualifying." The team's new sponsor and technical partner, Just Miata of St. Petersburg, Florida, has come on board to help get a competitive engine in the #89 Spec Miata. Running a high-mileage street motor, the #89 car is well overdue for an engine update.

"A legal showroom stock race motor will go a long way in making up that 1-second deficit we're facing," Morrison says. "We obviously want to stay within the rules, but it is true that a 125-thousand mile street motor is not going to be competitive in this series. Stuart Thompson at Just Miata can help us out with a motor that is within the rules and also outperforms our old tired motor. We have also not been running a limited-slip differential, which is allowed by the rules. At certain tracks, that part alone could be worth as much as a second a lap - maybe more."

"What we are finding is that racing, even at the grassroots level, is exceedingly difficult. In order to be competitive, you have to spend the money and put in the hours," Morrison states. "We have been in this for almost two years now and I am just now starting to feel like I'm driving the car hard enough. Even so, I'm sure there's still a lot more time to be found in my driving than in the car."

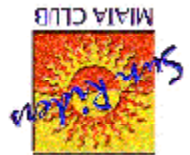
Flaming Blue Weasel Motorsports will race again on July 13-14 at Moroso Motorsports Park, in two sprint races and a 90 minute enduro, in which Steve Swiger is slated to co-drive with Morrison in the #89 car.



FIRST CLASS MAIL

MIATA CLUB

Tampa, FL 33623-6071
P.O. Box 26071



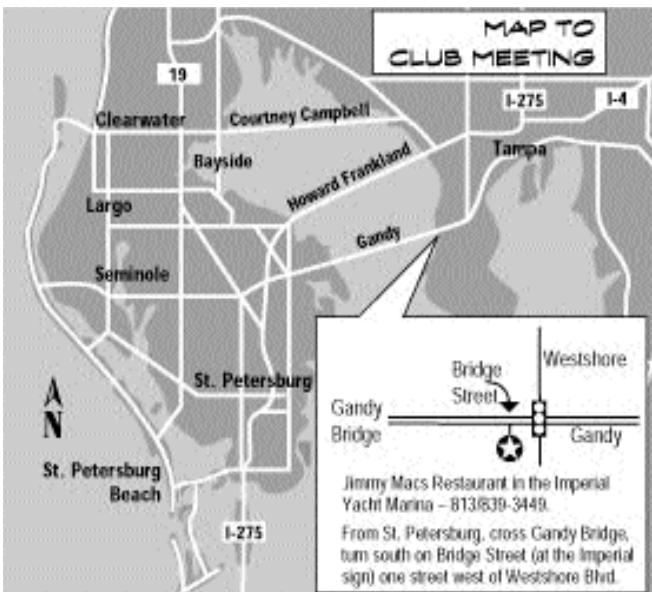
Join us at our club meetings...

We meet the third Tuesday of each month. Currently our meetings are being held at Jimmy Macs Restaurant, tire kicking starts at 6:30 and the meeting begins at 7:00pm.

For more information visit the web page at:
www.sunriders.com

If you received this newsletter and are not a member of our club, please consider this an invitation to join.

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Stuff the lawyers make us say: all opinions expressed in this newsletter are those of the authors. they do not necessarily reflect the opinions of the Sun Riders Miata club, Miata Club of America, Mazda Motors, or the Board of Directors of any of these organizations. Technical advice given is based on the writer's experience with their particular cars. Unless otherwise stated, these procedures are not "Factory Approved". Sun Riders assumes no responsibility for the use or misuse of any information presented herein. Use any information at your own risk. Some assembly may be required, batteries not included. Keep away from small children and point away from face when lighting.