

ERA EXCHANGE

YOUR GUIDE TO ELECTRICAL REBUILDING

March 2017 \$12.95

11SI OR KD11?

Beware of Lester Number 8483

E&B TRADING COMPANY LTD

Adapting for the Future

EXPLORE THE ERA WEBSITE

Using the Forums Part 1

2017 Trade Show Registration!

See Page 15

**PLAIN
TALK**

**THE TIMES THEY
ARE A-CHANGIN'**



A WORD FROM THE PRESIDENT

Become More Involved



As the ERA show in April gets closer, I am reminded that it is also that time of year that we hold our elections to fill various board positions. When I look back on all of the contributions that many of our members have made in serving in as officers, I realize just how important these elections are to the continued success of the ERA.

Our board is made up of a mixture of rebuilder and supplier members. We meet once a month via conference call to review current projects and discuss potential new ones. None of these members are paid for their time or expenses. The ERA is a non-profit organization, so that all of our revenue goes towards generating benefits for the membership.

That is why I am asking you to consider getting more involved by taking a position on the board and contribute with your knowledge, experience and ideas. As our industry changes, we must continue to provide the tools and technical information that will help our membership adapt and be more successful.

If you would like to help in this effort, please feel free to contact me, the ERA office or any one of our board members. You can find all of our contact information on our website by selecting "Contacts" under the "Association" drop-down menu on the home page. The ERA office phone

number and email address is on the right side of this page you are reading. Serving in any capacity is a great way to meet new friends or talk with old ones from throughout our industry once a month.

As president for the last two years, I have tried to ensure that we stay on track to achieve the goals and objectives as they are stated in the ERA's mission statement:

What is the purpose of the Electrical Rebuilder's Association?

The purpose of the Electrical Rebuilder's Association is to promote the well-being and professionalism of the electrical rebuilding industry through education and training. This is accomplished using several programs, including the website, the technical education program and the annual trade show. In addition, the association promotes the public awareness and professional image of the industry.

I believe this to be a very worthwhile agenda. That is why I have been a member since almost the beginning. I would like to remind everyone that now is the time to fill out your registration form and make reservations for the ERA show next month. It is shaping up to be another fantastic show. I look forward to seeing you there.

Mike Dietrich

"There is joy in work. There is no happiness except in the realization that we have accomplished something."
— Henry Ford



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NEW ERA MEMBERS

B&M Alternator, Starter Repair
Union City, Ohio

Stanley Auto Electric
Marble Falls, Texas

Karam Auto Limited
Saskatoon, Saskatchewan, Canada

ABOUT THE COVER

Delco KD11 rectifier



PLAIN TALK — THE TIMES THEY ARE A-CHANGIN'



BY ROB BOKSAR

I suppose the Obama administration did lots of good things? I just didn't care for much of what I saw or experienced. They sure weren't business-friendly! What the Trump administration attempts and accomplishes remains to be seen.

This isn't a personality contest or toastmasters international. Nor am I on the steering committee for Donald Trump. What I do know is the nation needs a no nonsense chief executive who likes America and is willing to take action! Even though consideration of others is paramount, allowing 3rd world dung-hole nations push us around is totally unacceptable!

I recommend to one and all, liberal or conservative, not to rush to judgment. Trump is the new POTUS and *deserves the same chance that we all gave to Obama*. Sadly, far too many democrats and too much of the media has already doomed the new president and his crew to failure and they're barely out of the gate. Actually, as I'm penning this, the lion's share of Trump's crew has not been approved by Congress. Trump is already on the field moving and shaking without the benefit of his entire team and getting things done.

It's a pretty good bet that by the time this is published, the cabinet will be approved and functioning at some level. Then, we can see what these guys are made of and the direction that they're going to take us. This much I know for sure, we're all in for some real change!

I suppose that this is a good time to tell you what this is all about. The easiest way to do that is first, tell you what this isn't about. It's not my purpose or intent to knock the previous administration or endorse the new one. This is all about recognizing that the ballgame has changed and will continue to change over the next four years, *maybe for the better*.

We have seen no encouragement to remain in small business the last 8 years. There have been some limp efforts concerning more NAFTA-type trade deals but nothing that would benefit small to medium business or the middle-class working man.

Our major domestic corporations have been lined up at the door, vacating the United States for greener pastures. That alone should capture America's attention and spur outrage, but it doesn't. We were the economic jewel of the planet and folks were lined up to get in and do business here. Now, they can't get out fast enough! No one seems to care? They call it the free market. Bull!

Further, the previous administration shut down the coal mines and related industries. Countless thousands of jobs were lost and billions reduced from our GNP. This was done through over-regulations and restriction via the EPA. Also, if you wanted to open a new factory in the U.S., it might take 10 years to work through before you were compliant enough to open. By that time, the need for what you wanted to manufacture was swallowed up by another country (probably China). Needless to say, opening up new factories in the U.S. just wasn't a good idea when our own government made it prohibitive to do so. I can only assume that it was more important to please the environmentalists than to encourage business in the world's greatest capitalist country. Maybe, they didn't like being a

capitalist country? Regardless, it's been ugly watching lots of small businesses turn into hobbies and good fulltime jobs flip to part-time or contract labor.

So, now we have a business-friendly administration. Before he was sworn in, Trump was wheeling and dealing, trying to keep factories from leaving the U.S. and encouraging other corporations to continue investing in the U.S. rather than some other country.

Trump's first public move was convincing Carrier Air Conditioning to stay in Indiana rather than moving to Mexico. Being a Hoosier, I was excited and encouraged by this first attempt, it worked! He talked to many others who also agreed to stay and keep their manufacturing and capital investment here, it's huge!

Get a load of this, Trump promised to reopen the coal mines. We lost all of the mining-related business 2 years into Obama's first term. In his first week, Trump relaxed 75% of the EPA regulations and restrictions and essentially told the EPA to back-off. Last week, we were called by a customer who serviced the mines that we thought was out of business. He was so excited on the phone that he could hardly contain himself. He cheered that the mines were opening, everyone was being called back to work and he's back in business! In that same call, he gave us a huge order for parts needed to freshen up equipment that's been sitting for 6 years. Hip-hip-hooray! How about them apples!

It's difficult to wrap my brain around that a few phone calls, the swipe of a pen made it possible for me and my co-workers to continue making a living, building parts. That's not to mention the thousands of miners and businesses, small and large that gets to regain their dignity by reclaiming their livelihoods. This is powerful stuff.

This doesn't mention all the calls that we've been getting from industry, construction, railroad, maintenance and material handling. Something's changed and something's happening out there. Whatever it is, we're on the cusp of it. Almost as if we are waiting for the starting gun to fire.

This last decade has been really hard on all of us. Lots of change and much of it has not been in our favor. It's been real difficult staying upbeat and trying to charge forward when you get the snot beat out of you weekly!

The "Good Book" admonishes us all "that those who endure to the end, will be saved". I'm sure God was not referring to rebuilding shops but I think the principle is solid. Hang in there friends, don't throw in the towel. Recall customers that you thought were lost-causes and contact the ones that you have continually put off. You just might be surprised. Moreover, look where you haven't looked before, there's something there for you and you never saw it. With a Pro Business Administration, there will be change, it has already begun and I can testify to that.

In conclusion, if it's financially possible and you can, make the time to attend the ERA Trade Show. Attendance is similar to charging a low battery. We all need to be around like-minded people with a will to succeed who speak the same language.

Attend with an open-mind and focus on what you can give rather than what you can get. With that approach, you'll return home with 10-fold more than what you went with and I don't

PLAIN TALK

mean pens, post-its and tablets.

For those of you who have taken some major hits and have had to downsize or maybe even take on a part-time gig to stay afloat, don't quit. Don't view your setback as retreating, look at it as reloading. Join your soon to be new friends at the show and make it your business to be a beam of light and encouragement. Keep your eyes and ears open and watch for the windows of opportunity as they open because they will. Why? As Bob Dylan said, "The times they are a-changin'."

God Bless the United States of America and our little industry!

Rob can be reached at IWI 800-323-7521

"What's right about America is that although we have a mess of problems, we have great capacity - intellect and resources - to do some thing about them."

— Henry Ford



DID YOU KNOW? The mass production techniques Henry Ford championed eventually allowed Ford Motor Company to turn out one Model T

every 24 seconds!

NEW ERA MEMBER BENEFIT

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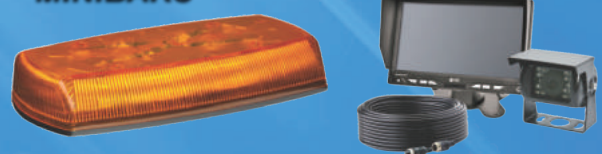


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11SI or KD11? Beware of Lester Number 8483



BY BOB THOMAS

The Korean-made Delco Remy 11SI was introduced primarily for marine and industrial applications that required more amperage than could be squeezed out of their 7SI platform. The 11SI is physically larger than a 7SI (see Figure 1) and utilizes a CS130D style regulator plug as opposed to the two-pin 5SI and 7SI regulators (see Figure 2).

The overall design of the 7SI and 11SI alternators is similar with a removable black plastic cover for easy access. They both have dual internal fans, make use of A-circuit regulators and have rectifiers that include diode trios as a source of field current (see Figure 3). However, between the size differential and physical appearance differences, it is fairly easy to tell them apart.

But in 2004, a strikingly similar but completely different alternator was introduced by Delco. This new alternator, also Korean-made, is currently referred to as a KD11 on the Delco Remy website. It has also been identified previously in some places as an AD211.

This new alternator is identical in size to the 11SI. It also uses the same CS130D regulator plug. Unless you have them both side-by-side, it is not easy to tell which one that you have. Delco Remy has assigned part numbers to the KD11 but for whatever reason, they have departed from their long standing practice of labeling and are not tagging them with identification numbers. The only numbers you are likely to see will be meaningless casting numbers on end frames. This presents a major challenge to anyone faced with servicing, repairing or rebuilding one of these alternators. That could be you.

Fortunately, at least for now, it appears that a single Lester number covers most if not all versions of the KD11. That Lester number is 8483, Aptrak 63693 or original Delco Remy part numbers 96540542, 96838439 and 96954113 (see Figures 4 and 5). It was used on Chevrolet Aveos, Pontiac Waves and Canadian Suzuki Swifts from 2004 to 2008. Those years and models add up to a large number of vehicles sold, most of which have now been on the road for over 10 years.

The 8483, like all of Delco's CS and AD series alternators, uses a B-circuit regulator with a phase connection to the

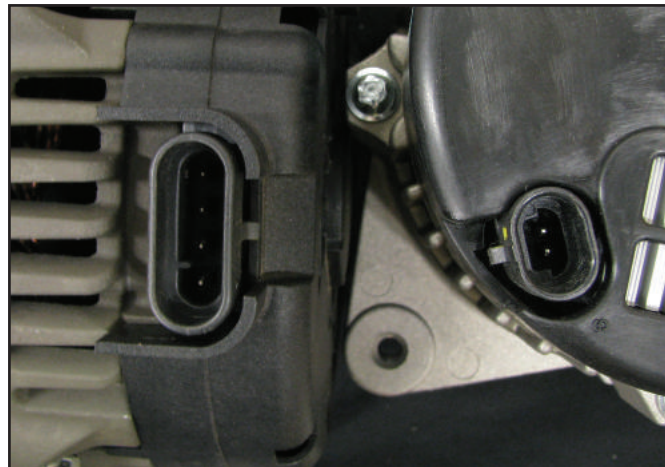


Figure 2 – The two-pin 7SI regulator plug (right) compared to the CS130-style 11SI plug (left).



Figure 3 – The 11SI rectifier contains an integrated diode trio on the lead frame.



Figure 4 – Delco's KD11 alternator can be easily confused with an 11SI.



Figure 1 – Delco's 70 amp 7SI alternator (left) and 95 amp 11SI (right).

11SI OR KD11?

rectifier (see Figure 6). The KD11's rectifier does not have a diode trio (see Figure 7). In fact, the rectifier's lead frame appears to have been manufactured with spaces for trio diodes but they are empty. The KD11's brush holder grounds the negative brush.

These characteristics are the **exact opposite of the similar-looking A-circuit 11SI**. You can easily see the 11SI's trio of axial diodes on its rectifier (see Figure 8). The physical dimensions of the two rectifiers are identical (see Figure 9).

While the CS130D-style plugs and terminal designations are the same, the 11SI and KD11 voltage regulators are visibly different (see Figure 10). However, they could be mistakenly installed in place of one another. The 11SI on the right in the photo has an extra terminal that connects to a phase terminal on the 11SI rectifier. The terminal next to B+ on the 11SI is the trio's output terminal. That terminal is the phase terminal on the KD11's regulator, which has no trio. Either regulator will fit both rectifiers – but they cannot function if mismatched!

The KD11 regulator has had three different plug configurations or plug codes since its introduction in 2004. Remy's online Tech Tip TT-667 (see Figure 11) explains that all of those applications use only the two center pins – Ignition and Lamp. But there are reports from the field that a Suzuki application with a tachometer requires an active phase (P)



Figure 5 – The KD11's rear plastic cover has cosmetic differences from the 11SI but mounts identically.

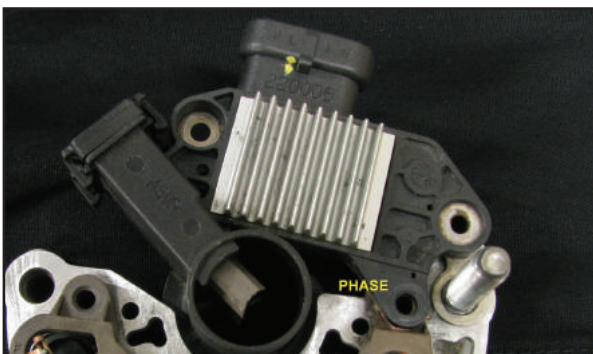


Figure 6 – The KD11's regulator has a phase connection next to B+.

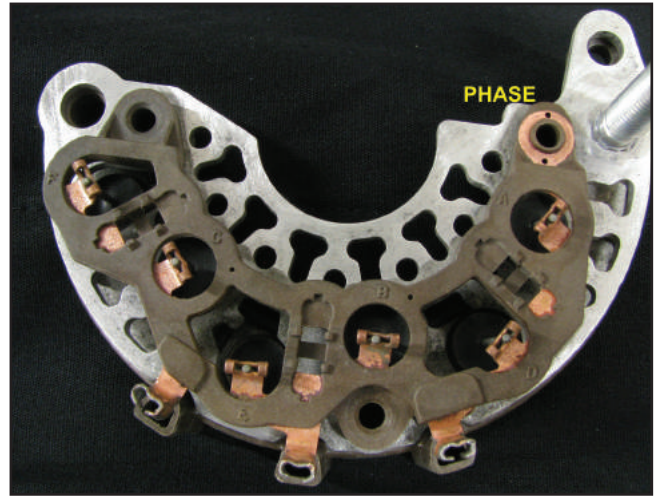


Figure 7 – The KD11 rectifier's lack of a diode trio makes it easy to recognize.

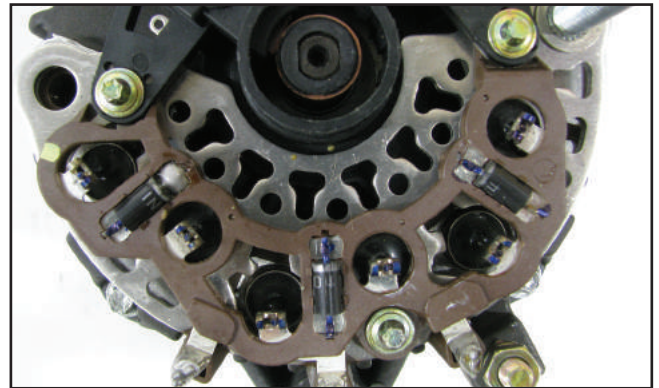


Figure 8 – This aftermarket 11SI rectifier makes the trio even easier to see.

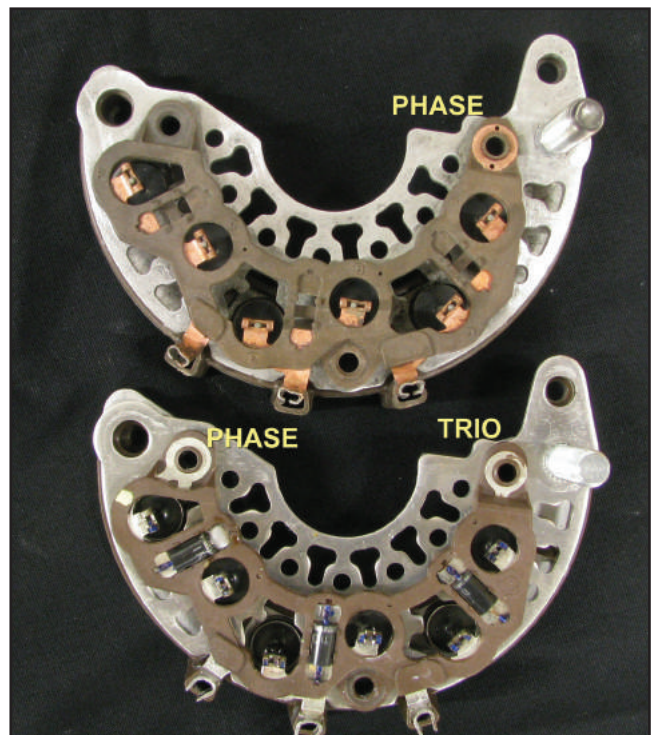


Figure 9 – The terminals are identified on the KD11 rectifier (above) and 11SI (below).

11SI OR KD11?

terminal in the plug for the tachometer to function properly. Oddly, the P wire does not feed the tach directly, but does so through the vehicle's engine control unit (ECM). Keep that in mind should you ever run into that problem. Those vehicles will have a third wire in the regulator's harness connection.

One word of caution: While researching these alternators, I found multiple conflicts of information on vendor websites. Take extra care to insure that you are buying the correct parts when rebuilding a Lester 8483 alternator. No matter how it looks, it is not an 11SI.

Special Thanks to Mike Schroeder, Central Automotive Electric in Union, MO and Gene Kaiser at Regitar-USA for supplying information about these alternators.

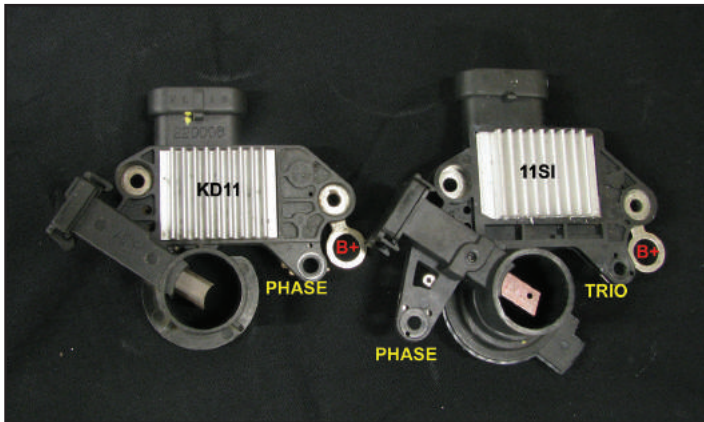


Figure 10 – The terminals are labeled here on both regulators.

TECHNICAL TIP

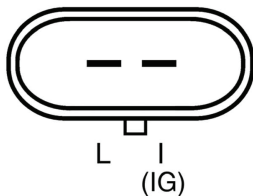
TT-667

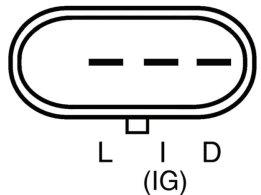
Please Review

2, 3 or 4 PINS on the REGULATOR Connections

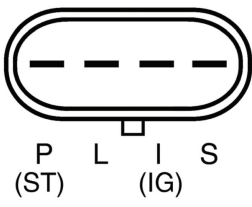
Research has found that alternators installed on vehicles in the North American market have or use only 2 pins (L & I) on the regulator / 2 wires on the connector. Although the unit you received may have additional pins than your original unit it will install and function correctly. Please note the following plug configurations that may be found on the unit supplied and that the L & I terminals are located commonly on all 3 models.

North American Vehicles





These Models can be used to replace 2 pin – Note L & I pins are in a common location within the plug



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Figure 11 – Delco Remy's Tech Tip can be found on their website. It explains the various regulator plug codes that have appeared on the KD11 alternators to date.

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E & B TRADING COMPANY LTD

Adapting for the Future



BY BOB THOMAS

Those who attended the ERA Expo in Atlanta in 2014 may remember talking to a tall friendly rebuilder with a soft Jamaican accent who had recently joined the association after finding its website. Eric Williams had flown into Atlanta from Hamilton, Bermuda, where he established his business, E & B Trading Company Ltd in 1987.

“Growing up in my native Jamaica, I was always being exposed to some form of rebuilding,” Williams explained. “Things just had to be rebuilt because the money was not always there to buy a new one and even if the money was there, you may not be able to find one.”

His first job was with Tropical Battery Company Ltd in Jamaica. They manufactured batteries at their factory while sales and rebuilding was done at branch locations. They also carried out starting and charging checks and did repairs on some vehicles. “After my training,” he said, “I was promoted to Assistant Branch Manager in 1969.”

A year later, Williams was offered a position in Bermuda with Bermuda Motor and Cycle Accessories Company Ltd. also known as Lucas House because they were the dealers for all Lucas products. “My job was to manage the battery shop and assist in the electrical department,” he said. “They were the premier DC electric sales and service provider on the island. We worked on anything DC.”

“In the late 80’s to early 90’s I could see that the industry was shifting to electronics and I wanted to grow with it. I took the Veejer Enterprises Vehicle Electronics Course and several other home study courses on electronics. I also obtained my Automotive Service Excellence (ASE) certification.”

Williams opened E & B Trading Company Ltd in 1987 as a one-man electrical rebuilding business in a 1,500 sq. ft building. The initials in the name stand for Eric and Beverly, Williams’s and his wife’s first names.

“My motto then and now is: Above average parts and service or I don’t do it,” he stated. “Do not tell me about the other shop’s price. Tell me about the quality of their products and service. Then I’ll be all ears.”

As his small business grew, Williams discovered that he needed help but could not find acceptable technicians on the island. “I had to recruit them,” he explained, “from Jamaica and the Philippines.”

His wife retired from teaching in 1996 and joined the business and in 2007, their youngest son joined the business after obtaining a certificate in Motor Vehicle Technology. In 2010 another son left the insurance industry to join the business. “We moved into a small building at our current address in 1999 and in 2006 we built the building that we are in now. In 2012 we purchased an adjacent property to accommodate our growing office and parking needs. Last year we purchased an 8,000 sq. ft warehouse at another location to house cores and other stock items.”

Williams believes in hiring good employees and hanging onto them. He also believes strongly in training for himself, his employees and his customers. He was so impressed by Dan

Marinucci’s seminar at that ERA show in Atlanta, that he contacted him afterwards about presenting a seminar in Bermuda for his customers and employees. Last December, it all came together and Marinucci flew to Bermuda to present that seminar for E & B Trading Company Ltd.

“Living on an island with 60,000 people, there is not enough of a demand to sustain a pure rebuilding business,” Williams said. “We learned to supplement the rebuilding with other products and services. In our case, we developed an auto parts store and a mechanical garage for most makes and models on the island. I would like to thank the ERA, its writers and presenters for the wonderful work they do for independent rebuilders who do not have early access to upgrades and changes in the industry.”

Special Thanks to Dan Marinucci of Communicate’ for providing the photographs and information that made this article possible.



Dan Marinucci and Eric Williams enjoying the weather outside E&B Trading Company Ltd in Hamilton, Bermuda last December.



Eric Williams at E&B’s front counter with a freshly rebuilt Mitsubishi diesel alternator.



Pictured above: The technician testing the alternator is Federico Sampang, also from the Philippines. He has been with E&B for ten years.

Pictured on the left: The technician on the lathe is Marnie Gloria. He is from the Philippines and has been with E&B for eleven years.

ARROWHEAD

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WE KEEP YOU RUNNING

EXPLORE THE ERA WEBSITE Using the Forums Part 1



BY JESSICA MYERS
& BOB THOMAS



One of the most used features of the ERA website is the Forums, where members can ask questions, express ideas and share information with one another. Created in 2004, the Forums database contains over 30,000 posts. Every one of them is archived and the Forums has its own search engine for finding answers to many specific questions quickly.

Those who have used the Forums regularly can attest that there is probably more information to be found there about rebuilding problems than just about anywhere else on the planet. But when you have a question that has not been answered before, you can create a new thread by simply posting

it. Typically, other members will begin suggesting answers within a few hours.

Using the Forums starts with logging into the ERA website, selecting “Forums” from the main menu on the green bar across the top of the homepage. Then log in on the Forums. Your username and password should be the same for both. If you check the “Remember Me” box, your computer should fill in both whenever you return – assuming that you visit regularly.

Before you use the Forums, we suggest that you read the Forum rules, which can be accessed by clicking “Forum Rules” at the top of the main Forum page (see Figure 1 and 2). These rules are pretty much common sense, to prevent the use of profanity,

Forum	Last Post	Threads	Posts
Technical Help Post your technical questions and technical information here.	7750 Ford alt. by CAEBUSCO Today 09:52 AM	3,592	16,000
Quality Concerns Having problem with a part? This is the place to discuss it.	Listing Older Part Numbers by RayVanDervort February 7th, 2017 03:33 PM	176	1,025
ERA EXPO 2017 Ford Tour SIGN UP Everyone who would like to join the informal group should sign up on the ERA Forums. Alan Melton will co-ordinate the transportation and serve as an informal group guide for those wishing to tour as a group.	~Come A Day Early For The... by sammys79 Yesterday 01:40 PM	1	6

The Electrical Rebuilder's Association website is a communication tool for our members to share information, ideas and opinions relating to our industry. We encourage all members to participate and share their views. However, a few rules are needed to keep the site professional and maintain a setting that is conducive to constructive participation from all members.

Please read the Terms of Use for ElectricalRebuilders.Org before you begin using the website.

Terms of Use

- Profanity, references to drug use, sexually explicit material, racist or sexist remarks are not permitted anywhere on the website (including private messages)
- Negative & Personal attacks directed towards other members/non-members or obnoxious behavior will not be tolerated (including private messages and e-mail)
- Forum posts or replies containing specific price information are not permitted, with the exception of items listed on the For Sale Forum. Private messaging or personal emails should be used when sharing all other price information.
- Forum replies that do not add anything constructive to the topic or have been made for personal amusement are not permitted. Such off topic replies directed toward a specific individual should be done using private messaging.
- The Off Topic Forum has been provided for all discussion that does not fit into any of the other forums. Please keep off topic comments on the forum that has been set up for it. Any reply that does not make a contribution to a specific thread should be posted to the Off Topic Forum, not the original thread.
- Each post may be posted only once. Do not post the same message twice in the same forum, or in more than one forum.
- Forum moderators may delete duplicate posts, move posts that have been placed in the wrong forum, edit posts to improve readability without changing content, or remove any post that is inappropriate.
- The above terms and conditions are in addition to the END USER AGREEMENT linked to at the bottom of each page. Use of the ElectricalRebuilders.org site constitutes an acceptance of the terms and rules contained therein.
- Any violation of these rules will be subject to removal of the inappropriate Post by the ERA Webmaster.
- The ERA retains the right to modify or amend these rules at any time.

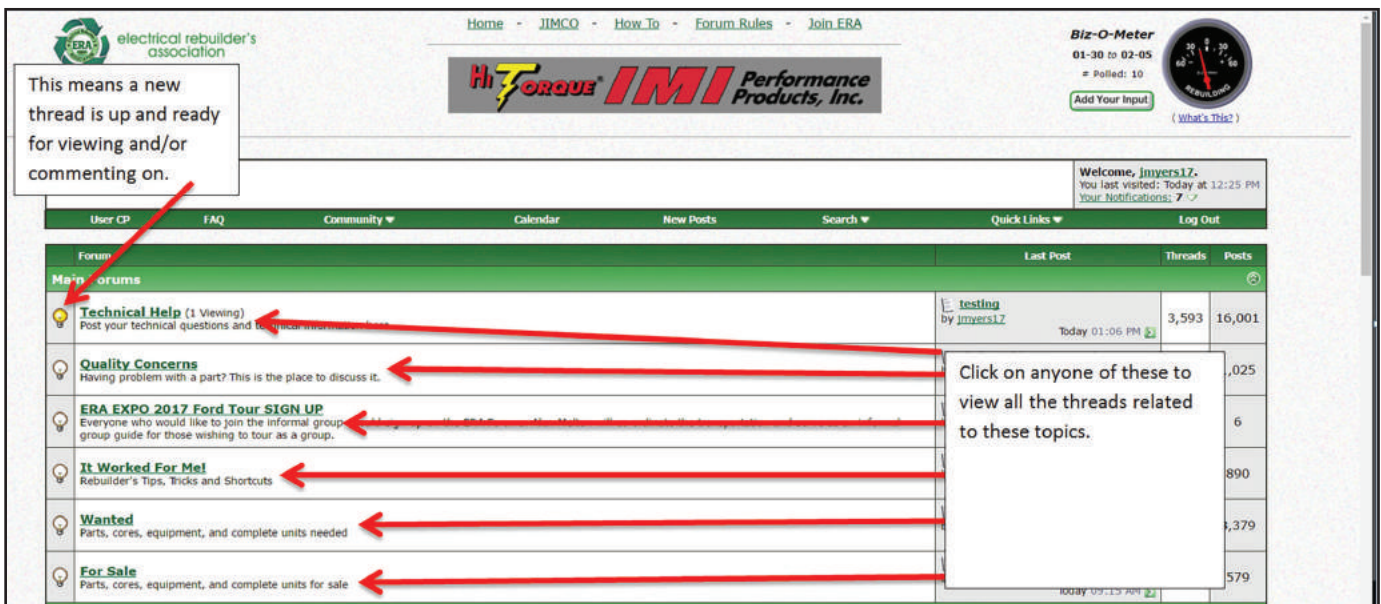
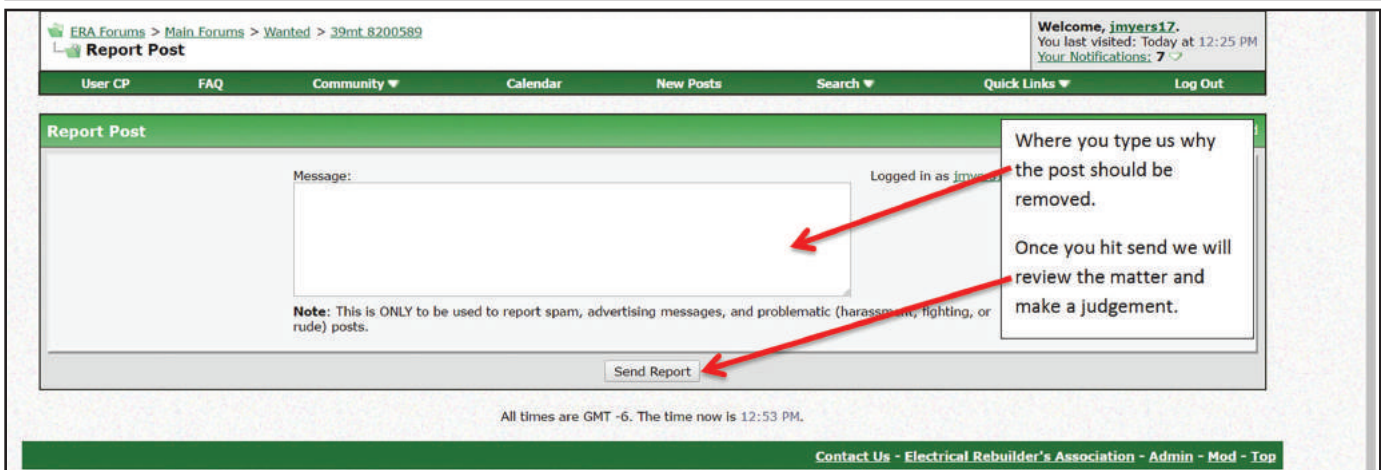
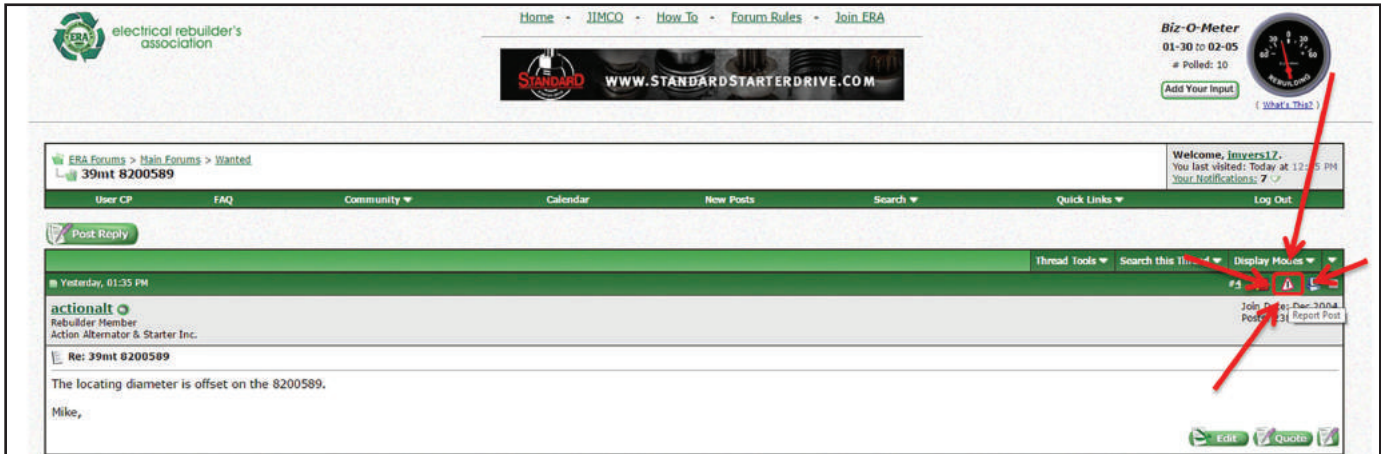
EXPLORE THE ERA WEBSITE

personal attacks and other abuses. There are no Forum police to enforce the rules. Instead, they are pier-enforced. If you encounter a post that you feel exceeds the rules. You can report it from the post itself.

At the top of every Forum post, you will see a green bar with the date and time of the post on the left side and some icons of the far right side. The “Report” icon is a white triangle with a red border and an “I” in the middle (see Figure 3). Left clicking on the report icon takes you to a page with a text box

for reporting an infraction (see Figure 4). Once the report is filed, a panel of monitors will review it and take appropriate action if called for.

The main Forum page displays 12 different Forums. The most used is at the top of the page – titled Technical Help (see Figure 5). You can learn a lot by just reading those posts daily. Over the next few issues, I’ll explain how you can get the most out of the Forums many features, including the User Control Panel, Forum Searches and uploading photos and other files.



Meet the Seminar Presenters



Tim Weyandt

Tim Weyandt & Sam Fox with Allegiant Power

Friday, April 7th 1:00-2:30 p.m.

Topic: AGM Batteries Explained

With over 36 years in the battery industry, Tim brings a wealth of knowledge to the Allegiant team. He was self-employed for 16 years as a battery specialist. Tim worked with a large tire chain where he managed the battery division for 10 years. He has worked for two battery specialists while sitting on manufacturer/dealer council, and has even taught at a vocational school. His strength is his ability to understand the business side of the battery industry and apply his marketing background.



Sam Fox

Sam Fox has an extensive knowledge of the battery industry that spans over four decades. He has successfully operated his own battery specialist company. His work history includes Southern Battery, Chloride/Conrex, Chloride, Battery Associates, Co-Founder of Battery Alliance with Art Wilson, and now the current Vice President of Allegiant Power. His expertise in dealing with supplier partners as well as sharing his knowledge with battery specialists across North America has earned him a reputation for sound business ethics.

Bill Bowman – Retired from Delco Remy

Friday, April 7th 2:30-4:00 p.m.

Topic: Alternator Electronics

Bill has extensive experience in both the aftermarket and OE. In the early 80's while working for Delco Electronics, he designed and patented the CS130 voltage regulator (411). The features and functions (Load Response Control, High Side Drive, Active Fault Indication, etc) are now standard on modern voltage regulators.

He worked for WAI and Renard Manufacturing in the 90's. His latest "real job" was the Director of Global Electronics Engineering for Delco Remy (Remy International) from 2010-2015.

For 3 years he wrote the "Driving Quality" column of the APRA Global Connection. In those articles, he discussed ideas of how to improve product quality primarily in the alternator field. In August 2006, he wrote "The MOSFETs are Coming" which predicted the diodes being replaced by transistors in the rectifier. Ten years later, active rectification (with MOSFETs) is a reality.

Bill will present a 90-minute seminar called, "Alternator Electronics." It starts with Ohm's law and goes through regulators, rectifiers, and finally communication protocols (LIN, CAN, COM, etc). To keep the presentation interesting and to engage the audience, Bill uses stories more than boring technical facts to teach. It will feel more like a conversation than a lecture.



MEET THE SEMINAR PRESENTERS



Dan Marinucci – Automotive Technical Training

Saturday, April 8th 8:00-10:15 a.m.

Topic: Vital On-Vehicle Tests That Minimize Starter/Alternator Returns

Dan is an ERA member who has presented a variety of seminars for the association over the years. He's also a member of the North American Council of Automotive Teachers (NACAT).

He has been reporting on the automotive service industry since 1976, writing for **MOTOR/AGE, UNDERCAR DIGEST, IMPORT SERVICE and ELECTRICAL REBUILDERS EXCHANGE**.

What's more, he has written **MOTOR Magazine's** monthly "Foreign Service" column for 27 years. (**MOTOR Magazine** is a Hearst publication that has served the professional auto repair market since the 1920's.

Dan has written the twice-monthly "Automotive Management" column in **TIRE BUSINESS** for 27 years. (**TIRE BUSINESS** is a Crain journal serving the tire dealer market since 1983.)

Dan has been presenting tech training seminars for installer-technicians nationwide since 1993. He has taught these classes in 38 states and across Canada. Dan gathers data for his seminars by investing countless hours in hands-on testing. As just one example, he has captured more than **4000** oscilloscope patterns during his research.

His depth of knowledge and ongoing data-gathering give Dan a unique perspective on the automotive service business.

Mohammad Samii with Sammy's Auto Electric

Sunday, April 9th 9:00-11:30 a.m.

Topic: Newer Starter and Alternator, Testing, Rebuilding, and Case-Studies

Mohammad Samii or "Sammy" as he is often called has been involved with electrical rebuilding since 1972 and currently is president and owner of Sammy's Auto Electric Service, Inc., in Champaign, Illinois which he established in 1979.

His company does custom electrical rebuilding, electrical/electronic diagnostics and installation on various vehicles, and modifications and customizing of charging starting systems for higher power and torque. He is a member of the Society of Automotive Engineers (SAE), an ASE certified technician. Sammy serves on the board of governors of the Electrical Division of the Automotive Parts Remanufacturers Association (APRA). His monthly column, "Auto Electric Corner" appears in the Global Connection (APRA's monthly newspaper) which he has been sharing his experience with his peers since 1992.

He teaches various courses in installation, rebuilding, and diagnostics throughout the U.S. and Canada for rebuilders as well as technicians and mechanics. He has been involved with teaching APRA's Electrical Clinics as well as conducting many training sessions for ERA during their annual ERA Show in the past several years.

Mohammad is a graduate of the Iranian Air Force Academy as well as USAF Air University at Maxwell Air Force, with a degree in aircraft maintenance engineering.

His career in electrical rebuilding since 1973 coincided with the introduction of power electronics in automotive applications, where his educational background made him quickly grasp the new technology. Invention of computers and their introduction into the automotive field peaked his interest where diagnosing some hard to find electrical/electronic problems remains his interest and is part of his daily work, in addition to rebuilding rotating electrical units.

He has lived in Champaign, Illinois since 1979 with his wife and 3 children who are now all grown. As a private pilot he enjoys General Aviation and flying various single engine airplanes, and is an avid tennis player who enjoys playing the game and watching various tennis tournaments.



Mark this date now! April 7-9, 2017

TENTATIVE 2017 DEARBORN/DETROIT SHOW SCHEDULE:

THURSDAY, APRIL 6

9:00

The Henry Ford
Museum Tour
with Alan Melton

FRIDAY, APRIL 7

8:30

Load Bus at Hotel
for Ford Tour

9:00 – 11:30

Ford Tour

11:30 – 12:00

Return to Hotel

12:00 – 1:00

Hot Lunch Buffet

1:00 – 2:30

Seminar: Tim Weyandt
— with Allegiant Power —
AGM Batteries Explained

2:30 – 4:00

Seminar: Bill Bowman
— retired from Delco Remy —
Alternator Electronics

4:00 – 5:00

Reception with Cash Bar

5:00 – 8:00

Exposition Open

SATURDAY, APRIL 8

8:00 – 10:15

Seminar: Dan Marinucci
— Automotive Technical Training —
Vital On-Vehicle Tests That
Minimize Starter/Alternator
Returns

10:30 - 11:30

Roundtable

11:30 – 1:00

Hot Lunch Buffet

1:00 – 5:00

Exposition Open

SUNDAY, APRIL 9

7:00 – 8:45

ERA Breakfast
& Annual Board of
Directors Meeting

9:00 – 11:30

Seminar: Mohammad Samii
— with Sammy's Auto Electric —
Newer Starter and Alternator,
Testing, Rebuilding and
Case-Studies

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we learn the limits of
our abilities."
— Henry Ford*



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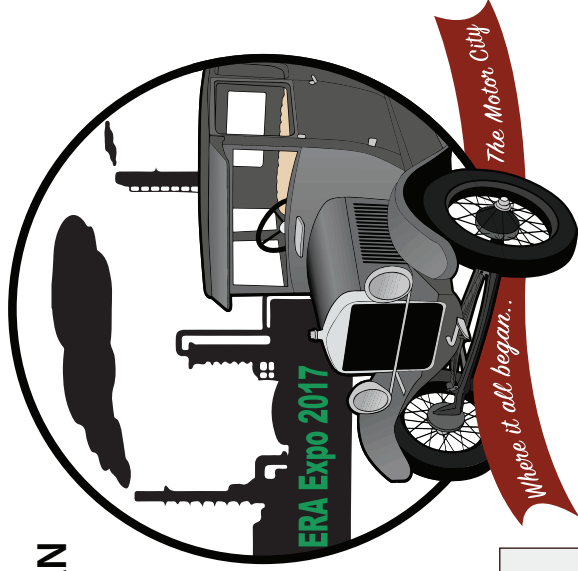
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the Henry Ford

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The Henry Ford Museum in Dearborn is the uncrowned king of transportation museums. Coincidentally, it is only a couple of miles from the site of ERA Expo 2017 April 7-9. Incorporating a museum tour in the show schedule was not feasible because of the museum's massive size. It takes a full day just to walk through it.

Alan Melton of AMFOR Electronics will be arriving a day early for the ERA show to spend Thursday, April 6 at The Henry Ford Museum. "I have been there three times and will be going again," Melton stated. "I invite fellow ERA members to join me."

The host hotel will extend the group discount room rates for anyone wishing to tour the museum with Alan. Tickets to the museum are available at the door: \$22 per person for ages 12-61, and \$20 for seniors over the age of 62. The host hotel will provide transportation. Museum hours are 9:30 am to 5:00 pm.

This is a grand opportunity to see one of the world's premiere transportation museums, covering not just historic automobiles, but engines of all kinds dating back to the 1600's, unique railroad locomotives, antique bicycles and one-of-a-kind airplanes.

If you plan to join Alan on April 6 you can let him know by signing up on the ERA website forums.




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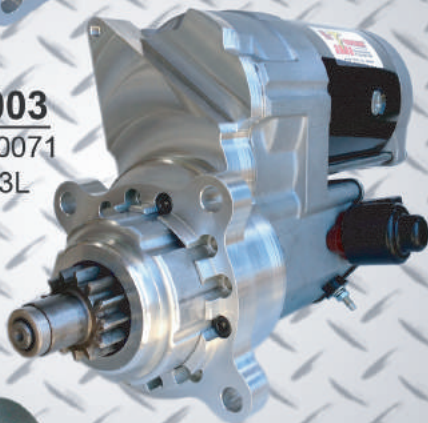
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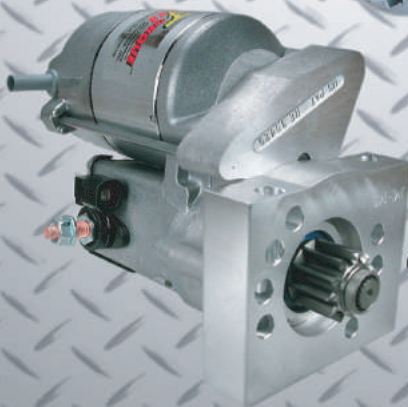
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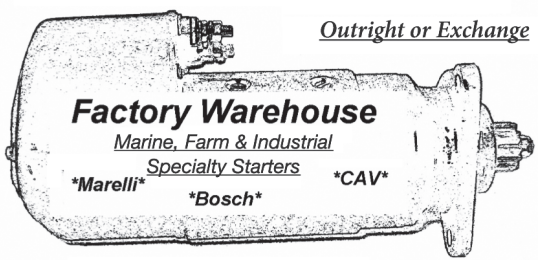
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