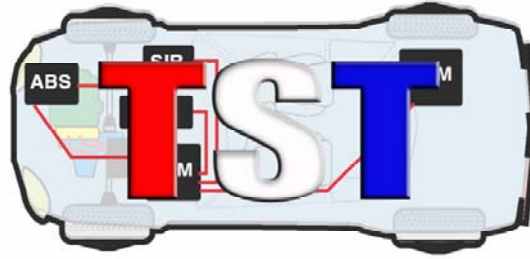


May 2012



Technicians Service Training

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Upcoming Seminars:

OBD Diagnostics with a Scan Tool

Ken Zanders

June 4th to 7th, 2012

Editor

Jerry "G" Truglia

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Have Your Tips & Tricks Seen in Motor Age!

Did you see it? TST has a new column in *Motor Age* magazine called "Scanning, Scoping, & More with TST." We will be taking case studies from our newsletter and putting the best into our column.

Now you may or may not noticed that we gave credits to the technicians who submitted the short case studies. We have been asking you guys for years to submit case studies for the newsletter, and now you have an added incentive. Fame! You can have 500,000 other people reading your case study!

We would be more than happy to edit what you write, even if you send it to us in bullet points. Just be sure to take pictures so we can illustrate your diagnostics to Motor Age's audience.

If you missed the column, here is some of what you missed:

"Impossible to Find" Corolla System Lean DTC
(Contributed by TST Member Alex Portillo)

If you have a P0171, what in the real world is likely going on? Vacuum leak, air-fuel sensor pinned lean, and bad MAF sensor?

(con't on page 3)

Technicians Service Training

11 Lupi Plaza

Mahopac, NY 10541

Phone: (845) 628-6928

Fax: (845) 628-9109

Email:

Info@tstseminars.org

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Information contained in this newsletter is intended for use by professional auto repair technicians familiar with approved vehicle repair procedures. The authors are not responsible for physical injury or property damage resulting from the incorrect application of information or procedures outlined in this volume.

Currently there are **TST chapters in Connecticut, Massachusetts, New Jersey, New York** and membership continues to grow. For more information you can call

TST headquarters at:

(845) 628-6928



Technicians Service Training



www.TSTseminars.org

What is TST?

TST is a group of dedicated technicians and instructors committed to the continuing education of our fellow technicians. We provide once a month training seminars to technicians at a reasonable price. TST brings our members nationally known instructors and state of the art training.

Our Goal & Mission Statement

- *Keep our fellow technicians up to date with the latest technology.*
- *Provide training seminars for a reasonable price.*
- *Deliver information that the technician can use now.*
- *Keep technicians informed of information affecting our industry.*
- *Increase consumer awareness of what a good technician is.*

Why join TST?

TST membership includes special pricing on once a month week-day night seminars and the occasional full Saturday seminar. With a **\$75.00 yearly membership, the monthly seminars are only \$65.00.** **TST classes are NOT sales or product seminars.** The instructors that TST brings in are all “hands-on” industry experts with up to date, cutting edge knowledge that you can use in your shop the next day. That’s 65 dollars for a seminar in which you are able to learn something useful, for fixing those tough jobs that we all see on a regular basis. Our instructors are masters at making the complex understandable. Membership also includes a Monthly Newsletter full of real world technical articles, diagnostic case studies, and solutions to the kinds of problems you see in your bays each week.

The following are some of TST’s regular instructors:

Bernie Thompson of ATS

John Thornton of Autotrain Inc.

Wayne Colonna of ATSG

Jorge Menchu the “Labscope Guru,” AES Wave

John Anello of Auto Tech On Wheels

Mark Warren of Motor Magazine

Bob Pattengale of Bosch

Peter Meier of Motor Age Magazine

Ken Zanders of Illinois Air Team

Jerry “G” Truglia of National Instructor & owner of A.T.T.S. Inc.

Have Your Tips & Tricks Seen in Motor Age! (con't from p. 1)

So, you get a 2006 Toyota Corolla and it has a P0171...

First you check TSBs and confirm that the PCM and Evap Purge Solenoid were replaced as per the recall, because they are known to set P0171 DTCs. Then you might smoke it cold and warm to look for vacuum leaks.



If you find that it checks out, you should test the A/F sensor and make sure the voltage moves positive when you cause a vacuum leak and goes negative when you add propane to make the fuel mixture rich. The A/F is a steady 3.3 V and appears to react logically. Your next step is to diagnose the MAF sensor because they go bad all the time on these vehicles. This can be done quickly by doing a volumetric efficiency test.

You can use an ATS EScan scan tool which has a built in volumetric efficiency test, or go to Google and use a volumetric efficiency calculator. An even quicker method is to go to WOT while looking at the Calculated Load PID in Generic OBD II on your scan tool. If it is lower than 90 percent inspect the MAF. Common on these Corollas that they are contaminated, so it is good to replace them. We have not had success cleaning these sensors on several vehicles.

Now, even if you did everything right do not be surprised if this vehicle comes back to you months later with the same problem! Why? Check your Freeze Frame. If the DTC sets when cold with a highly positive fuel trim, but otherwise LTFT appears to be good, this vehicle has an “impossible to find” intake manifold leak.

(Con't on p. 7)

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Jim Bradanini
Program Administrator

QUOTE

Hey: To all my tool carrying friends,

I just switched Brian's tool insurance from Farmers to Pro-TEC and I am now only spending \$350 a year for \$70,000 of insurance on hand tools, welder, air compressor, tool boxes, etc...we were spending \$747 every six months.

Anyway, I figured whoever needs insurance on your tools against theft, flood, fire, etc.... blanket coverage. The people are really nice and you can do it over the phone. You don't have to have a tool inventory list, though you will need one if you have a claim so do one up front anyway.

They offer \$50,000 for \$250 but we upped it to \$70,000 for \$350. <http://www.mechanicsinsurance.com>. The guys name is Jim Bradanini and his email address is: JimB@cpminsurance.com. Their phone is 203-439-2810. I had left a message and he got back to me within the hour.

Thank you so much for making your process so smooth and painless, kind and professional.

Jo



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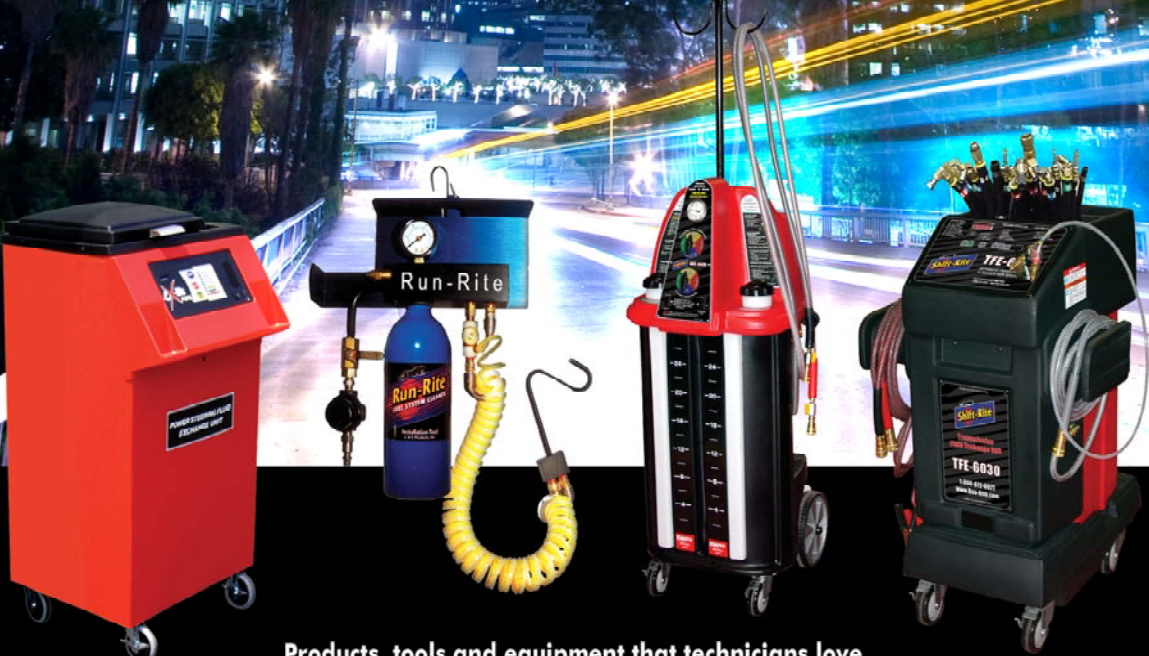
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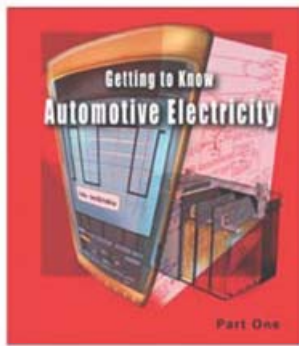
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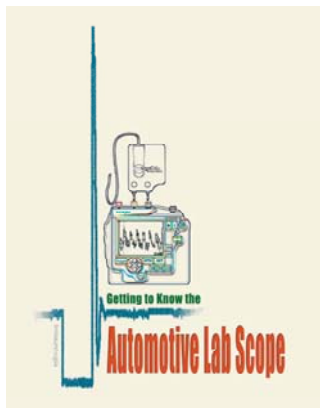
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Tips & Tricks in Motor Age! (con't from p. 3)

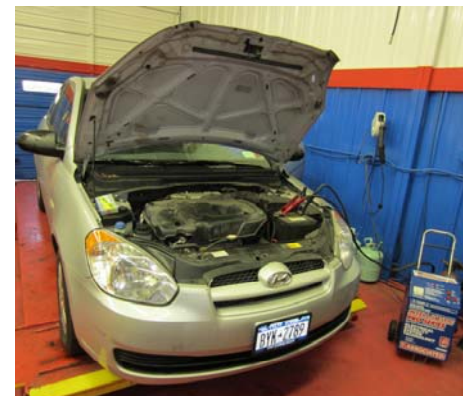
You can confirm this two ways. The easy way is to smoke the intake with CO2 gas and use an emissions analyzer to find if you have elevated CO2 levels around the intake manifold as compared to atmospheric CO2. Otherwise, just pull the intake off.



What you will find is that the original gaskets flatten and the new replacement gasket is much more robust. This will solve your P0171, but without the right tools (scan tool, emissions analyzer, smoke machine) you will never be able to catch this fault.

2008 Hyundai Accent "Invisible Misfire" *(Contributed by TST Associate Craig Truglia)*

Many Hyundai Accents have a P0300 or other misfire DTCs, but the customer will report no obvious misfires. The vehicle in had a tune up with aftermarket spark plugs twice, never reporting a misfire. There is a TSB that recommends updating the PCM software.



(Con't on page 9)

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Have Your Tips & Tricks Seen in Motor Age! (con't from page 7)

How would we do this for a Hyundai? It is an easy process. A J2534 reprogramming device (the Drewtech Cardaq is recommended), 32-bit laptop with Windows XP, and free subscription to the Hyundaitechinfo.com is all that's needed.

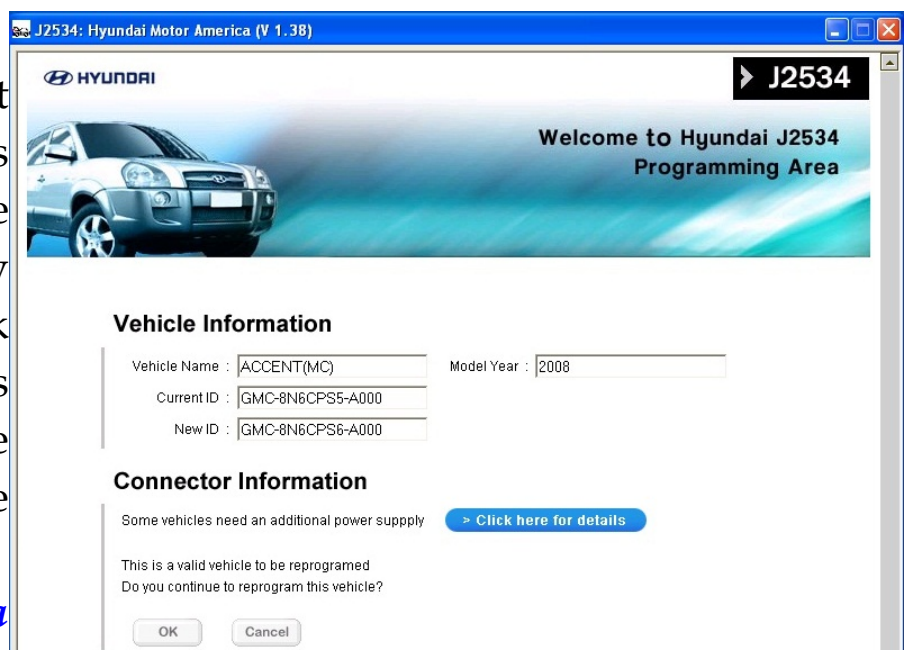
- 1) DO NOT run any other programs other than the J2534 application.
- 2) DO NOT disturb or disconnect the DLC cable or interface cable.
- 3) DO NOT turn the device OFF.
- 4) DO NOT turn the ignition key to the OFF position.
- 5) DO NOT start the engine.
- 6) DO NOT operate any electrical accessories. (climate control, lighting, audio, etc.)
- 7) Click [OK] button to continue (Click [Cancel] button to exit)



Here's how you do it. We have found that doing such a reflash is a straightforward and error-free process as long as you follow the precautions you see above.

Otherwise, simply check that the Calibration ID that is different than the old one and click "OK." Wait a few minutes, the screen will look static as if nothing is happening and the software will indicate when the reflash is done. That's it!

Article by Craig Truglia



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Questions:

1. Do you want seminars to continue in your area?

2. Do you find the seminars useful?

Please ask a fellow technician to come and check-out our seminars so we can continue to bring you the best available information each month.

We need your support:

Thank you, G Truglia

TST-Motor Age Ontario California 2012 Big Event



TST and Motor Age will be holding its first Big Event for out-of-state members and those interested in sunny Ontario California at the Ontario Convention Center.



The event will be on Saturday September 29th, running from 8AM to 5PM featuring instructors G "Jerry" Truglia covering P0420s and Dave Crippen's presentation on Network Diagnostics.

This will be the second partnership for a large training event undertaken between TST and Motor Age. The decision of the location in Ontario is based upon previous large automotive training events held at that location and the proximity of the location to many repair shops.

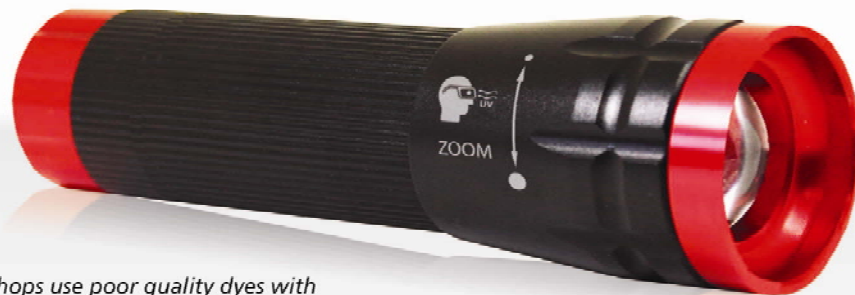


It is our belief that by continuing what we have been doing with webcasts and by spreading the Big Event to venues across the country, that we are fulfilling our mission.

(Con't on page 16)

DYING TO FIND A/C LEAKS?

The new **UV Phazer NEO™** UV light finds leaks others miss.



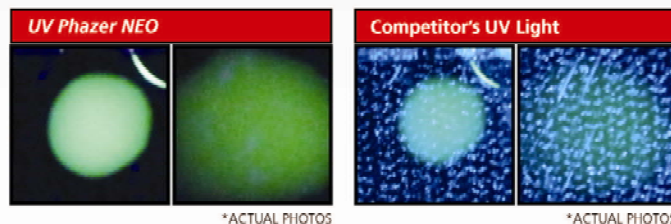
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We found many shops use poor quality dyes with ineffective blue lights. That's when we challenged our Engineers to create the ultimate leak detection solution – the **UV Phazer NEO**.



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Adapting TST for the Future (con't from page 12)

Which brings us to some changes TST is making in order to continue to provide quality and affordable training to you. We of the TST board always viewed TST not so much as a corporation, but a partnership between its members that allows us to bring in trainers in order to keep us up-to-date in the field of automotive repair.

However, maybe we were all too good at doing it. Thanks to our loyal membership we were able to do ten training events a year held live in four different state chapters. That's 37 classes a year with thirteen different instructors. That's a lot of training!

Many members have reported that they have already taken certain classes or topics like it, because TST holds so many training events. This has led to picking and choosing of classes which is making it difficult to provide ten different topics a year in so many locations. In order to provide all the training at the prices we currently have TST needs members to attend as many classes as possible.

Therefore, we feel it is not worth holding ten different topics a year at 4 different venues, if that means increasing the price of training. So, we made the decision to reduce training in half in order to continue to provide quality training at a reasonable cost.

(Con't on page 18)



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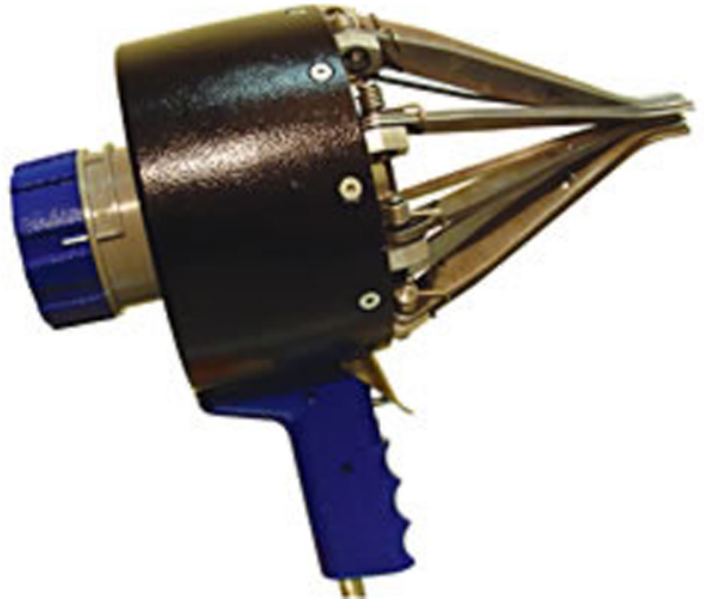
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\$12.99 an Universal Car CV Boot

\$16.99 for Universal Truck-SUV CV Boot

\$16.99 for Universal Rack & Pinion CV Boot

\$39.99 for Box of Universal Gomex Clamps

\$259.99 for New CV Boot Installer Claw including Gomex Clamp Tool



Adapting TST for the Future (con't from page 16)

So, we will be doing more than holding Big Events nationwide. We plan on bringing many of you online where we can provide training at an affordable price. Monthly we provide free training webcasts on TSTseminars.org. Plus, Motor Age does four different topics a year and companies such as Global Leak Detection & OTC sponsor topics so that we are providing about a couple dozen training events a year to keep you updated. So, we are doing more now to keep our membership up to date than we were ten years ago when this all began.

Prices for live classes will remain the same for membership at \$65 for advance registrations, \$80 for registrations at the door. The Big Event will continue to be \$185 for advance registrations and \$235 for those waiting up to two weeks before the event. If you would like to sign up for all the year's classes including the Big Event the cost will be \$395. This is a savings of \$150 for TST members. We hope that most TST members take advantage of this offer and make a special commitment to attending all the topics TST is offering.

We anticipate the 2012-2013 TST School Year to be these topics and dates:

- September—Getting to Know Asian Vehicles with G “Jerry” Truglia
- November— Top 10 DTCs Diagnosis with Ken Zanders
- December— Driveability Diagnosis with Jim Gehl (Wells Vehicle Electronics)
- March 23rd 2013 Big Event with John Thornton & Dave Decourcey
- May— Advanced Mode 6 Diagnosis with John Anello

Many more training opportunities made available monthly on TSTseminars.org. TST is getting bigger every year. Let's keep it going that way.

*Article by TST Board
—Contributions made by Craig Truglia*

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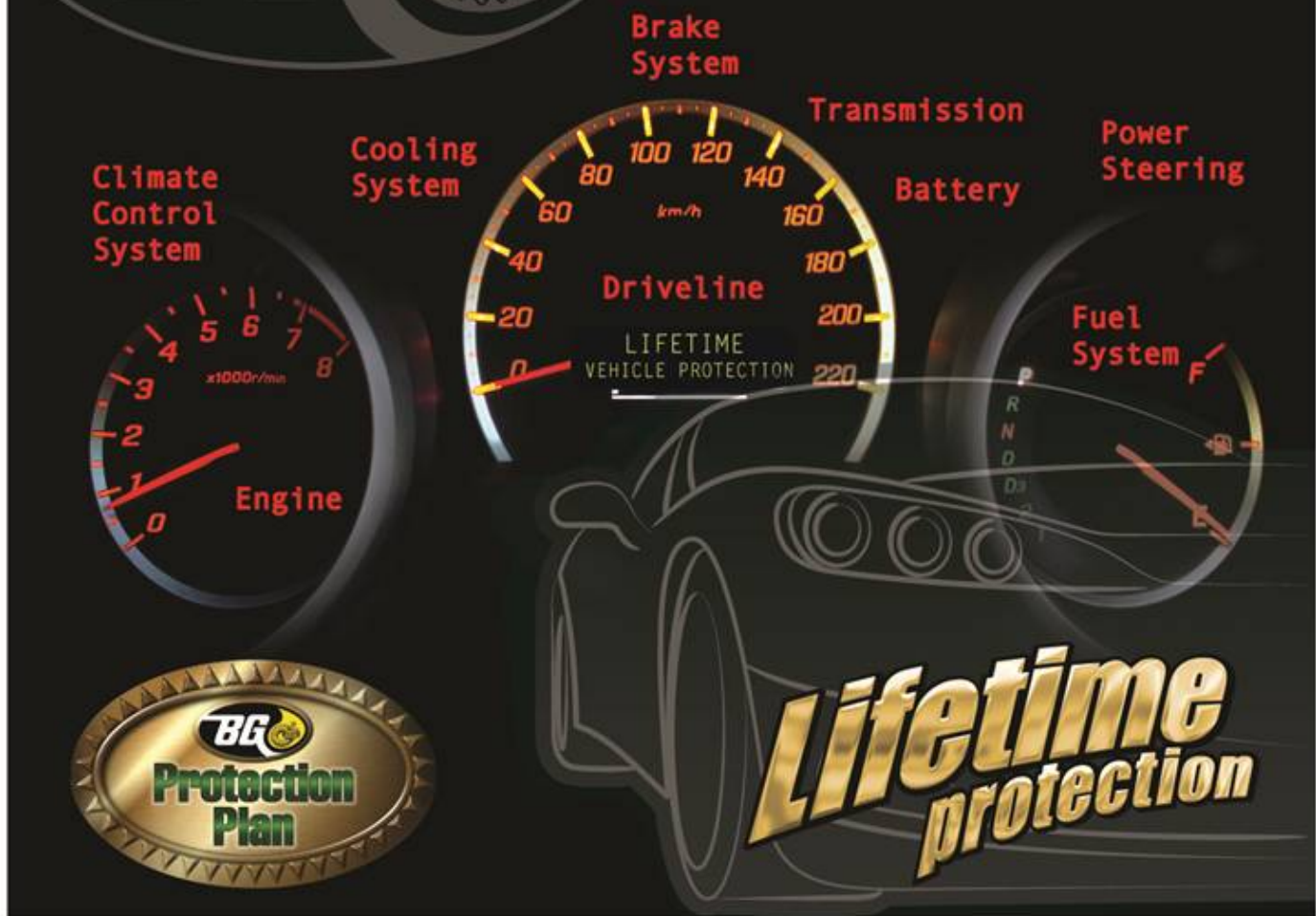


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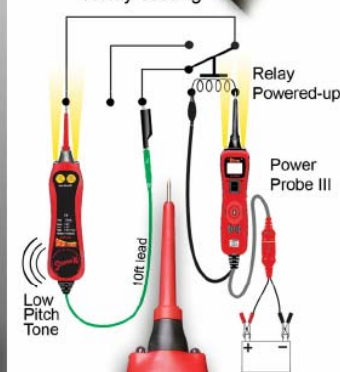
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