From the Frame Up, LLC



Tech Tips:

EL – LUCAS SMOKE REPLACEMENT KIT

<u>Acknowledgement:</u> This item, and the subsequent eBay auction, was created by Craig Bolton, of Autodynamics in Belington, WV.

As seen on eBay...

NOS Lucas Replacement Wiring Harness Smoke Kit

Have you inadvertently let the smoke out of the wires on your classic British car? This, then, is the solution to your problem!





Here is presented for your perusal one Lucas Replacement Wiring Harness Smoke kit, P/N 530433, along with the very rare Churchill Tool 18G548BS adapter tube and metering valve. These kits were supplied surreptitiously to Lucas factory technicians as a trouble-shooting and repair aid for the rectification of chronic electrical problems on a plethora of British cars. The smoke is metered, through the fuse box, into the circuit which has released its original smoke until the leak is located and repaired. The affected circuit is then rectified and the replacement smoke re-introduced. An advantage over the cheap repro smoke kits currently available is the exceptionally rare Churchill metering valve and fuse box adapter. It enables

the intrepid and highly skilled British Car Technician to meter the precise amount of genuine Lucas smoke required by the circuit.

Unlike the cheap, far-eastern replacement DIYsmoke offered by the "usual suppliers", this kit includes a filter to ensure that all the smoke is of consistent size, It has been our experience in our shop that the reproduction Taiwanese smoke is often "lumpy", which will cause excessive resistance in our finely-engineered British harnesses and components. This is often the cause of failure in the repro electrical parts currently available, causing much consternation and misplaced cursing of the big three suppliers.

These kits have long been the secret weapon of the "Ultimate Authorities" in the trade, and this may be the last one available. Be forewarned, though, that it is not applicable to any British vehicle built after the discontinuing of bullet connectors, so you Range Rover types are still on your own...

This Genuine Factory Authorized kit contains enough smoke to recharge the entire window circuit on a 420 Jaguar, and my dear friend and advisor George Wolf of British Auto Specialty assures me that he can replace ALL the smoke in a W&F Barrett All-Weather Invalid Car (147 CC) with enough left over to test a whole box of Wind-Tone horns for escaped smoke. How much more of an endorsement do you need?

More, you say? Well, I once let the smoke out of the overdrive wiring on my friend Roger Hankey's TR3B, and was able to drive over 200 miles home from The Roadster Factory Summer Party by carefully introducing smoke into the failed circuit WITHOUT even properly repairing the leak. Another friend, Richard Stephenson, was able to repair the cooling fan circuit of his Series 1 E-type by merely replacing a fuse and injecting a small quantity of smoke back into the wires. So there!

So, if you're troubled by lost smoke, bid early and bid often! Thanks for looking!

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Questions & Answers

Q: I have a fourteen year old son named Lucas who I have caught several times in the back of the garage smoking. Can this item help him to respect a little firm parental intervention and aid him in smoking less...or even stopping altogether? A: Part of the problem may be the fact that you named your son after the Prince of Darkness. Mayhap you should be happy that all you have caught him doing in the back of the garage is smoking! My suggestion is: since you already have spoiled him for life with his moniker, you search the 'Bay for a proper Little British Car to restore as a father-and-son project. That way, he'll have a way to fill the idle hours he'd have spent chasing girls had he been named Rocky or something more suitable. Plus, he'll learn first-handed how disgusting smoke can be. Alas, though, not with this unit, because whilst trying to photograph it for a spread in "Popular Ether Technology", it was unfortunately broken. Therefore, the auction must be terminated early. Thanks for the heartwarming interest!

Q: Once I have re-introduced smoke into my TR-2, do you warranty that it's system will resume operating at the speed of dark?

A: If you reintroduce the smoke through a microwave oven, you may even go back in time!

Q: I have been very diligent over the years and have maintained the smoke in my Sunbeam's wires perfectly. The problem is that that special Lucas perfume has disappeared

from the dash, carpets and seats. In fact, at the last Concours d'Elegance I lost out to a frogeye with period odors. Is the smoke in your kit fresh enough to bring back the OEM smells of burning plastic and Bakelite and are you including an adapter to replace same? **A:** No adapter needed, but have you tried just STARTING that over-restored trailer queen? It might bring back the aroma by itself.

Q: This has been a most informative thread which set me off thinking about wider global environmental changes that have happened since the mid 70's. Could it be that the copious release of smoke from Lucas wiring looms around that time has significantly contributed to the holes in the ozone layer and the onset of global warming? Could it be that, had your excellent device been more available at that time, we could have saved the planet for future generations instead of fighting a rear guard action? Hindsight is such a wonderful thing isn't it.

A: Hey- This is a serious site- we're not discussing "junk science" like Global Climate Change!

Q: I have a question. For some time. My object is to restore a few pre-Chrysler Rootes Sunbeam Tigers to original factory condition, with ALL the LAT racing options. So far, I have been quite successful, but unaware of your Lucas Smoke Kit. I am perplexed as to its satisfactory application to this original British Classic that Mr. Carroll Shelby has enhanced with a lot of Ford (USA) parts. This includes a large portion, but not all, of the electrics. It is very easy to differentiate between the Lucas Parts and the Ford Parts, as the Ford Parts still work. While we can admire Mr. Lucas for the development of the intermittent windshield wiper, the self-dimming lighting system, and the colorful turn signal spark generator, it is unclear whether your offering will work satisfactorily with so much of the electrics originating in the US. Is this device compatible, as the US parts do not show signs of leaking smoke?

A: The Lucas smoke may cause failure of the connecting interstices, but the, so will everything else.

Q: Maybe you can help me. I have an old generator that I have suspected of having a metaphysical ozone leak for several years. It's one of those things I feel I know to be true but cannot prove. Anyway, through an ingenious marriage of a Sharper Image Ionic Breeze air purifier and a breast milk pump, (by the way, both were obtained on eBay) I have devised a way to recharge the ozone that I can smell leaking from the generator. But, you guessed it, when I disconnect the wiring to introduce the replacement ozone I invariably cause a smoke leak. Do you think there is a way to mate our two machines in such a way two birds with could "kill а single stone" if 1 **A:** That's just wrong.

Q: Can I use this device to replace the smoke in my Alfa Spider? Is Brit smoke the same as Italian smoke?

A: Only if it's pre-Bosch.

Q: Will this kit put back ALL the smoke in a 1975 Midget wire harness? Some time ago while driving our 75 Midget smoke began pouring from under the hood, after pulling over, smoke was immediately followed by flames. A HUGE amount of smoke was lost from the wire harness (10 minutes worth before the fire department showed up). Your jar appears to be too small to contain the volume of smoke produced by the Midget on that day. Please specify quantity of smoke. PS - Would you know where can get bulk replacement glue on insulation, there is none left on any part of the wire harness under the hood. The harness appears to be intact but is lacking smoke holding insulation. I'm planning on rerouting the main power buss from over top of the fuel line. This way next time I will have smoke, red

hot wires without melting thru the fuel line. Thanks in advance. **A:** You'll need bulk smoke, but I'd try your last suggestion before ordering any. Good luck!

Q: Is this setup on the "metric system" or can it be used universally? I have a MB 380SL but have replaced some of the wirings with U.S. products. Will your product make the transition? Also, are there any EPA limitations on shipping? A: This setup is Whitworth only. sorry.

Q: As you may or may not know, the Japanese 'borrowed' heavily from British designs back in the 50's and 60's. In fact, the Skinner Union carbs on my beloved Datsun 1600 roadster were actually built by Hitachi under license. Also, most of the electrical devises in early Datsuns were copied from Lucas. That said, do you know if an adapter is available to use the Lucas Kit you offer on a Datsun 1600 or do I need to keep searching for the Hitachi/Mitsubshi version? Thanks, Paul A: It sort of worked in my Datsun 410 Station Wagon, but the lights all shined in instead of out. It was quite disturbing...

Q: Does this unit contain new or re-cycled smoke and will if my 1966 Triumph Bonneville motorcycle?

A: This is new, previously un-leaked smoke, as originally installed on your T-120. Have at it!

Q: Would this product fix the Miller dynamo on my motorbike? The smoke got out of it years ago and I am in despair. Having to run a total loss electrical system now. Please, no smart-alec comments about nothing to lose. I have been desperate for a cure for years and will jump at anything. I get so depressed. But I really liked your answers to all the questions. I learned so much. You must be smart. What are some good upgrades for my bike? Should I get a Boyer electronic ignition?

A: Probably.

Q: It looks like a self contained, auto smoking, environmentally enclosed, smoke recirculation, multi-smoker bong I created in the late 60s. The only thing missing is the air manifold (from a fish tank set-up) to hook up the individual smoking tubes. Are you sure you didn't get this idea from me, when we were smoking that wacky tobacco one time? ; >

A: Could be. I can't remember.

Q: I have the identical part but needs the smoke refill cartage, I was told to ring 84433 3-33888444555 or speed dial 666 is that you? **A:** No, that's that shop in Michigan.

Q: Do you have any idea if the kit will work on Alfa Romeos? My 1963 Giulia has bullet connectors, a Lucas windshield wiper motor, and a variety of other Lucas components. Earlier Alfas had lots more Lucas stuff, such as starter motor and generator, so I imagine it's more suited to them. On a different note, did Alfa's change from Lucas to Bosch signify the end of the of the 'Italian masochistic' era? **A:** This will work with the Lucas portions. The Bosch change was a misbegotten effort to work around the simultaneous Italian/British Stevedore Strikes of the early 70s.

Q: HI, JUST HAPPENED ACROSS YOU AUCTION. GREAT ITEM BUT I AM CURIOUS. I DO ARCADE GAME REPAIRS ON THE OLD UPRIGHT ARCADE GAMES. YOU KNOW, PACMAN, DEFENDER, DIGDUG? THE X-Y MONITOR TYPE GAMES SUCH AS BATTLEZONE, STARWARS OR TEMPEST ARE FAMOUSLY KNOWN FOR RELEASING THE X-Y SMOKE FROM THEIR

MONITORS. WOULD THIS TOOL BE SUITABLE TO REINTRODUCTION OF MONITOR SMOKE. YOU SEE THE SMOKE IS READILY AVAILABLE ON EBAY BUT THE RECHARGE TOOL IS NOT AS ATARI QUIT OFFERING THEM YEARS AGO. THESE MONITORS ARE QUITE EXPENSIVE TO REPAIR WHEN YOU DONT HAVE THE PROPER SERVICE TOOLS. PLEASE LET ME KNOW IF THIS WOULD WORK OR WOULD I NEED AN ADAPTOR SUCH AS P/N 2FUB-1269-AR. THANKS.....FRED

A: Got me. I got my VIC-20 to run one game of "Hangman" with just a spritz, though.

Q: Enough, enough already! I cannot allow you to perpetuate this lowbrow fraud any longer! Anyone with any knowledge of Lucas products should recognize that the Lucas label art on the jar is wrong for this early version of the smoke kit. And of course, the lid should be black with the valve oriented 180° to the label. The smoke color itself is not original to the early cloth insulated wiring and perhaps even for the early plastic insulation. Bidders beware, this is most certainly a replica, and a poor one at that — possibly from Taiwan. Additionally, the smoke replacement kit was meant to be used only by highly qualified personnel. The dangers of misuse are indescribable - certainly I can't..., but the phrase "gone smoke" was in born of this process. up A: Oh, yeah? Well, in the interest of openness, I'm going to place your tirade on the site. That doesn't mean I like it, though.

Q: I wonder if you would do an exchange (with a cash adjustment in my favor). I have some bottles of 'bottom air' that was supplied by Dunlop many years ago. The advantage is that it takes up very little space as of course when you get a flat the top air in the tyre remains perfectly serviceable, it's only the bottom air that needs replacing. I will wait your reply.

All the best from the UK.

A: If this is the proper bottom air for a set of 4.00X 10 Gold Seals, we may be able to work a deal. We have a '68 Moke in the shop with original rubber, and the domestic bottom air keeps migrating out. It evidently doesn't have enough atmospheric British ambient smoke to fill the pores in the tyres.

Q: My brother Joe is currently (well last 8 years) working on a mini and he's never managed to get ANY smoke out of it yet. Would it be possible to use this kit to make some come out of other parts of the car - not just the wiring loom? I was thinking mainly about the exhaust...

A: No.

Q: Geez, I wish I had seen this auction before I bought some "off-shore" smoke. I didn't realize there was some OEM stuff left. To make matters worse, I switched to synthetic smoke (yeah, I know) but it seemed like the right thing to do at the time. Unfortunately for my 72 Range Rover, I have not yet been able to fashion an effective bypass for the optional Fairy smoke pump which has recently failed. If only you could have made this item available earlier!

A: Hook you battery charger up with the leads reversed, preferably at the starting motor, and turn it to "high". This should purge the wires of all the synthetic smoke, enabling a refill with the proper stuff.

Q: Are you sure that offering to ship smoke overseas by air mail is allowed under the Patriot Act and that smoke is not a prohibited substance that could easily fall into the hands of terrorists and British Car Owners?

A: We spirit it out in a diplomatic pouch.

Q: HELP!! I have a 1960 Porsche 356 and a Lotus 7. The 356 is leaking various fluids front and rear. While none of the fluid in question is coolant, the gear oil is very clearly trying to

attack the Lotus. My question is "Does the smoke have any defensive properties for the British car to repel this assault?" Thanks for the help. David **A:** Gear oil won't hurt a Lotus 7. Try to calm yourself! No, this won't help.

Q: On a recent, rather spirited, off road competition I noticed several sources of smoke emanating from my Ford Escort GT based kit car. Copious darkish oil smoke from out of the hole in the bonnet that the carburetor sticks through, profuse blue/white smoke from the side pipe aimed at the spectators, wispy brown turning to black smoke from the bell housing apertures, white smoke from both rear tyres, but alas, nothing at all from the electrical system. Is this a common fault with Fords that can be easily rectified (no pun intended) by fitting your product? As I'm only English could you tell me if the present bid of \$2,025 is less than auid? Camilla sends her love. TTFN. or а A: Aside from the lack of electrical smoke, my experience with Escort Gts at American racing venues would indicate all is normal- no fettling called for at all. You asking in old Pounds or new? My love to Camilla.

Q: I note that you are also selling genuine Lucas wiring on another site. Are the wires intact or has the smoke already been depleted? If they are still unmolested, it would seem that they would provide a most convenient source for instant replenishment of the Lucas smoke canister. As well, it has also been my observation that a variant of Lucas smoke may be obtained by marinating discarded Dunlop Bias (not radial and not steel-belted) tires in tar top battery acid, placing the tires in a large sealed zinc-plated container together with the now-depleted tar-top batteries. The container, placed on a platform, may be set alight from underside. Insertion of a spiral copper tube into the top of the container will result in the production of a very high density liquid condensate of smoke which I understand has an unlimited shelf life if sealed properly. Under no conditions should this condensate be ingested.

A: I learned at the Mitty this year that the heating process can be expedited by setting alight a VW Beetle (early) magnesium engine block.

Q: Where would I mount the Smoke Kit in my Mini? There's certainly no room under the bonnet, and the boot is filled with a large tool kit, spare tire, extra spark plugs, points & condensers, spare coil, baling wire, duct tape, 5 quarts of 20w-50 Castrol, tow strap, jumper cables, one gallon jug of 50/50 antifreeze, spare fuses, wire stripper, 20 foot roll of 16 ga. wire, electrical connectors, large roll of electrical tape, a Haynes Manual, and a Book of Common Prayer.

A: You need the half-pint (Imperial) model. By the way, carrying all that kit of spares is just asking for trouble.

Q: Will this fit my zetec mondeo.

A: Only if you use it as a donor car for a Lotus 7 copy.

Q: Sir! I have recently stumbled upon your forum to which I think I can put your mind at ease concerning the rarity of this item. I live in the foothills of the Smoky Mountains here in East Tennessee. The early settlers of this area were primarily English and really never left this area. Hence the hain't and yall's and pokes that people still speak in everyday language is just old English! Well, to my point. They also drove many British cars over the years and one still can find many of these old relics all over the landscape languishing in fields with their rotting harnesses leaking away, yes that is correct, the Smoky Mountains actually got their name from the LBC's. I would be happy to climb up to Clingman's dome and hold an empty moonshine jar up in the air and "capture" some genuine, well preserved smoke for anyone that will pay the cost of the moonshine (not many empty jars lying about you know) and the cost of shipping to their destination. And yes, I will ship worldwide.

A: This is a hoax! We have the same smoke, from the same Scots-Irish roots, in WV. It is being represented by Scottish separatists that this smoke will directly replace the genuine Lucas smoke. It will, instead, reverse your earthing and burn out the dynamo, hence rendering every military vehicle in the UK stationary, enabling Sean Connery to finally rule the British Isles. Beware!

Q: My cousin is restoring a Riley and he had heard that Lucas (the inventors of convergent technology) had worked on a variant that recycled the smoke through the casework as a woodworm/termite/borer deterrent. Are you aware of this application and if so what modifications can be made to the item for sale?

A: My friend Super Dave Bondon has used the method for years to keep a Morgan/Lotus race car in sound condition. Merely replace the fuse-box adapter with BMC tool 18G187 (radiator reverse-flush adapter) and you are ready to go.

Q: While I can see your unit would be suitable for early model Land Rovers, I was wondering if it would also suit my Defender. I am becoming increasingly worried about my Defender which has yet to emanate any smoke and, as per the oil leak situation, I am beginning to wonder if perhaps the system has run out of smoke? Perhaps you can steer me in the right direction on this one.

A: Your temperament would obviously be better suited by a Series I Land Rover. As your Defender has no bullet connectors, this unit is incompatible. Thanks for the query.

Q: It is necessary to sound a note of caution here for potential users of this device who wish to recharge their Lucas screen-wiper circuits. The screen wiper motor (part numbers SW53098A through SW53089K) normally has an attached pair of smoke dispersant arms which can cause the unit to dispense far larger volumes of smoke than other units, so an extra large reservoir may be needed when using the kit. It was rumored that the dispersant arms were originally intended to clear water from glass, but rigorous scientific tests have proved that this was not possible.

A: Thanks for bringing it up. An added note of caution- The replacement plastic dispersant arms moving across glass can generate offsetting (static) smoke which will back up into the wiring causing great havoc. Please use proper (Tex or similar) arms at all times.

Q: I'm a little skeptical about this being a genuine Lucas product . . . If it were real, wouldn't it be leaking?

A: See the discussion of the Nuffield Paradox belong. This ground has been covered already.

Q: Is it possible that this Smoke Kit will work for Lucas refrigerators? I had always heard that one of these refrigerators would keep my Guinness at the perfect (room) temperature. But mine seems to be faulty and the beer is cold. Will more smoke help to rectify this situation?

A: Try using a Series II E-Type AC unit. I've found that the vent temperature is ideal for most Irish stouts. Your Lucas refrigerator is probably hopelessly beyond repair.

Q: This is not really a question but a desperate plea for help. I recently completed a patent search for a replacement smoke generator that would make this product obsolete. However during a recent vacation to area 51 in Arizona some little green men abducted my 1964 Hillman from the parking garage at the Indian Casino. Although they returned the car - - my original papers were missing. I would appreciate it if you would all keep an eye out for these nefarious creatures. It will be easy to recognize them -- as I said -- they are little and green -- about the color of British Racing Green. Thank you for giving me a forum to enlist aid. Good luck with the NOS Lucas item -- if I locate these characters I will put my invention on e-bay for sale. Any information leading to their capture will be rewarded with a free unit.

A: Glad to help, but those were probably not aliens. Lifeforms with the technology for intergalactic travel would surely have kept a Hillman to take back and study.

Q: Is this the type of smoke one would use to blow up someone's ass? If so I'll bid. I'm running low.

A: It seems the British motor trade did that for decades, so this must be the same stuff.

Q: I'm afraid you've become trapped in a classic Joseph Heller conundrum. You assert that this is an authentic Lucas part and offer substantial testimony that it works and is effective in many applications. It would seem impossible that it could work and also be a genuine Lucas

product.

A: This is known as the Nuffield Paradox. It can't be helped. It is the reason BL finally adopted a clenching sphincter as their corporate logo.

Q: Great piece! Too bad there are not a hundred bidders. Perhaps the initial price was too high. I have adapted mine by wrapping wire around the muffler and just letting the smoke fill the entire interior and engine bay and trunk -- no electric problems what so ever. Course Lucas system. there is nothing left in the Happy TR6 racer! A: This is a crude but effective technique first pioneered by the Triumph works teams at LeMans in 1961. I'm glad to see it is still in use. I understand the TRF TR-S is similarly equipped.

Q: I'm amazed that you have one of these kits in your possession. It was my understanding that they were produced under license from Lucas at the Lockheed/Girling factory in Swindon which burned to the ground in the late seventies, taking with it all of the SSB775 brake master cylinder kits for the dual-circuit master cylinders fitted to BL vehicles of the period. I note the lack of of the proper pump and pressure gauge needed to ensure priming of the system at a minimum of 1.5-2.0 bar. Of course this can also be accomplished by momentarily grounding the "A" terminal of the voltage regulator (both words being totally misleading) whilst hopping up and down on one foot. Alternatively one can attach the special Churchill adaptor hose (L.184A-2A) to the spare tire valve. This technique was later Volkswagen operation. adapted by for windshield washer Thanks. A: I'm always open to a tech tip from a master. Thank you!

Q: I always thought that the volume "Smoke and Mirrors" (Luddite Press, 1947) was the Lucas Master Catalog. I also always thought that the smoke is stored in the battery(s). From my experience, the smoke stops being released when I disconnect the battery, and comes back immediately once I reconnect it. Also, once the smoke stops even with the battery attached, then you know it's time to replace the battery. Would this kit refill the battery, and is this smoke the same used to cloud the Lucas mirrors? A: Actually, "Smoke and Mirrors" (Luddite Press, 1947) was Dr. Heads expose of the failed Lucas/ Raydyot merger of 1946. The battery is actually the "electrical" part of the smoke system. It apparently, according to the latest theories, energizes nanosolenoids in the wiring harness that allow the smoke molecules to flow through the wires. That is why a modern "smokeless" sealed battery will still work in our cars.

Q: Can you get hold of any Clutch Plate smoke? I lost all the smoke from my 1955 Alvis clutch on a steep hill in Yorkshire yesterday and now it wont accelerate properly. I know its a long shot, but you could have contacts.

A: You might check with Aaron Couper at Couper's Classic Cars in West Pawlet, Vermont. He stocks Alvis clutch smoke, or so I've heard.

Q: I've upgraded quite a bit of the wiring in my MGB to newer wires, modern sealed connectors, blade type fuses, and modern switches but I still have quite a lot of the original wiring in place as well. Will the newer wiring interfere with the proper retention of the original Lucas smoke and operation of the original circuits? I'm worried that it might block the

A: Technically, you now own an MGB/Miata hybrid, but the elimination of Lucas connectors and switches, artfully done, will usually just speed the flow of the smoke to its ultimate destination- the atmosphere.

Q: Will you ship to the UK? As you can imagine, the amount of Lucas smoke that has inadvertently escaped over the years is far too great to be replaced - it forms a constant gray blanket in the sky that some people mistake for clouds and generally bland weather - but this could be just the ticket to prevent further loss. Jun-08-05

A: Perhaps I should leak-test my unit. That could explain what passes for summer around here, as well. Thanks for the insight!

Q: If you could mass produce this valuable addition to any British car, you could change the world! I own three of them and carry spare "smoke filled wires" to replace defective ones, but this would eliminate that! Is there anyway to use this to refill the smoke in the bar coolers and fridge's in the UK? Do you think that we could actually get them to start drinking cold beer??? Thanks very much! Joe A A: It's been tried. It seems that the Smiths kegs won't dispense anything at a desired temperature, and the Lucas Bakelite tap handles become brittle below 49 degrees F, breaking and causing a workplace hazard for the serving wenches.

Q: Sir, My 55 TF1500 has been converted to negative earth by DPO. When using the 530433, should all electrics be set to "dim" "flicker" or "off"? ..or as all settings seem to work the same, does it make a difference? For a successful transfer, can you tell the the concours acceptable temp. for an OSH during this to ensure proper torque and seating? copper (assuming proper cork & gaskets are in place) A: Hi, David- You have obviously answered your first question through careful reasoning. As for your second, 50 degrees F. and 100% humidity, with a dew point of 49 degrees, seems to be the accepted nominal condition.

Q: 1) When the Brits took over the aircooled VW plant after WW2 did they use Lucas smoke? I own an old triumph and the smoke emitted from my '62 bug smells quite familiar! 2 if so, I assume this thing will work with old bugs too? A: That is more likely the smell from your overheated wet carpet, but it's worth a try!

Q: Sorry to keep asking questions, but the general run of questions and answers has been so informative and enlightening, that this has become a fascinating forum on Lucas and British cars in general. Much better than the Austin Marina enthusiasts chat group I belong to. Anyway, I see mention of the Lucas Bullet Connector in your listing and I've always wondered something about them. I know they were designed by the famous Lucas engineer and auto-eroticist, Richard Head, and his commitment to the latter is evident both in appearance and assembly, but I'm unclear about some aspects of their function. Specifically, can you tell me if they were intended to function as a structural fastener to connect bits of the harness together, or are they also used to occasionally pass current and smoke? My experience leaves this very unclear, what are your thoughts? A: As Mr. Head relates in his seminal work "Smoke and Mirrors" (Luddite Press, 1947), the connectors were originally designed as a mere structural member, but as, when new, the were very effective at this function, the management at Lucas was uninterested. However,

when it became apparent that they would also function as a smoke-relief valve for overtaxed circuits, a deal was struck and an industry was born. Thanks for your question.

Q: I have had on occasion an apparent "dam" on my LBC, in which the smoke will not pass. Will this genuine smoke leap this dam and get my LBC going again? Thanks, Paul A: The usual course for the smoke is to move to an adjacent wire, bypassing the "dam" and returning directly to earth, thus opening a fresh channel for smoke release. Although a sharp rap with a knock-on mallet may temporarily rectify the impediment. Good luck!

Q: Not so much a question as a possible marketing tool. This would make a tremendous addition to some products offered by the Blimey Group. I have used their Leaks-A-Lot and Rattle-B-Gone with great (see: limited) success. Another item I found to be useful in emergencies is Dr. Scholl's English Vehicle Brake Back-up Sole. I think 3 a.m. tv is chomping at the bit for a package like this. **A:** Your suggestions have been passed on to our R&D Department in Roswell, GA. Thanks so very much!

Q: I have a "friend" who owns a BMW MINI. Since these are Minis in name only would induction of some real Lucas smoke make his car more acceptable among his classic mini owner friends? Would there be a chrylser/bmw adapter that allows the use of Lucas smoke? He has already taken to squirting drops of oil on the ground and only parks next to large SUV type vehicles to help with the illusion. Thanks. **A:** Gee, this is a tough one. I think he's already doing all that can be done. Since none of the Lucas smoke would ever leak out, he'd only be impressing himself (same as now!).

Q: Hi, I have full set of Chrysler K car manuals, post-Rootes, pre-Benz, I would like to trade for this pre-Ford Lucas device. Can we strike a match, or will you be blowing smoke? **A:** K-Cars drove me to British in the first place, but if you throw in a set of manuals for a first-generation Lean-Burn analyzer, we MIGHT talk.

Q: I live in California, long and widely ballyhooed as the land of the fruit and the nut, where it's illegal to smoke indoors almost everywhere. Will this kit cause me to be arrested and my Jaguar impounded for smoking in indoor parking garages? A: One must first ensure that the wiring harness has been repaired, so the smoke stays on the INSIDE. CARB is probably watching your car anyway. Since you own a Jag, preliminary testing should probably be done in a nearby Red state.

Q: I see that you have already had one negative feedback. Could this be the result of your misrepresenting an auction item? How can we be sure that this is THE authentic Lucas smoke kit and not something you've quickly assembled from spare parts and is not likely to be up to specification. Come to think of it, most Lucas items were not up to specification, so maybe this is, and therefore is an imitation. I'm confused, please let me know your answer before

M: I imagine the proof would be in the pudding. If when beaked up, it doesn't function

A: I imagine the proof would be in the pudding. If, when hooked up, it doesn't function properly, it must be the real thing! Your logic is impeccable!

Q: THIS IS GREAT....YOU PUT THIS OUT FOR AUCTION JUST AS I AM ABOUT TO GIVE UP AND SELL MY POOR LBC. LET ME SEE HOW HIGH THE BIDDING GETS AND MAYBE I CAN GET IT FOR THE NEXT LUCKY OWNER OF MY CAR. I BET IF I OFFER AS SPARES IT MIGHT HELP CLOSE THE DEAL, THANKS FOR LISTING. PS THIS IS CORRECT FOR THE EARLY TRIUMPHS,

RIGHT..???

A: More correct for early TRs than for almost anything else, short of Chrysler-built "Sunbeams".

Q: Please can you tell me if this smoke will work on an old English (British) built land rover? They type with a single fuse. Only the smoke keeps escaping out of mine and as you say the non-genuine parts simply don't last.

A: This is the proper smoke for your Land Rover, but must be metered VERY carefully or the wiring insulation will swell, resulting in even more leaks. 'Tis a tedious process, best tempered with frequent applications of Guinness.

Q: Being a series Land Rover owner I tend to go "wading" on occasion. I have been told that Lucas smoke is not water proof. Is this true? Or can Lucas additives be added to Lucas smoke?

A: Wrong Lucas, but I've heard that mixing the smoke with Waxoyl prior to introduction to the circuit is effective.

Q: I am in favour of your smoke device but have heard through the grapevine that marijuana smoke is more effective. Could this be true? A: This is an urban myth, but it also explains why so many Yankee college students abandoned their little British cars in Elkins, WV in the late 60s and early 70s.

Q: Will the unit work in smoky/smoggy environments? If not is there a dry nitrogen purge kit to give low smoke offsets at an additional price? A: This unit has always performed as advertised in my British Car Restoration Shop, so it goes without saying that it will work in a smoky environment. It is recommended, however, that the technician perform a regular purge of himself with a good quality dry gin. Thanks for your interest.

Q: Man, this is so cool! Is there a water pipe adapter for filtering the smoke? Oh yea, and do you really need a car?

A: The question is, more likely: does one really NEED a BRITISH car?

Q: Seems to me being grounded was important when "recharging" with smoke. In your opinion, is this a positive or negative thing?

A: This unit is presently set up for Negative Earth. It can be repolarized by inverting a diode, connecting a jumper wire, and flashing the whole shebang off the "A" terminal of the voltage regulator (dynamo control box) however. Thanks for the astute question!

Q: Is it possible to permanently mount the kit under the hood and leave it connected all the time? I have a 1962 Jag 3.8 E 2+2. Could also use a smoke generator and/or smoke recapture kit to keep up with the release of new smoke. Thanks A: While never released as an actual service bulletin, I understand it was common practice at Jaguar dealerships right up until the Ford buy-out (buy-in?) to install a unit in the boot, away from prying eyes, and use a Trico electric screen-jet pump as a booster. This installation, naturally, requires the use of Lucas smoke pellets, of which there is apparently only one surviving supplier (see below). Thanks for your interest!

Q: I happen to own a WWII-era British smokemobile which was used for training village constabulary and civil defense personnel. It produced the smoke by introduction of hydrocarbons or tablets into a special smoke generating chamber. I recognize that the hydrocarbon smoke is a no-go, but as I recall, the tablets were manufactured by Lucas as a part of the war effort and the smoke the tablets produced was especially acrid. Do you suppose there is any market for this vehicle and my remaining Lucas NOS tablets? A: I'm certain that if you were to bring both the vehicle and the remaining tablets to the larger all-British meets and set up a service stand to merely replenish the smoke lost whilst

demonstrating the cars for the concours judges, surely you'd be the most popular chap in all the land!

Q: Will this smoke kit also stop oil leaks on British cars? A: No, nor will it bring about Middle east Peace. Some things just ain't going to happen, my friend.

Q: Do you have any kits that enable the conversion of the smoke for electrical wiring to fluid for brake or clutch applications? I'm sure the quality of the smoke would be sufficient to achive DOT 3 at least if processed with the appropriate converter. **A:** I'm not aware of any such adaptors presently available. I know that in the late 60s such a process was being explored in a joint Lucas/girling effort, but it seems that the only suitable use for the resulting smoke was as a replacement for the vegetable-based hydraulic fluid used by Citroen.

Q: My and my Jaguar's salvation might be found in your genuine Lucas Replacement Wiring Harness Smoke Kit. Please tell me whether I have deduced correctly, from your description, that this genuine smoke will pass concour d'elegance standards. I have been attempting to have a 100 point car in national competition and, yet, invariably the judges deduct a point or two for non-original wiring smoke, which leaves a tell-tale visibility when it backs up through the electrical wiring and contacts into my original Lucas head-lamp bulbs. A 99.99 score will not do, so please tell me whether your NOS OEM kit will solve this problem? Cheers!

A: You can rest assured that this unit, properly maintained, will produce nothing short of Pebble-Beach grade concours smoke. I recharged the wiring in my EX182 clone using this selfsame unit, and my Lucas Lemans headlamps are still as clear as a Lawyer's conscience. However, if residual non-concours smoke is still trapped in the wiring, I cannot be responsible for contamination of the fresh Lucas smoke. The wires my be purged of old non-original smoke by reverse-polarity connection of a battery charger to the circuit in question prior to refilling the circuit. This should be entrusted to a professional, unless one isn't handy, in which case, an amateur will do. Please complete and return the disclaimer that is furnished with the unit.

Q: Not a question, but more of a general comment vouching for the capacity of this unit. I had a college roommate who kept one of these contraptions under his bed in our dorm room and with the help of a Pink Floyd album and a well placed window fan we were able to "replace" smoke for days...man.

A: Another endorsement!

Q: I'm curious. Yellow. Anyway, I've an old clapped-out Series 1 E-Type by the name of Tweety; now, his smoke is still in the wires, but you never know! My question is this: Will the Lucas smoke work in any of my DKWs? Do you think the Brit smoke, once introduced into the German wiring harness, would cause any undue 'allergic' reaction? Signed, One Large Dude, Figuring on A Rational Thought.

A: I'd suppose that all the British smoke that Bomber Harris brought to Deutschland may have caused a temporary reaction, but they seem to have gotten over it. I have used, in a pinch, Lucas smoke in my Hansa 1100, but could never get it to run long enough to use it much before it leaked out. Sorry, that's all I've got. E-types AND DKWs, huh? Wow!

Q: Can I refill the canister with Japanese smoke emanating from an overrich Mikuni DCOE? Will Japanese smoke affect the accuracy of the reading? A: Although the Mikuni DCOE, being a license-built Italian design, is capable of generating a goodly amount of "smoke", one must remember that it is merely unburnt hydrocarbons and

not in any way comparable to true Lucas smoke, or even the less-refined alternative brands of electrical grade smoke. I'm afraid that it would have the additional undesired effect of softening the insulation on the Lucas wiring, as well. It's not recommended. Thanks for your interest!

Q: Dear Mr. Bolton I see you too have been duped by the long running British auto industry plot. As Dan Brown reveals in his next historical thriller the secret Lucas Order of the sacred Spark has for years installed "black boxes" capable of producing the necessary smoke a heavenly fire to run these vehicles. They may be cleverly disguised as a "battery" "fuse box" or yes its true a "distributor" when in actuality the only force that keeps the auto running is the belief of its driver or sometimes the desperate supplication of a passenger on thje roadside in a dark and stormy night. I believe this is described in the upcoming novel as the Tinkerbell principle. Even as I write agents of BMC seek to stop dissemination of this knowledge.

A: Your question reminds me of a passage from The Hagakure, in which Master Tsunetomo relates: "There is something to be learned from a rainstorm. When meeting with a sudden rainstorm, you try not to get wet and run quickly along the road. But doing such things as passing under the eaves of houses, you will still get wet. When you are resolved from the beginning, you will not be perplexed, though you will still get the same soaking. This understanding applies to everything".

Q: Do you have any good sources for smoke recharging? My kit is completely out of smoke and I'm loathe to attempt a recharge without the proper equipment. I understand the charging unit must be the proper Lucas one, part number 31957, or the recharge will be unsuccessful as the charging units from Smiths, Sealey, and Jaeger are missing the proper carbon plasma canister and the Robinair one from the USA is completely useless without the since special Lucas adapters that have been NLA at all suppliers A: Thanks for the question. As you have found, the Robinair kit, the only one currently marketed, is junk. Bulk Lucas Smoke being long unavailable some improvising may be required. I have found that the easiest method is to attach the fuse adaptor on the bottle to an Alfa Romeo GTV6 plumbed through a BMC Commodore 3.4L Marine Diesel Injector Nozzle Reverse-Flush Adaptor (BMC tool # 18G109E), using an Austin 2.2 Diesel hire-car Pintaux Nozzle Testing Adaptor (BMC Tool #18G109B), inline with a Lucas F6M filter, start the engine, and turn on all the electrical accessories at once. This will normally generate enough fresh filtered smoke for a complete recharge. The Paris-Rhone smoke is close enough in consistency to Lucas to stay in all but the most porous Lucas circuits.

Q: Is the smoke canister rechargeable or do you dispose of it after use? Is there a gauge to let you know when the canister needs replaced? A: The canister is rechargeable with any commonly available smoke source, as long as it is composed of copper, PVC, and/or cotton. Whilst it is recommended that harness smoke content be measured with a voltmeter, it is considered acceptable practice to hold a Zippo lighter up to your lamps to see if they're burning, as recommended in the owner's manual. Thanks for your interest!

Q: WOW!!! I thought all of these had been used up long ago! I actually had one that I got off a bloke in Australia 3 years ago that was advertised as NOS, but someone had used all the factory pre-charged smoke up except for a small quantity that was only sufficient to recharge the socket assembly (Lucas 545072) for the inspection lamp on my 1955 Beardmore Mark VII Taxi (Ford Consul Engine). Do you have a "Buy it Now" price? Cheers A: I think I know the bloke of which you speak- a while back he was also advertising NOS NGK sparking plugs for Indian Motorcycles, I believe. Rest assured this kit is untapped, and

at any rate can be recharged with replacement smoke available at any curb market in the US until July 5. The secret is in the Churchill filter, Mate. Thanks for the inquiry.

Many thanks are due to the original poster of this auction!

<u>Acknowledgement:</u> This item, and the subsequent e Bay auction, was created by Craig Bolton, of Autodynamics in Belington, WV.