

Triumph Wedge Owners Association



Wedges on display at "The Gathering" Dobson, NC



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From the President

The Shape of Things to Come

By Jim TenCate

Anorak. *noun.* In British slang an anorak (/'ænərəək/) is a person who has a very strong interest, perhaps obsessive, in niche subjects. This interest may be unacknowledged or not understood by the general public (from Wikipedia).

Anorak is also a somewhat derogatory term, or so I've been told. The Triumph TR7 and TR8 are certainly "niche subjects", unloved (still) by some British car collectors. Those of us who care (yes, perhaps obsessively) about the unique details of these cars are often called *anoraks*, and in a sense all of you reading this newsletter might be called that! Your new President -me - has been called an anorak on a number of occasions, but I'll try and not be too obsessive about things "Wedge", promise. But I also promise that I **will** work very hard to get *The Shape* a little more respect, rather than the "niche" spot it currently holds in the British car world.

So, since we're on the subject, the new Board of Directors is now officially in for the next three years. We are: Jim TenCate (President), Wayne Simpson (VP), Joe Worsley (Membership/Treasurer), David Elsberry (Secretary/Editor), Bill Derksen (Member at Large), Mike DeAndrade (Founder), and Tim Lanocha (immediate past President). We 7 people—yes, that number was chosen carefully—are in charge of moving TOWA and our marquee's visibility up in the "car world".

Personally, I want to thank all those who got us to where we are today, those who built the club over the past three years, visibly "official" folks like Tim and Rand, and countless behind-the-scenes people you may not have heard about. It has been a team effort, and many of these folks still are willing to help out in a moments notice if asked. These are the people who helped build TOWA and we owe them all a debt of gratitude. Now we intend to let them sit back and watch while we make them proud of us. Here's how we plan on doing that in these next 3 years.

The previous TOWA Board started something great with the Head Honcho (thanks to Wayne Simpson) and we'd like to continue on that theme. We want TOWA to take on projects that an individual simply can't. We already started down this path by building a "Gizmo8" that is now available for setting the air/fuel idle mixture on FI TR8s, we're making a similar Gizmo7 for those rare FI TR7s. A couple of TR7 fuel injection owners are working with Shoebox electronics and we're waiting to help out with that

project if we can, we've discussed making a TR7 valve shim kit available for adjusting the 2 litre's valves in one afternoon instead of several, eliminating the need to measure, order shims and wait, we're supplying unavailable wiring harnesses to British Wiring / AutoSparks so they can pattern and reproduce them, have supplied an original TR7 battery cable to TRF so they can reproduce those and get them exactly right, we are working with the owner of the World Wide Wedge mailing list, to bring the archives back online permanently, and the list keeps growing.

Now, here is where you come in! Do you have an idea for a "research" project or a part reproduction that we as a club can take on that you can't? Write to me, president@triumphwedgeowners.org and I'll bring it up with the board and we will see if we can make it happen! That's one of our goals. The second is pretty obvious, we aim to bring you an awesome newsletter, filled with technical articles you can't get elsewhere plus how-to articles that will help get your car back on the road so we can meet all of you at the next big event. What do you need to do to get your car on the road again? Let us help!

On a final note I have a few comments and observations about TR7s to share since I've been watching them come and go on "Craigslist" for a while now. There are currently sixty-seven of them for sale—I use SearchTempest—throughout the US and Canada in every kind of shape you can think of (pun intended) Sixty-seven is quite a few! I've noted that early, rust free coupes are snapped up quickly and *original* late-model fuel-injected cars seem to be rising in value over the past year or so too. There is something still very edgy about the early, Harris-Mann-designed coupes you've gotta admit. You get noticed driving them. But it's not just those coupes that are rising in value. A later fuel-injected TR7—those are actually pretty rare—can easily fetch over \$3k but seldom reach \$4k, a seriously amazing bargain in my opinion, especially since the Head Honcho is available to bring many of these back to life. Head gasket problems? No problem anymore! I've also recently seen a pristine, low mileage original fuel injected TR7 listed for \$7500. It didn't sell for that but it's nice to see some appreciation for the TR7s finally.

Happy motoring everyone, hope to see you at a car show soon!

Jim

WedgeFacts: There was a thought at one time to make the TR7 the MG Magna

2012 TOWA

Board of Directors

President—James TenCate

(505) 672-1953

President@triumphwedgeowners.org

Vice President-Wayne Simpson

(732) 477-3878

VicePresident@triumphwedgeowners.org

Secretary/Editor—David Elsberry

(919) 279-5046

Secretary@triumphwedgeowners.org

Membership/Treasurer— Joe Worsley

(336) 998-6501

Treasurer@triumphwedgeowners.org

Member At Large—Bill Derksen

(306) 384-5882

MemberAtLarge@triumphwedgeowners.org

Prior President—Tim Lanocha

(410) 557-0052

PriorPresident@triumphwedgeowners.org

Founder— Mike de Andrade

(301) 318-6101

founder@triumphwedgeowners.org

1st Quarter 2012

North American Membership 337

Overseas Membership 57

Total Membership 394

TOWA on the Web

<http://www.triumphwedgeowners.org>



Editorial contributions to the TOWA Newsletter are welcome and encouraged. Submissions should be emailed to editor@triumphwedgeowners.org. Materials accepted are subject to such revision as required to meet the requirements of this publication. Unless otherwise specified, all correspondence will be considered for publication.

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Upcoming Events

There are several British car and Triumph events this year where we'd love to see both you and your wedge. Is your car ready? If not, can we (as a dub) help you to get it back on the road?

The Gathering

April 13-15th, Dobson, NC

The Gathering at Shelton Vineyards will be a fun filled weekend. Friday will see the Blue Ridge Mountains driving tour, and British parts auction, with Saturday being the car show. Sunday, run your wedge through its paces in the autocross.

Registration information:

<http://www.triumphclub.org>

South Central VTR Regionals

April 26-28th, Tulsa, OK

Registration information:

<http://www.greencountrytriumphs.com/>

"The Mitty" at Road Atlanta

April 27-29th, Braselton, GA

The *Georgia Triumph Association* and the *Vintage Triumph Register* present "Triumphs at the Mitty". John Clancy (of Code Name Bullet) will be in attendance, and will be filming for an upcoming release entitled "Bullet Reloaded", and hopes to get as many TR7s and TR8s on camera as is possible. Kas Kastner will be the Grand Marshall, and the event is shaping up to be a unbelievable celebration of all things Triumph.

Registration information:

<http://www.themitty.com>

Later in the year, Galveston Texas will be the site of the VTR Nationals. There's also Triumphfest 2012 in the Southwest near the end of September.

Other events are the Canadian Classic at the end of July, the All British Field Meet in Portland, OR, and the list just keeps growing.

There are many, many activities being scheduled, throughout the year, and this early in the year, some details are not available at this time.

The TOWA Website **regularly** keeps a current schedule of events are we are made aware of them. For the most current list, browse over to <http://www.triumphwedgeowners.org/2012-events.html>



Center stage at the Simeone Museum

Wedge Cars Take Center Stage at Simeone Museum Exhibit

Well, not exactly center stage, but they did take places of honor on either side of the exhibit's flagship, a 1934 MG PA Airline Coupe owned by none other than Wayne Carini of the Velocity Channel's *Chasing Classic Cars*.

The exhibit in question is the Simeone Automotive Museum's annual "Best of Britain" exhibit, which ran from February 10th-26th in Philadelphia, PA. The theme this year was "Triumph vs. MG" with a sub plot of "British Muscle", highlighting V8 powered British cars. On hand were examples of an Allard K2, a (TVR) Griffith, an MGB-GT V8 (a real one, not a clone), a Morgan Aero 8, a 289 Cobra, a Sunbeam Tiger, a Daimler SP-250 "Dart", a Triumph Stag and of course, a TR8, resplendent in Midas Gold over tan check sporting factory alloys with polished rims.

On the other side of the center podium was Wayne Simpson's Inca Yellow TR7, perched on its original steel wheels and 30 year old tires, looking much as it did in the showroom three decades ago. Interestingly, the museum selection committee had a hard time locating a show quality, unmodified original TR8 within easy driving distance of Philadelphia to put on display with their collection of British V8 powered cars, and it took until the last minute to locate one. If you have an original car in good condition, it seems that in the Northeast you may have a rather unique car, as quite a few have now been modified.

Rounding out the display were MGs of the P, T, A, B and C series as well as a Midget; and a Triumph TR3, TR4, TR250, TR6, Spitfire, and GT6. Last but certainly not least were a Lotus Elan, several race prepared MGs and a Triumph TR4. The Museum's web site can be found at <http://www.simeonemuseum.org>.



Wedges on display at a show in the Pacific Northwest

Vice President's Column

Election of TWOA Officers

As your outgoing Secretary, it was my duty to collect and count the ballots of our recent election, and my duty now to announce the results. Voting ended January 15th, by which time between the mail and the internet, we collected 49 ballots. All were unanimous for the slate as proposed except for one write in vote for President. This was disallowed since the person receiving the vote is ineligible on the basis that he isn't a dues paying member.

So there we are. Our thanks to everyone who took the trouble to vote even though none of the seats were contested. We'll do it all again in three years time so if you fancy yourself becoming an officer, do step up and offer your services to the club as a Regional Rep and put yourself on our radar.



TRIUMPH WEDGE OWNERS ASSOCIATION

Official Ballot

Voting Instructions: Vote for one candidate per position. Use the space provided for write-in candidates if desired. Fill in your return address, affix postage and mail. Ballots must be postmarked no later than 1/15/2012 to be counted.

| Position | Candidate | Write In |
|-----------|--|----------|
| President | <input checked="" type="checkbox"/> Jim TenCate | |
| Vice Pres | <input checked="" type="checkbox"/> Wayne Simpson | |
| Secretary | <input checked="" type="checkbox"/> David Elsberry | |
| Treasurer | <input checked="" type="checkbox"/> Joe Worsley | |

Handwritten notes: "Free 1 More!" and "BKS pads 0" are visible next to the write-in column.

Actual ballot received after the deadline. No, we didn't count it.

Code Name Bullet DVD

Last Fall we announced we would be distributing UK based producer John Clancy's **"CODE NAME BULLET: The Story of the Triumph TR7 and TR8"**. As I write this in late February, we are now shipping our initial order of 20 copies to those that pre-ordered. And here's the best news: In response to our interest, John has gone back to his original films and remastered the program in NTSC format so they will play in any US/Canadian market DVD player. No need to view these on your computer!

The program runs approximately 90 minutes and tells the story of the design, development, production, advertising and motorsports history of Triumph's iconic Wedge car. TR7 designer Harris Mann is interviewed along with other people from within the Triumph organization. Special features include an extended interview with Mann and coverage of Wedge car offshoots like the Lynx and Broadside.

Our initial order is nearly sold out but we have already ordered more and by the time you read this, they will be available for purchase in the members

area of our web site. If you were to buy **Code Name Bullet** from John Clancy's web site, it would cost you £15 plus £2.50 postage, or about \$28 US. Our price is just \$21 postpaid to US addresses and \$23 for our friends in Canada. If you live somewhere else in the world where NTSC format is the norm, contact me and we'll figure a price for you. If you live in a region where the PAL format is used, your best bet is to buy direct from John at <http://www.triumphdvd.co.uk>. Also available there is John's **"Triumphs USA"** DVD from last year's VTR National in Breckenridge, just £15 (about \$24) with free shipping worldwide. There are appearances by your current President, plenty of interviews of Triumph people, and lots of Wedge car and autocross footage there. I even make a brief (silent) appearance or two!

Deconstructing The Wedge

I had an opportunity recently to buy a rare 1981 Bordeaux Red TR7 complete with all its EFI gear. I've always wanted a Bordeaux car; it's my favorite Triumph color with the possible exception of the enigmatic Oporto. Unfortunately, this car is way too far gone with rust to save, so its life with me will be short lived. I'm stripping it of as many useful pieces as I can and will scrap the rest. The EFI engine and driveline will be used to restore another, as yet unnamed project.

I have to tell you, taking this car apart over the last couple of weeks has been a real education. Rather than going at it with an air hammer and Sawzall-all, I've been trying to use wrenches and sockets so as to destroy as little as possible, and also to have the experience of "doing it right". I will face unknown repair jobs with a lot less dread now that I've seen up close and handled virtually every major assembly on a Wedge car. Yes, it's our goal to save the Wedges, but you know you can't save them all. And if you can't save a particular car, at least you can save the parts "that others may live".



Wayne's Bordeaux Red Donor

Spring Gathering in Dobson

David Elsberry (your new TWOA Secretary and Editor) and I both plan to be in Dobson, NC for the annual British Car

Gathering hosted by the Triumph Club of the Carolinas. This three day event takes place April 13-15, and includes a Friday night auction, Saturday car show and Sunday Autocross, all for a paltry \$20 registration fee. Spring in the Carolina Blue Ridge hill country is just sublime, so if you're within a few hundred miles why don't you come join us and make it a proper Wedge car party? Contact David or I and we'll try and put something together. We hope to see you there!

TWOA Website Updates

In case you missed it there are have been quite a few updates to the TWOA website lately. Here is a sampling of what's new.

- Randy Kimpton provided a FI fuel tank to Odd Hedberg, who carefully had it dissected for the purposes of having a local manufacturer reproduce the tank. The method that Triumph used to provide a FI swirl pot is quite fascinating. If you've ever tried to look inside a tank with a flashlight, particularly a FI tank, you will be amazed by what is inside.
- Darrell Walker has provided a copy of the British Leyland Dealer Service Manual for the GM R-4 air conditioning compressor used on the TR8.
- The Jaguar Rover Triumph FI parts reference has been added to the Tech/Parts section
- The Hurdwell Memo: British Leyland Motorsports memo on the design changes for the UK spec TR8
- WedgeColours / aka Colours of the Wedge is linked up in the Members Only section.
- Also available in the members Only section of the site, the link to purchase your own copy of John Clancy's *Code Name Bullet* DVD
- For mobile users, the TWOA website has been optimized for mobile phones and tablets. Handy when you want to review that PDF copy of a newsletter on a technical item while in your garage!

• *Tech/Parts* has links two new articles, both from Mark Elbers. Mark has contributed the Wedge Math article, the definitive article on Wedge suspension geometry, and also a parts cross reference. Both are excellent additions to the site, filled with excellent material!

• *Coming soon*—access to all the British Leyland Service Bulletins

Stay tuned to this area for updates and changes as they progress.

What would you like to see on **your** website? Send your suggestions to:

website@triumphwedgeowners.org

WedgeFacts: Harris Mann designed the TR7 to have a targa top.

Steering Column Firewall Bushing Replacement

A fine new version to celebrate the New Year

By Clay Thompson - additions by Jim TenCate

The steering column bushing is often a problem with our 30 year old TR7/8s, as the lower steering column firewall bushing eventually disintegrates and falls out. To diagnose the state of your bushing, hold the steering wheel with both hands and try to shift it up and down. If there is movement and a metallic clunking noise, then your bushing has deteriorated and needs replaced. Replacing the bushing is fairly straightforward; however it can be a difficult to accomplish with some of the hard poly bushings available.

Acquire a steering bush replacement. The stock bushing is a fairly soft poly of some sort, but there are some reports that it doesn't last very long. Many vendors furnish their own harder, stiffer poly bushings which should easily outlive the cars. Jim has installed both types of bushings and prefers the original softer poly as you'll read later.

On the lower steering column under the dash is a clamp. One side of that clamp has two bolts. Loosening them will do no good, so leave them alone. The other side has a locking nut and a setscrew and this is the side you will work with. Back off the locking nut and then loosen the setscrew without removing it.



Note the hex head set screw

Turn the steering wheel so you have access to the upper bolt on the universal joint on the steering shaft right up against the firewall in the engine compartment.

NOTE: You will have to align this shaft and hole exactly with the bolt when reassembling the joint, as the bolt will only fit in one position so keep track of the steering wheel position to help in reassembly.

Loosen the 13mm nut and remove the bolt. Spray penetrating oil on the shaft and the universal joint at the firewall.



13mm bolt on the steering shaft

Crawl back under the steering wheel and work the bottom part of the steering shaft between the clamp and the foot-



Steering column stop clamp

well to move it up into the upper part of the steering shaft. These ARE collapsible steering shafts after all. Jim had trouble doing that on both his cars so he removed the "stop clamp" near the upper shaft of the steering wheel instead and then the steering wheel out enough to remove the remains of the old bushing.

This clamp too is keyed to the slotted shaft, the bolt holding it will only fit in a certain orientation. Also note that the steering wheel adapter tabs will pull away from the turn signal indentations on the column switch so try not to disturb things too much and keep the steering wheel orientation changes to a minimum at this point. When the shaft is free and pulled up into the foot-well, you can see the hole in the foot-well and perhaps the remains of the old bushing.



The old OEM bushing

Crawl back out of the foot-well and then crawl under the car and retrieve the big flat washer and the spring washer that probably fell on the ground.

Pull out the old bushing if it's still present and push and squeeze the new one home from the firewall side, large side facing the engine. How?

Place the new bushing in a pot of boiling water for a few minutes to soften the material. This step isn't necessary if installing a factory bushing but warming it up a bit does help.

Quickly take the bushing out of the pot of boiling water with tongs and gloves and just push it in. Don't be shy, just squeeze it together starting with the narrow end, and force it in quickly. Jack McGahey has done several using this method, and Jim managed to install a poly bushing the same way after lots of trials - and a big screwdriver to help push it in. Clay ended up partially cutting the bushing from the outside to the inside of the hole for some of the stiffest bushings he's installed. Once cut, you can twist the bushing into a screw type coil and work it into the hole that way.

FYI: A NOS bushing took Jim about 2 minutes to install once it was warmed up with a hair dryer - Easy.

Apply silicone grease to the inside of the bushing and along the shaft, align the shaft on the inside of the foot well with the bushing and press it through.

Now have someone with small hands hold the curvy and flat washers together as you push the shaft a little farther through the hole. You can do it yourself but it helps greatly to have an assistant at this point.

Align the universal joint with the shaft and then push the shaft home into the steering U-joint. If you removed the upper clamp and are pushing on the steering wheel, make sure the tabs on the steering wheel align with the turn signal turn-off indentations on the column switch in the same way they came apart. Otherwise your turn signals may not turn off!

Replace the bolt and nut in the universal joint in the engine bay and tighten. (When the bolt will not go in, pull the shaft back and realign it with the universal joint in the proper position. Repeat until successful!)

Set the locking screw tightly and tighten the locking washer inside the foot well. (If it loosens back up, you'll end up with a bit of play in the steering.) If you removed the stop clamp, replace that now too in the correct orientation.

Allow a day to complete this task if you're using a poly bushing and haven't done this before, less if you're using a factory bushing (~3 hrs), and never

volunteer to do it for someone else! Some things are best learned on your own!

Postscript: Peter Nussbickel has fashioned a tool to do this with poly bushings as shown below. It uses a hose clamp on a copper carrier to squeeze the bushing together. Pull the copper carrier through the hole and release it. We didn't have a chance to try it out. Let us know if you'd like to!



Peter Nussbickel's Bushing Tool

Colours of the Wedge

By Jim TenCate

There were a lot of interesting exterior colours used on the TR7 and TR8s over the years. Bill Piggott's Original Triumph TR7 & TR8 is perhaps the best published place to find what colours were used and during what time period. However, about a year ago I thought it might be interesting to try and simply collect photographs and images of a wedge or two of every colour ever used. Richard Connew had tried this years ago with only fair success and, with the pervasiveness of the internet today, I thought I'd try again.



JCJ Cavalry Blue

I started with my collection of photos and images from all the car shows I'd been to over the past 20 years. While some of the colours like Persian Aqua were easy to find, some of the ones listed (like Vermilion) I was sure I'd never seen. So, I asked for photos and images from two places, the original World Wide Wedge mailing list and the www.triumphtr7.com forum and started collecting.



Vermilion Red

Last year I assembled what I had and uploaded them to the World Wide Wedgesite but have since come across a couple of new photos I didn't have and thought I'd upload them all to the TWOA "Members Only" area and update everything and let all of you have a look at my collection. To navigate through the photos, click on one of them, a larger version should appear, and, if you move your mouse up the side of the photo, you'll be able to click through the large photos one by one, backwards too if you want.

I need your help though. I'm still missing some colours, in particular Porcelain (NAF) and Maple (AAC). In addition, some of the colours had two codes listed (Vermilion is both CAE and CML for one example). Is one perhaps a TPA version of an earlier colour? I just don't know and the more photos you can send me on these "bi-polar" colors, the more we'll all learn.

Please contact David Elsberry or myself if you've got a photo you think I'd like, a missing colour, or a much better image than what I've found. Happy browsing.

Editor's note: The entire collection of photos covering the colours collected is available at:

<http://www.triumphwedgeowners.org/wedgecolours.html>



TR7 Delco Remy Distributor— Vacuum Advance Repair

By Jim Helmich

Later TR7s with Bosch Fuel Injection systems, along with some carbureted models, were fitted with Delco Remy distributors which utilize a vacuum unit to retard the ignition timing at idle down to 2° ATDC from 10° BTDC.

After 30 years of use, many of the diaphragms inside these vacuum units have failed, and replacements are unavailable. As far as I know, this particular model of distributor is not found on any other US car, either domestic or imported, and until now I have been unable to find a source where I could either replace or repair these vacuum units. Sadly, a daily scan of eBay for the past several years has never produced a working unit.

One approach I've used is to set the timing at 10-12° BTDC at idle and not worry about it. That works fairly well but will not pass a smog inspection here in California (although it will based on the actual emissions read). I have reset my distributor for the test and passed.

Since I like to keep things both stock and legal, I was delighted to finally discover a company that could rebuild the vacuum unit. Quality Rebuilds LTD in New Zealand specializes in the repair of sealed actuators for distributors and mechanical fuel pumps. They are easy to work with too with a fast turn around. They rebuild the units with Viton which should make a very long lasting repair.

If you have one of the many Delco vacuum advance modules in need of being rebuilt, you can contact Quality Rebuilds LTD at:

Quality Rebuilds Ltd.
+649 267-4700

<http://www.qualityrebuilds.com>

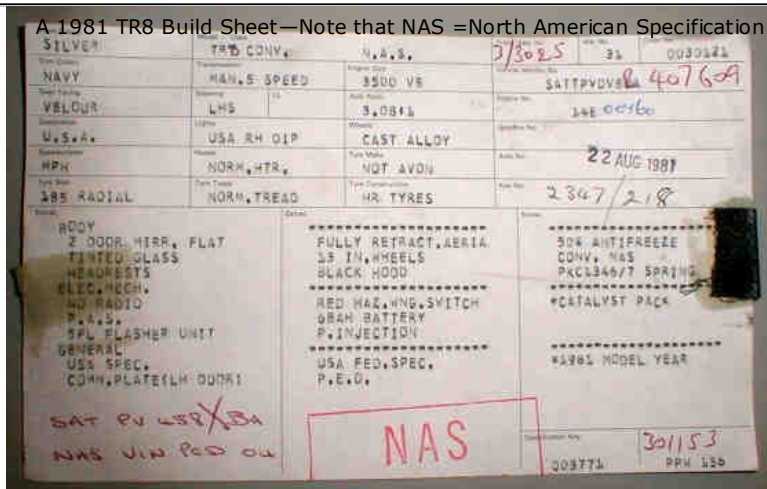
How Plentiful are they Anyway?

Production Numbers, a Detective Story

By Jim TenCate

How many Monza Red or Cavalry Blue cars were produced? How many fuel-injected TR7 Spiders were made? What's a PED VIN car? How many cars were fuel injected? The TWA gets asked questions like these quite a lot and, while records are sometimes too sparse to know, with a little detective work, sometimes we can learn more than what's generally known. This is one of those detective stories, this one (we think) answers the question one of us gets asked a lot: how many 1980 fuel-injected TR8s were built for the California market—I have two such cars—and, more generally, how many total fuel-injected TR8s were built worldwide?

There are a couple of published sources of production numbers out there, one is Bill Piggott's *Original Triumph TR7*



learned (from Albert Tingey) that Canley placed an initial order for 800 fuel injection systems from Lucas for the TR8s. Ah hah! So, if *all* those fuel injection systems destined for Canley were built and delivered, that would put an upper limit on fuel injected

(the few there are) had carbs.

- Total TR8 production is generally thought to be between 2750 to around 2800 cars. Let's use round numbers and assume that 2800 TR8s were made worldwide.

cars built in 1980. (Recall that production moved to Solihull for 1981.) But 800 fuel injected cars out of 2000?

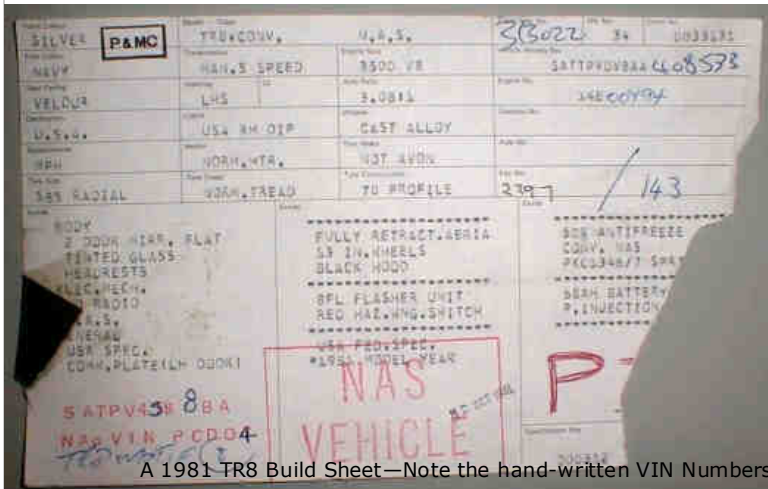
That's more than 1 in 3 TR8s built for California. Not likely but let's continue. Another clue is in the membership files of the old TR8CCA; now the TWA. Of these records, when you compare the numbers of 1980 TPZ cars (CA fuel-injected TR8s) to the 1980 TPV cars (49 state carb'd TR8s), you find roughly 20% are FI. However, the best clue of all can be found in Richard Connew's records of 1981 TR8s. The *engine numbers* of the fuel-injected cars began with 14E (manual trans) or 15E (auto trans, just a few handfuls) and the largest engine number ever seen was 14E00799 on a Silverleaf car built 12 OCT 81 (reported by David Huddleson). Richard's own car (following page) is a PED car with engine #760. My January 1980 California injected car is engine #44 and Brian Ridley-Jones (UK) has engine #14E00002 in one of his cars. So, the engine numbers suggest there were around 800 *total* fuel-injected engines, again, give or take a few handfuls. Now we're getting close!

- From the sources cited in Joe Mahoney's article last newsletter we know there were approximately 400 TR8 coupes in 77-79/80.
- So, that leaves roughly 2000 TR8s produced for the 1980 model year.

We also know that *all* 1980 California cars,

both TR7s and TR8s, were fuel injected to meet stricter California emissions standards.

Were *all* the engine numbers used? The records from 1981 suggests that the answer is (generally) "seems so!" The records of cars and engines look like the engines were brought out in batches and then the cars built---nothing strict about



& *TR8* (2000) and another is the older William Kimberley's *Complete Guide to the Triumph TR7 and TR8* (1981). While there are certainly errors to be found in both books, these are good starting places for research like this. Additionally, several years back UK enthusiast Richard Connew spent a couple of days at the British Motor Industry Heritage Trust and went through all the 1981 model year records (yes, looking at individual cards like the ones shown!) and carefully wrote down all the information on the 1981/1982 TR8s. We all owe Richard a debt of gratitude for the many hours and hours and hours(!) he spent doing that.

So, let's see what we know about the fuel-injected and TR8 production numbers from the above sources.

In nice round numbers (nearest 25 or so), there were approximately 400 1981 TR8s shipped outside the UK and all were fuel injected. Genuine UK TR8s

So, how many TR8s went to California that first year? 5%? 30%? Up until now, only a few people would have even been able to guess. We asked Mike Cook (VTR) to see if Triumph sales might have had an idea of how many or what percentage of cars were destined for California that first year; no luck there.

Now comes the detective work. We've recently



Jim's TR8 Engine Number—January 1980 California Car

numbers or sequencing, seems like it was just grab another FI engine and put it in--- but it looks like almost all the numbers were used.

Conclusion? In round numbers, approx. 800 fuel-injected TR8s were built worldwide, total. Of those, approximately 400 were fuel injected for 1980, i.e., 20% of the initial production that went to California, and another 400 or so were built in 1981/2 before the factory shut down.

There are still mysteries like this out there. How many fuel-injected TR7s were built and why did they use two different ECUs? What about those PED cars, sold to US servicemen and then exported over here (and some never left the UK or actually came back to the UK). Got any questions you'd like to know the answer to? Write us! We love a good mystery.

Wedges In Print

By David Elsberry & Wayne Simpson

The March 2012 Issue of **Hemmings Sports & Exotic Car** has their "16 to Buy in 2012" and has included the 1975-1981 Triumph TR7 in the list. The Author, David LeChance, covers the cars history, its love / hate relationship with other Triumph owners, the early issues with build quality, and the fact that the cars that have survived are perfectly serviceable because by now the issues have all been sorted. You can pick up the current issue at your local newsstand, or at <http://www.hemmings.com>.

The Winter 2012 issue of **British Motoring** published by **Moss Motors** has two articles on the TR7 and TR8. Kathleen M. Mangan, herself a TR8 owner, has written a very thorough Buyer's Guide entitled

ing magazine, at <http://www.mossmotors.com>.

The second article, again written by Mangan, is a cautionary tale, aptly titled "**Learn From My Experience**", describing her own personal TR8 restoration nightmare at the hands of a once trusted mechanic. In the end, she was out a large sum of money and her car was delivered in what she believes is worse condition than when she submitted it for repairs.

The story she tells applies to the restoration of any vehicle and the threads common to such tales seem pretty consistent: a long stretch of time goes by with minimal, if any, supervision followed by an unexpectedly large bill and a car that fails to meet expectations.

The lessons she learns are of value to anyone embarking on a restoration, including:

Get a written contract describing exactly what will be done.

Get a written estimate for the work covered in the contract. A restoration shop is an auto repair facility, and you have the right to an estimate.

Agree to a timetable by which milestones are to be completed. The longer a restoration goes on, especially with periods of time in which no work is completed, the greater the risk or problems.

Do not contract for body and paint services with a shop that does not do these repairs in house. Deal with the body shop directly.

Supervise your restoration shop and make periodic visits to see how the work is going.

If possible, stay within the British Motor Trade Association network. The BMTA is the official trade association of the British Car hobby, a volunteer organization consisting of suppliers, shops and media outlets such as magazines and clubs. A BMTA member has made a commitment to quality and ethical business practices within the hobby. Find out more at <http://www.britcar.org>

Mangan tells us her car has gone into storage and her experience has understandably detracted from the enjoyment of owning her car and the hobby in general. We can only hope she will find the enthusiasm and the means to get her car back on the road again.



Richard Connew's 1981 FI TR8

P.S. Finally, if you'd like a "Birth Certificate" for your car gleaned from records like Richard went through many years ago, you can get them from the British Motor Industry Heritage Trust <http://www.heritage-motor-centre.co.uk/exhibitions/archive-services>. It's pretty cool to have a "birth certificate" for your car. The one for my brother's 1975 TR7 actually says what ship the car came over on!

"Triumph TR7 and TR8: Wedges Still Polarize Enthusiasts". Beyond a buyers guide, the author provided an in-depth review of both models, pointing out many historical details starting with the concept of the car, the release of the TR7, the development and release of the TR8, suggestions on the different models, and a list of common upgrades that can provide performance improvements to both cars. A well written, worthwhile read. You may read the entire article, and British Motor-

TR7/8 Suspension and Anti-Dive Characteristics—Update

Wondering about an anti-dive kit for your Wedge, or how to find your car's center of gravity? Mark Elbers' article Wedge Math (mentioned in an earlier issue) is now linked on the TWOA website. Go to <http://www.triumphwedgeowners.org> and look under the **Tech/Parts** tab, find **Tech: Best of the Web** and the link to Mark's article is the first link, linked over at the WWWedge site.

Me? I've installed an extra pair of packing pieces, part # UKC9883 between my anti-sway bar and the subframe to help with anti-dive on my TR8. The TR7 will still probably need a thicker spacer. But if you want to know for sure, read Mark's article—the answer **will** be in there!

Browse over to the website and have a look at Mark's excellent work.



Note the extra packing piece

1978 TR8 Pre-Production Coupe Restoration

By Lorenz Hassenstein

It is sometimes hard to understand why a grown man of somewhat sound mind would spend good money to revive a thirty-four year old British sports car that couldn't win enough hearts to survive back in the day. I suppose there is a story behind all projects like this, and this is mine.

I grew up in Wilmington, Delaware, where my brother had a 1970 MGB roadster sitting in the garage that he bought new upon returning from Vietnam. Camaros, Javelins and Mustangs owned the road back in the late 1970's but my little roadster was unique, and fortunately for me, the ladies took a liking to it. A love for British cars was born. I drove that MGB all through high school, through college and have it to this day. I finished a complete restoration on the car in 2010—but that friendship is another story.

In 1995, just before my first child was born, my wife gave me a coffee table book on MGs written by F. Wilson McComb. In it is a chapter about V8 cars and the more I read it, the more I thought it would be fun to build one for the track. Eventually, I found a local MG fanatic named Raymond here in Connecticut. Raymond had a 1968 GT conversion car that was sitting in a barn, so I bought it for some \$500 and hauled it home. Raymond had five or six pre-war MG race cars; very cools stuff. 1,400cc supercharged boat-tale one-of-a-kind racers worth millions. Wealthy Japanese execs were after him all the time to sell them - but that too is another story.

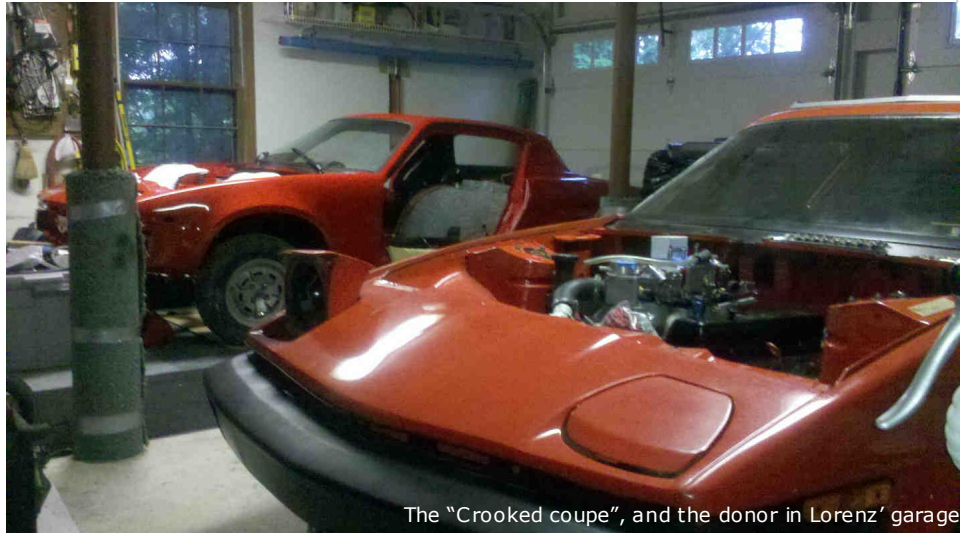
It took me three years to get the GT together; you can see it on Curtis' BritishV8 site. When I was looking for a motor I did a Google search and subsequently found Tim Lanocha. It took us some time, but finally we got that 5.0L Rover motor in a good place and now that car runs like a Swiss watch. If you are reading this there is a good chance you know Tim, and he doesn't have a MG. At one event in Vermont we ran into a MG owner that had painted his motor tan of all colors; I can't write what Tim called the guy but I think Tim was/is right about most MG owners. Needless to say every time I showed up I had a MG and everyone else had a TR8. So I figured what the hell, they can't be that bad right?!

I decided that ultimately I liked the TR8 coupe with a sun roof best. I had both the GT track car and the roadster already, so why not build something I could drive most of the year. Although Tim had a yellow TR8 he was trying to sell, it was a convertible. Woody got his hands on a (red) coupe that was partially assembled that needed a home. I think Woody told me the coupe came into the country via Washington/Oregon and made its way to Florida. Since I really

wanted a coupe anyway, I ended up purchasing the shell from Woody and the running gear (suspension, motor/trans/diff, brakes, tires, wheels, cooling, etc) out of the yellow car from Tim Lanocha.

I picked up the running gear from Tim in Maryland, carried it up to Massachusetts, and dumped it on Woody's porch. Woody had an individual down the street re-spray the current Vermilion

bumper mount was pushed in by about $\frac{3}{4}$ of an inch, the inner fender well had filler layered in it to hide the wrinkles, the left frame rail was kinked in two places (once before the K-member mount and once between the mounts), the left front fender sat some $\frac{1}{2}$ inch higher than the right and the clincher was when you looked at the car from the front it had a crooked smile. After re-viewing all of these individual deficiencies



The "Crooked coupe", and the donor in Lorenz' garage

paint on the coupe and under duress, Woody installed the motor and transmission into the shell. I took the car back home to Connecticut, where it took me two months to get the rest of the car together and running. About \$4k and a year's worth of time later, and I had most of the kinks worked out before turning a 12.8 quarter time at Pittsburgh International. Not too bad for a Frankensteined TR8, right?

Now you may think that would be a good ending to the story— but not so fast. As I assembled the car, I realized it had been hit some years before. Woody alerted me to this earlier, as I bought the shell sight unseen, however after I assembled the car, it was dear to me that the body was too damaged for me to live with. The windscreen leaked, the drivers seat frame was snapped, the left

as a whole, I decided I wanted a clean car that had a square stance.

Having build and restored a couple of cars in the past, I didn't want to take this car apart, try to fix the shell, and ultimately try to live with a plethora of compromises before re-assembling it some two/three years later - with parts all over the place in the meantime. At this point, I made the decision to buy a clean coupe with a sunroof and start from scratch.

Finally, in 2012 I found a maroon coupe in Maryland and went to work on it. I put the crooked coupe in one bay of my garage and the maroon donor in the other bay and went to work figuring out what I needed done - all the time driving the crooked smile around while deciding what I wanted to change about it.



The finished shell, ready to receive its new drive train

I stripped the donor car down to bare metal, in the process learning that it had a replacement panel that needed



The painted coupe, with the ceramic interior coating visible

some attention. Other than that, and some dings and dents, it was a clean shell. The frame rails were clean and the inner-rockers didn't show a spot of rust. I did all the prep work myself and got the panels into primer for the body shop. I also welded steel plate into the seat pans and rolled it up the vertical panel behind the seats, tying it into the control arm mounting points. A combination of DOT slicks and torque tend to rip the cars apart and I didn't want a problem on my hands down the road. I also boxed in the upper and lower control arms to reduce twisting, shaved the rear fender wells for the bigger tires, welded up tabs for some additional components in the engine bay, created mounting points for a strut bar in the rear corners of the engine bay, sliced and angled the spare tire compartment so you can't see it anymore, welded in mounting points for a 5-point harness and probably a dozen other details that are difficult to remember at this point.

In February of 2011 I gave the shell to the body shop. It had some three spools of welding wire in it, the entire undercarriage, interior and trunk were sprayed with a ceramic coating and the wheel wells were undercoated. The body shop painted the interior and trunk in a black epoxy and painted the rest of the car Vermillion red. The new shell was returned to me in March, and I spent from March until September swapping everything from the old car over to the new shell. Once everything was swapped over, I had a sign shop put on new decals including the clear matte finish Group 44 stripes.

The swap wasn't as straight forward as one might think. Along with the body being bent, I wasn't happy with the brakes and the old car simply handled like a pig. After having MGs, I knew that I definitely had to do something with the handling.

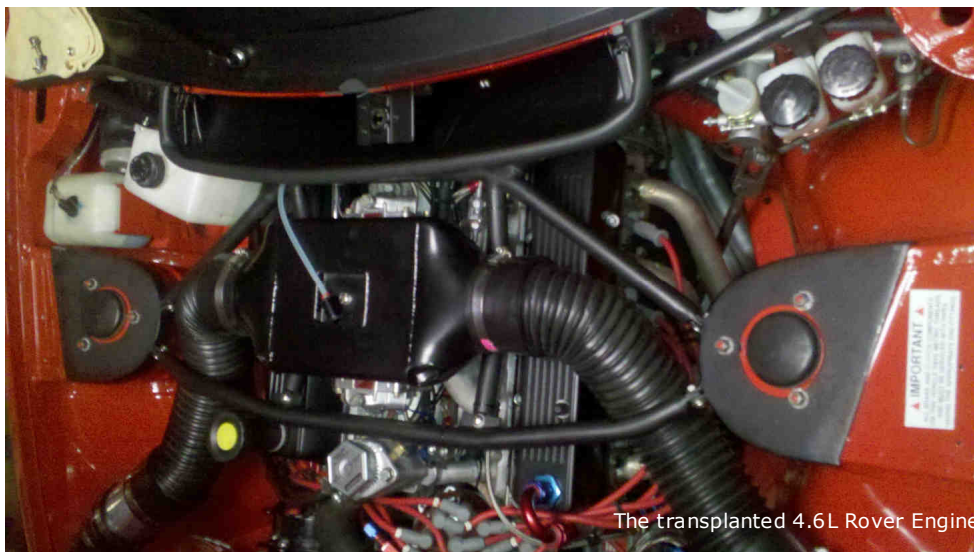
The front wheels were to far in-

bound due to the back-spacing of the 15" wheels and the brake/hat on the car. The front rotors were 10" I think, and

the whole ride height was off. I believe it had negative rake on the car before I took it apart.

The 4.6L Rover motor swapped right over, and I added a vacuum pump driven off of the inner stock pulley. This helped to make some additional power, and stopped the motor from leaking oil. Thankfully, the Borg-Warner T-5A transmission swapped over without issue, as did the Ford 9" rear.

Aside from the camshaft and intake manifold, the motor is stock and on the dynamometer, the car produces 320 ft/



The transplanted 4.6L Rover Engine

lbs of torque at the rear wheel.

While transferring the seats over, I decided to have them recovered. Mike Perkins pointed me to a source in Virginia for the orange plaid interior cloth I choose, and I purchased enough to do three complete seats. My door panels were fine, and were re-used. In installed a 8-speaker stereo system, driven by two amplifiers, and I fabricated a new deck behind the seats to hold the sub

woofer, the 5x7 speakers, and a mount for my Go-Pro camera so I can capture the surprised look on BMW owners faces as I pass them by. While every part was meticulously refurbished before being installed, the bulk of my time was spent on the wiring, suspension and brakes.

For braking, I chose a Wilwood tandem master cylinder with remote reservoirs. I bent all new lines and plumbed in a proportioning valve, front pressure residual valves and a rear hydraulic parking brake. I mounted the dutch and rear brake reservoirs off the "bird cage" (what I call my strut brace). The rear brakes I retained aside from installing new pads and had the 12.2" vented rotors turned. The front brakes are fed from a steel braided brake line kit designed for the rear of a Corvette. 4-pot Dynolite calipers were installed on all four wheels, and the front disks are 11.75" vented and slotted that are 8 on 7" circle. I purchased un-drilled 1.96" offset hats, and had a machine shop drill out the 4 x 100 front bolt pattern. All the front brake setup was then mated to a new set of strut tubes Todd fabricated so I could adjust the ride height. I can't say enough about both Todd Kishbach and Mike Perkins, both of whom have a wealth of knowledge and are great to work with. The brakes are fantastic, the pedal is hard and braking is easy. I can stop the car on a dime and have all the confidence in the world in the system.

To upgrade the suspension, I began with the shocks and struts. Fortunately for me, I live 30 miles from the largest shock distributor on the east coast. I

drove down and after fifty questions and answers I was handed a pair of racing Koni adjustable struts designed for the rear of the Toyota MR2 for use on the fronts struts, and another pair of Koni adjustable shocks designed for the Alfa-Romeo to use in the rear. The Koni struts I planned on using in the front adjust from the top strut mount, so I had to fabricate new mounting points in order to make everything work. The rears



The finished TR8 sunroof coupe

waste your time, the current owner of Triumph is BMW. Lots of luck with that.

Now that those two issues are out of the way, what goes wrong with these things? The design had to work or they would never have passed testing and approval in the first place. My original TR8 never had a problem and so I never returned the belts for recall. The left belt on my current TR7 is fine, but the right side belt would occasionally lock up for no apparent reason and hold my passenger hostage until the belt was disconnected and retracted. When it finally refused to unlock no matter what, I felt I was in for a set of aftermarket belts, which have neither the look nor fit of the originals. With little to lose, I set about to fix the original belt. Here's what I found.

How It Works

On first inspecting the retractor, you will notice that one cover says right on it: "Do Not Remove This Cover". Heed this warning. Undereath this side is the spring that winds the reel. Open the cover and the spring will go off with near explosive force. Leave that side alone.

Now open the other side and have a look. (fig. 1) How can this flimsy contraption of plastic wheels and levers restrain you in a crash? It doesn't have to. What you're looking at is a servo mechanism whose purpose is to move the locking pawl, a sturdy metal stamping, upwards to engage the belt reel and keep it from rotating. It's the locking pawl that does the heavy work.

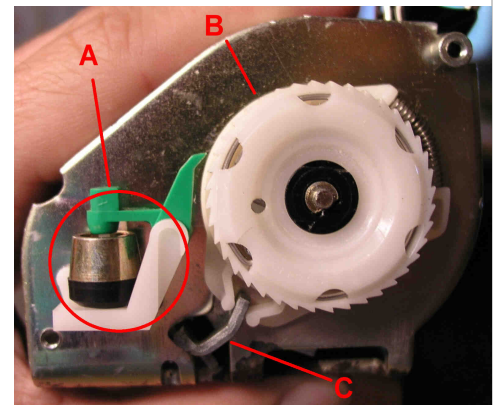


Fig 1: The inertia reel mechanism assembled, Starlock fastener removed. A) - The crash sensor, shown in its neutral position. B) - The outer toothed wheel. C) - The locking pawl in its lowered (unlocked) position

Those three little pieces that fell out when you removed the cover is the crash detector. It consists of a base, inverted pendulum and lever. If this senses acceleration in any direction but vertical, like the force of gravity on a more or less level car, the pendulum will tip over causing the lever to move forward, engage the toothed outer wheel and lock

bolted right up and limit the bump so the car won't bottom out. The Ford 9" in the old set-up had a tendency to hit the bottom of the gas tank – not good. That issue is now corrected. Droop is limited by a set of custom made straps connected to mounting points I welded onto the frame rail and axle tube. The front springs are 2.5" x 8" x 275 rate. The rears are 2.5" x 7" x 275 rate. You can actually adjust the ride height on all four corners, making it possible to almost perfectly balance the 2,900lb car. The real trick was getting the "bird cage" installed so it didn't interfere with the motor when it moved under load while still allowing me to disassemble anything in the engine bay without disassembling the "bird cage".

A couple of other nice tricks on the car include the fresh air intake system. Spectre Performance sells all the components you need to use the stock fresh air vents to feed a low profile plenum. This keeps the car cooler in summer traffic and gives it plenty of air under load. A 300+ bhp motor under load needs more air than a single 4" tube can supply, and air filters under the hood pull hot air from the engine bay which hurts performance. Snow Performance makes a water-methanol injection system that increases pump gas to 116 octane, while cooling the intake charge by approximately 30 degrees. It also cleanses the cylinders and allows you to lean out the air/fuel ratio in the lower RPM range to conserve fuel, however you must be sure to tune the engine on a dyno. You can richen the mix enough to lose power if you aren't careful. On a summer day idling at a light the motor can be at 190 degrees; if I nail it and kick the water/methanol injection on, by the time I hit 3rd gear (4-5 seconds) I am doing 70 and the thermostat has dropped to 160 degrees. It really is an amazing product that was developed for prop aircraft during the Second World War.

So, now I have the car I wanted—a great daily driver that is both fast and reliable, and I think it looks OK too! I owe a great deal to Todd Kishbach and

Mike Perkins, who helped me get through the brakes and suspension mods – Thank you. **More Photos at:** <http://www.triumphwedgeowners.org/lorenzphotos.html>

Fixing the Sticky Seat Belt Retractor

By Wayne Simpson

Do your seat belts retractors lock up and fail to release? Do you have to pull them out with the care of a surgeon to put your seats belts on? Have they held you or your passengers hostage? In this article I will attempt to show you what goes wrong and how to fix them, but first, a disclaimer.

We are talking now about your seat belts, the last line of defense between you and the windscreen; the things you count on to save you when everything goes south and your day is about to go from bad to potentially tragic. There are replacement belts available and if you have any reservations about working on such a basic piece of safety gear, I would recommend you buy a set of replacements. If you do undertake this work and end up with a non serviceable belt, don't use it, and don't blame me if you do.

The original belts, made by Kangol, were the subject of a factory recall in the 1980s. As an original owner, I have that original recall notice. It advises you to test the belts by pulling them out at a steady speed, and if they lock up at something less than 5 miles per hour, return the car to an authorized dealer for replacement of the seat belts. Years later, Jaguar Cars would send owners new belts for self installation. Its been a long time since that recall was issued and once every year or so, someone goes off in search of free belts under that recall from whoever owns the Triumph name this week. I liken this to the Great American Quest: the eternal search for something for nothing. If you want to

the mechanism. More on this later, but this is not what goes bad.

Carefully remove the push-on Starlock fastener on the spindle. This is not easy and don't pry on the outer toothed wheel or you could crack it. Lift off the outer toothed wheel, turn it over and note the spring clip with loop. The loop goes over the post on the metal weighted inertia flywheel.

With the outer wheel off (fig. 2), you can see the inertia reel mechanism. The black outer hub is keyed to the reel spindle and rotates with it as the belt winds and unwinds. The weighted flywheel is free to rotate on the spindle, but is connected to the black hub via a light spring and a lever mechanism. As the belt unwinds, the flywheel is dragged along with the black hub. If the speed of the spindle suddenly increases, the inertia of the flywheel opposes the pull of the spring, extending the lever which then engages the teeth on the inside of the inner toothed wheel, rotating it counter clockwise. The inner wheel then engages the steel locking pawl and this locks the seat belt reel.

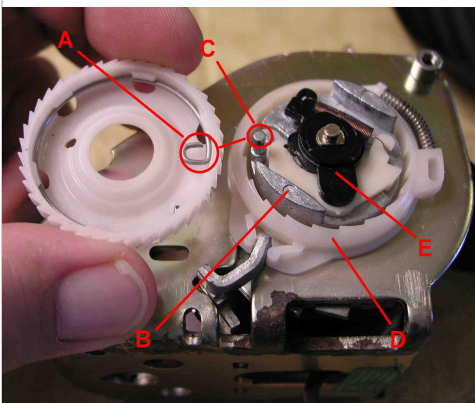


Fig 2: Outer toothed wheel removed and turned over. A) - The spring clip with loop. The outer toothed wheel is installed so the loop engages the post on the weighted flywheel, C. B) - The weighted inertia flywheel and locking mechanism. D) - The inner toothed wheel. When engaged by the locking lever, this wheel moves counter clockwise slightly and rotates the locking pawl to engage the belt reel. E) - The black

Similarly, if the crash sensor tips over, it engages and stops the outer toothed wheel (fig. 3). This will stop the flywheel via the loop on the spring clip, extending the lever and locking the mechanism as before. That, in a nutshell, is how the mechanism works.

What Goes Wrong

When the mechanism locks, allowing the belt to retract should unlock the system, but the outer toothed wheel needs to be free to rotate slightly on the black hub under the tension of that light spring to withdraw the inertia mechanism's locking lever. If there is any drag between the outer toothed wheel and the black hub, this may not happen. This is why they lock

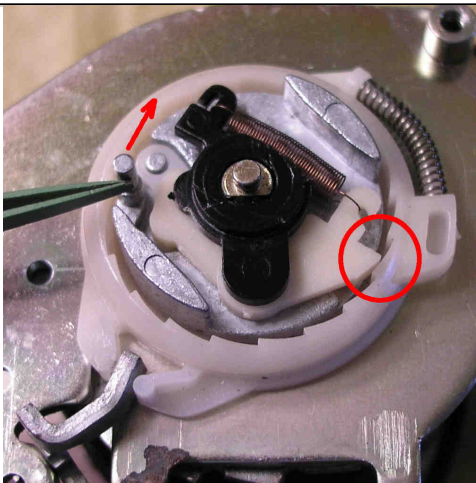


Fig 3: In this detail image the post on the weighted flywheel has been moved in the direction of the arrow, simulating a sudden change in belt unwind speed or a tripped crash sensor. The locking lever (circle) has extended to engage the inner toothed wheel. This will rotate the inner wheel counter clockwise and raise the locking pawl to lock the reel.

up and fail to release. To test it, with the outer toothed wheel in place and the spring clip's loop over the flywheel post, rotate the outer wheel one tooth clockwise and release it. Does it spring back? Good. Now rotate it clockwise again until you feel the spring clip start to move inside the inner wheel. Rotate it one tooth and release. It should spring back again. Keep doing this until you've done a complete revolution of the outer wheel. There should be no orientation of the wheel that doesn't spring back freely, but chances are, there will be one or more spots where the outer wheel sticks on the black hub. There is a short video on the TOWA web site demonstrating how it should work.

How to Fix It

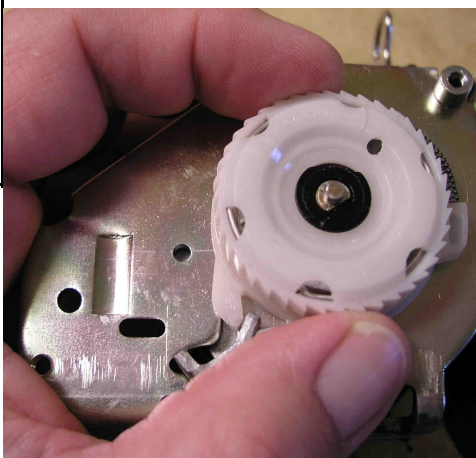


Fig 4: Rotating the outer wheel slightly to check it for sticky operation. There should be no orientation at which the wheel does not snap back when rotated slightly clockwise. A video showing this operation is at <http://www.triumphwedgeowners.org> or on YouTube at <http://www.youtube.com/watch?v=0BNqLoHf0BE>

The fix is simple. All you need to do is remove any burrs you might find on the black hub and carefully sand the inner diameter of the outer toothed wheel with 400 grit wet/dry or finer paper to remove the high spots. Don't go overboard. The outer wheel should not be loose on the hub, but it should spin freely on it all the way around. Then, carefully reassemble the mechanism and push the Starlock clip back on. I hope you took care in removing it because these are hard to find here in the States. If you didn't bugged it up too badly, you should be able to bend it back into shape and re-use it. If not, contact me and I may be able to find you a source for one or two.

When you test the mechanism, remember that with the crash sensor fitted, the belt will lock up unless the retractor is held still and in a level position, so don't be fooled if it locks on you because you weren't holding it right.

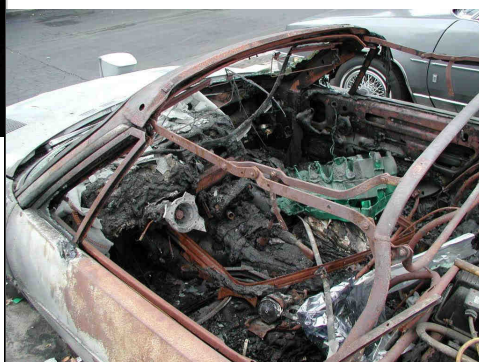
Finally and once again, if you don't feel comfortable working on such a basic and critical piece of safety gear, leave it for someone who is, or buy a set of replacement belts. A Google search should reveal one or more firms that service classic Kangol belts, or contact me for further information.

Editor's note: you may reach Wayne via email at VicePresident@triumphwedgeowners.org

Preventative Maintenance

As spring approaches, many of us are preparing our pre-driving season task list. One thing that should be on your list is a reminder to check your fuel lines. Today's blended fuels **cause** deterioration of the fuel lines on our cars due to the ethanol content, and can result in hoses that disintegrate and leak. A fuel line leak can have disastrous results.

In the photo below, the owner was draining the fuel lines into a catch pan, which accidentally caught fire. Please be careful and protect both yourself, and your car. A fire extinguisher should be kept within reach in every vintage car. A standard A B C fire extinguisher will work, and usually has a useful life of up to six years. At a minimum you should have a Type B C—B is for flammable liquids and C is for electrical fires. Models filled a Halon alternative have the added benefit of little mess to clean up.



Replacing The TR7 Prop-shaft CV Boot

By Norm Hall

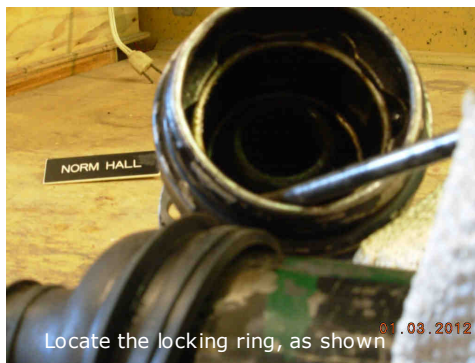
I recently took apart the constant velocity joint on my TR7 to replace a torn boot. Although the steps below do not rebuild the CV joint itself, if your CV joint is in good shape and you only need to replace the boot, this procedure will save you a few dollars over the price of a rebuilt prop-shaft. This may or may not be the proper way to complete this task, but it worked for me. If you wish to try this, use this guide at your own risk.

Raise your car up to where you can access the rear of the car. Assuming you don't have a lift, make sure that you block the front wheels securely so that when you raise the rear and remove the shaft, the car doesn't roll away and fall on top of you. Make sure you mark BOTH ends of the shaft in relation to the transmission and the differential, then remove the bolts, and set them aside. These bolts tend to see a great deal of stress, so it might be wise to replace them. If you do, make sure you use Grade 5 or higher bolts.

Take the drive shaft and place it CAREFULLY into a vise. Use a material such as a non-skid carpet mat to prevent the shaft from moving without putting excessive pressure on the shaft. If you bend the shaft, you'll have to replace it. To prevent having to tighten the vise too much, place a board or something similar on the far end of the shaft to support the shaft's weight. Cut away all the old CV boot rubber, then clean out all the grease inside the joint so that you can see inside the joint and locate the components inside.

Inside, where the shaft connects inside the bearing cage of the CV joint, there is a black rubber band around the shaft, presumably there to act as a bumper.

Place a blunt drift on the metal edge just in front of the rubber band noted above. Take a hammer, and drive the CV joint off the shaft. Once the CV joint is removed, look inside the joint and locate the retaining spring.



Locate the locking ring, as shown

Remove the locking ring / retaining spring from the CV carrier. The ring is shown in the photo below, after removal.

Once the ring is removed, extract the bearing cage, ball bearings, and races, and then clean and dry them thoroughly.

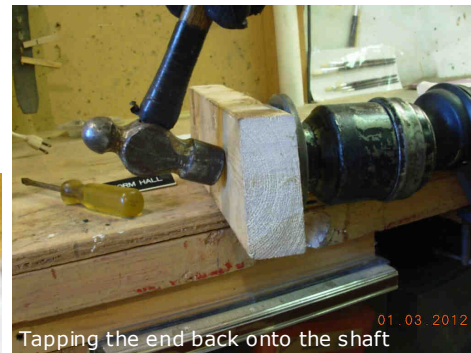
Place the new boot on the shaft by sliding it over the splined end. Tie the boot with the tie included in the boot kit, then turn the boot inside out over the shaft.



Locking ring removed from the CV joint, new boot installed

Once you have the boot on the main shaft, it's time to reassemble the CV joint. Grease all the bearing races, the bearing cage, and bearings with the grease supplied in the CV joint boot kit. Place them back into the CV joint housing, and replace the retaining spring.

Align the splined shaft carefully on the shaft to the female end of the CV joint. If you do not align the spline correctly, you can destroy the shaft. Slide the CV carrier onto the shaft as far as it will slide. Grab the joint CV carrier, and



Tapping the end back onto the shaft

twist it to be sure that it is seated properly.

Place a block of wood on the mounting end of the CV carrier, and tap the carrier onto the shaft until it is fully seated. Depending on the shaft, this might require a bit more than a tap, but you want the carrier to seat against the rubber bumper that you noted previously before you removed the CV joint.

Once the shaft is fully seated into the CV carrier, turn the boot right side

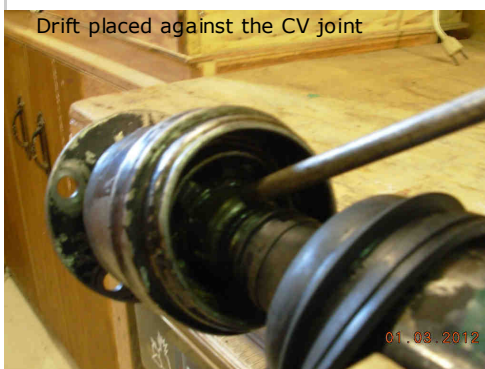


The completed shaft and boot

out, and attach it to the CV carrier with the tie supplied in the kit. That's all there is to it. While not difficult, it is something that can be tricky. To replace the boot, I used a kit for the Classic Mini. The kit is available from various vendors.

I would like to extend my thanks to Brian at kddpower center for giving me the information that I needed to complete this job.

Editor's Note: It has been rumored that oversized bearings from the Mazda 323 can be used if you need larger bearings in your CV joint. I have not confirmed this, however any bearing supply shop can supply oversized bearings if needed.



Drift placed against the CV joint

Member's Corner

By David Elsberry

Jim Altman's 220,000 Mi. TR8

Jim Altman's daily driver alternates between his 1980 TR8, and his 1973 240Z, so he's always behind the wheel of classic sports car. Purchased in 1999 with 97,000 miles on the dock, Jim drove his Persian Aqua Metallic car regularly and put another 38K miles on it until a hose clamp somehow worked its way into the engine. Jim replaced the engine, and continued to use the stock fuel injection system and a rebuilt air flow meter.

According to Jim, other than a 100 amp alternator, and conversion to R134A, Jim's car is still stock. The interior had seen its better days, so it was replaced with a full kit in 2000. This spring will see new seat foam and upholstery as the drivers seat, as one would expect, is worn out. If you're in Atlanta and see this car out and about, say be sure to wave hello to Jim!

Kevin Dennison's 1979 Time Capsule

Kevin Dennison's newest car is a Vermilion Red 1979 TR7 FHC with only 21,900 miles. Being his first wedge, Kevin joined the TOWA shortly after purchasing this car in February 2012.

Kevin located his car in CT, where an elderly couple owned and kept it garaged its whole life. Despite dry-rotted tires, the car is in excellent condition, and now that Kevin has gotten it home, he has taken some photos to document the car's details. The car is in immaculate condition, with two small spots of rust, both less than a quarter in size, and otherwise looks great. The photo, shown at right,



Jim Altman's 221,000 Mi TR8

is of the car as it arrived. He hasn't even had time yet to wash or wax the car, and is still investigating details and making a

over the years such as bushings, hoses, and fluids, but to otherwise keep the car in its stock condition.



Kevin Dennison's 21,900 Mi. Coupe

parts list of items that need refreshed.

Kevin's intent is to refresh the mechanical items that have deteriorated

Stay tuned as we hope to see a survivor's article on Kevin's car in the future when he's had time to sort the small

Product Reviews

US Dealer Option Stripe Kits

By David Elsberry

The TOWA has been working with ImportAutoGraphics, a company which has begun manufacturing full stripe kits for the Wedge. Chris, the owner, recently sent a selection of samples for the board of directors to review, and samples of the material available for all of the colors offered. The stripes and decals are manufactured with 3M materials, and are of excellent quality.

Chris' company is interested in working with the TOWA members to

reproduce the Canadian stripe sets, and other sets that are no longer available.

I recently visited the Java Green Southern Skies TR7 located in a salvage yard in NC, and it is our intent to eventu-



ally make these kits available in the future.

Chris has offered a 15% discount off the price of a full set to North American TOWA members. If you would like to purchase a set of stripes or decals, contact him at importautographics@yahoo.com. Provide him with your TOWA registered name, and we will confirm your membership to receive the discount. Photos of the colors and stripes we reviewed are viewable at: <http://www.triumphwedgeowners.org/decals.html>

Web Site Member Password

The new password for the members section of site is now:

██████████

Club Services and Tools

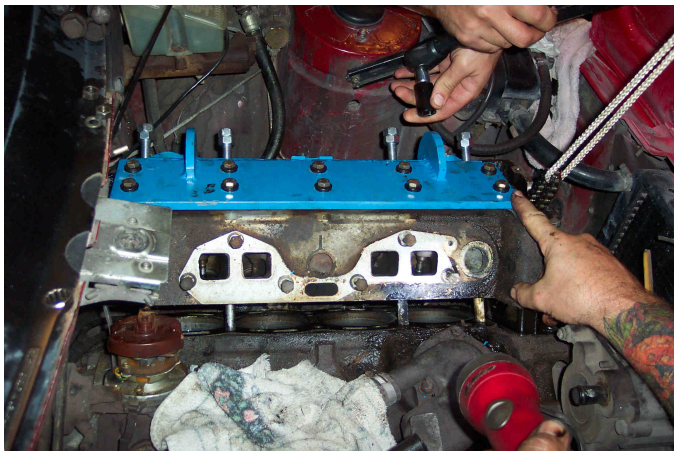
ECU Repair Service

Just a reminder that for TWOA members, we'll fix (or try to fix) any TR8 fuel injection ECU for the cost of shipping. But you will need to be a current member. We will also provide repairs for non-members for free in exchange for a new two-year membership. For more details, and shipping information, send an email to president@triumphwedgeowners.org

Head Honcho TR7 Head Removal Tool

The Head Honcho is a tool that allows the user to remove the head from a TR7 on which the angled head studs have corroded in place without damage to the head. The tool bolts to the head at the cam bearings with tie bars to the exhaust flanges, and presses down on the stuck studs with a set of jacking screws, thereby lifting the head off the studs. This tool replicates, and improves upon a commercial tool originally designed for this purpose.

Rental Service is available for \$40.00 USD, plus deposit. Details are available at VP@triumphwedgeowners.org



A stuck head being removed with the Head Honcho—Doug Jensen

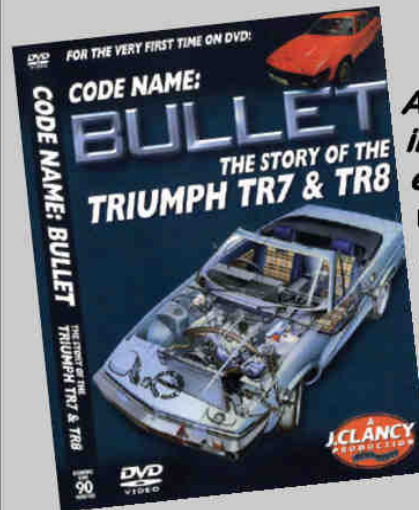
TR8 Fuel Injection Gizmo

The Fuel Injection Gizmo is a tool developed by the TWOA to help FI TR8 owners set the fuel mixture at idle, and adjust your airflow meter. Custom designed to not only replicate, but to improve upon the unobtainable factory tool for this purpose, the Gizmo is available for a small rental fee, plus deposit. Details available from Jim TenCate president@triumphwedgeowners.org

Newsletter Submissions

Please email your submissions to the newsletter to the editor at editor@triumphwedgeowners.org. The newsletter is published quarterly. Deadline for submissions for the summer 2012 issue is June 15, 2012. If you have an idea for an article you'd like to see, please let us know! Free classified ads are provided on this page for members—email the editor for placement.

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www.triumphdvd.co.uk**

Supplier Courtesy Listings

Lanocha Racing— Woody Cooper @ 508-880-5448

<http://www.lanocharacing.com>

Robsport International— (+44) 1763 262263

enquiries@robsport.co.uk

<http://www.robsport.co.uk>

S&S Preparations— (+44) 1706 873873

enquiries@ss-preparations.co.uk

<http://www.ss-preparations.co.uk>

TS Imported Automotive— 800-543-6648

tedsimx@bright.net

<http://www.tsimportedautomotive.com>

WedgeParts— 931-801-0509

trijagparts@mindspring.com

<http://www.wedgeparts.com>

The Wedge Shop— 508-880-5448

contact@thewedgeshop.com

<http://www.thewedgeshop.com>

This space and listings reserved as a courtesy for our suppliers. A more complete listing is available at

<http://www.triumphwedgeowners.org/wedge-parts-suppliers.html>

If you'd like to be listed here, all you need to do is provide a reciprocal link to the TWOA website from your site. Listings are alphabetical, based on available space.



Triumph Wedge
Owners Association

PO BOX 350

ADVANCE, NC 27006

Mail Checks payable to Triumph Wedge Owners Association

Mail to: Joe Worsley, PO Box 350, Advance, NC 27006

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