



Buckeye Triumphs Newsletter

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6-Pack Chapter
Center of Triumph Register of America
VTR Zone Member

TRF Summer Party - 2002



All British cars are welcome at The Roadster Factory Summer Party to be held on August 9, 10, 11, 2002 at and around The Roadster Factory in Armagh, Pennsylvania. The purpose of Summer Party is to get British car enthusiasts together to have fun with their cars and with each other. We want Triumphs, MG's, Morgans, Minis, Jags, Lotuses, Healeys, TVR's, Sunbeams, Aston Martins, and all the rest. We sell parts for Triumphs and MGB's, but we love them all.

Summer Party comprises a full program of events, including drag racing, autocross, gymkhana, TSD rally, participant's choice car show, Le Mans start, mini grand prix, tug of war, tech seminars, valve cover racing, parts sales, bonfires, BB gun shooting, and a Saturday night party at a real drive-in theatre. Events are included for every member of the family, and alternatives are available at most times, including just hanging out at The Roadster Factory to buy parts, to socialize with other enthusiasts, or just to enjoy our beautiful country setting.

TRF SUMMER PARTY CARAVAN

To accommodate most of the BT attendees, there will be a Thursday caravan to The Roadster Factory's Summer Party. As usual, we will meet at the McDonald's at Routes 70 and 79. (Route 79 is the Buckeye Lake exit.) We will plan to leave McDonald's by 9:00 AM, so arrive early if you want to eat breakfast at the "greasy arches". We will drive straight to the TRF campgrounds to claim our "prime" BT real estate. Of course, some folks will be staying in various motels in the area. (Most of the motels are within 15 miles from Armagh.) Motel folks may want to go their separate ways as we get close to TRF.

Jim VanOrder and John Huddy will be your caravan leaders. Please let Jim or John know, if you have room to carry the club canopy. Jim's phone number is (740) 967-

2110 and John's number is (614) 846-2321. The canopy provides shade, and sometimes, rain protection for campers. At this point, it sounds like many BT members are attending the Summer Party this year. If you haven't been before, you should give the Summer Party some serious consideration. It is the highlight of the summer for most of us "gearheads".

BT Driving Event - Saturday, August 17th

Tentative BT August Drive

Way back in the winter, we decided to schedule an August BT drive on our usual third Saturday of the month. As I recall, we thought that a drive would be of interest to those BT members who couldn't go to The Roadster Factory's Summer Party. At last count, we will have a strong BT presence at the Summer Party and a drive the following weekend may not be such a great idea. However, if enough of you want to do a drive on Saturday, August 17th, then we will go motoring. Since this event is tentative, you must RSVP to John Huddy at (614) 846-2321 by Wednesday, August 14th. John will post a note on the BT calendar to let everyone know the status of the drive. If you don't have access to the Internet, call John for details.

If we decide to have a drive on Saturday, August 17th, we will go to the Air Museum in Dayton by way of as much of old Route 40 as possible. We will meet at the Bob Evans restaurant at I-70 (west) and Rome-Hilliard Road. Since we will plan to leave by 10:00 AM, come early if you want to eat breakfast.

Please stay tuned.

Editor's Corner

Here it is – August 4th already and I find myself planning for our trip to the Roadster Factory's Summer Party. I know that many of you have gone to this for many years. For Ryan and I, this will be our 5th year. In the past 2 years I have really missed the Saturday "drive in" movie. Well I understand that this year it is back. I hope it is well attended.

My schedule has been fairly busy. I returned from business in Traverse City MI last Friday and got up the next day "bright and early" to drive my TR6 to the Dayton Car show. The show was a record for them with 270+ registrations. I have always enjoyed this event because of the pleasant setting and the fact that it is very well organized. Many "Kudo's" to Bruce Clough and the folks from Dayton.

Summer does seem to be passing quickly. I can tell you that the first 2 weeks of July did not pass quickly enough. Upon return from a 4th of July celebration with friends, we discovered that our air conditioning had given up ghost. Uggh is the only word I can think to describe the adventure. It took 2 weeks to get fixed.

We all had fun at the Arthritis Show. The turnout was a record (although it would be nice to attract more British cars) and the weather was fairly nice. When I was in college my friends would refer to me as "two beers" – because after 2 beers I would fall asleep. I found this very interesting picture on my

camera when I went to pull the pictures down to my computer:



If they had brought any makeup along, I'm sure I would have been decorated, too. In case you do not recognize him, our fearless leader Bob Mains is also enjoying a few zzz's.

Ryan's 250 project is progressing slowly, but with the heat it has hardly been fit to work outside. As we get closer to college, I have been more aware of how I will miss him when he is there. Ryan's 1989 pathfinder has seen better days, and we are looking for a replacement "college car" for him. He is taking the TR6 when he first goes to school so he can return for TRials, but will need a "normal" car later on. I have suggested an old 5 speed Camry or Maxima but he is being a bit stubborn in the discussion. Yesterday I suggested that perhaps he should consider searching for a good used "tow vehicle" for his (our) British car habit. That seemed to get his attention. Anyway – if you see any potential vehicles, give us a call or send an email.

When he goes to school I will probably spend my free days cleaning our garage and work areas. That should keep me busy for 2 months at least.

Some more pictures from our July adventures include:

Did you see that?(what do you think they were looking at?)



Just keep smiling (don't tell him about the picture) now where did we put that lipstick?



I jus couldn't catch her taking a drink....(if I did who knows what would have happened to me)



Here we are at Longaberger:



And we finished up the day at Tom's Ice Cream Bowl in Zanesville (ask Charma about her ice cream)



LaMar & Karon Wyse were able to join us for part of the trip (they live south in Galipolis) In a note from LaMar he wrote:

I meant to show you a picture of my TR in the River Recreation Festival parade here in Gallipolis on July 4. They asked me to be parade marshal. I said it should be the hospital rather than me personally. However, the hospital had to be "personified" by someone, so our Healthcare Employee of the Year and I drove the TR6 past the masses with the "Parade Marshal" sign stuck on it. It is the big event here and lasts three days (the festival, not the parade! :-)) -- the parade seemed like three days, but it was actually about 1 1/2 hours with will over 100 units. Took a lot of work for me to "Marshal" all those forces <LOL>. I couldn't help thinking of the irony of a British car with the Union Jack flag leading the Independence Day parade.

We had fun on our trip to Longaberger for our TRials "dry run" – I think the we found some nice roads to make the trip enjoyable.

Speaking of TRials: The Granville Inn is now "booked up" – which means we are now working on filling the Buxton Inn (directly across the street) When booking a room at the Buxton, please remember that rooms 7 and 9 are the haunted ones. (Boooo Haa Haa Haaa ☺)

Murry is working with member Bob Hixson to acquire some Newcastle Brown Ale for our "bottomless keg" activities in the Party Room at the Granville Inn.

When doing research about Newcastle Brown Ale I ran into a curious fact: "Newcastle Brown Ale" can be used to spell "Want cleaner bowels"!

I know, this is a family oriented publication, but I just could not resist!

One last note that I got off of the internet:

Date: Thu, 11 Jul 2002 07:39:05 EDT
 From: Vsniively@aol.com
 Subject: Odd Thread Sizes

NPT=National Pipe Taper. This is the system that we have adopted. These are tapered threads. The farther you screw them in, the tighter they get.

They rely on this interference for sealing. This is why thread sealants were developed. Tapered threads can only be reused a few times.

BSP=British Standard Pipe. I have seen some listers refer to this callout as parallel thread. Technically, this is not correct. There are (2) types of BSP.

- One is BSPT. It is the tapered thread, similar to our NPT. It generally has (1) thread per inch difference from ours. You can screw a Male NPT into a female BSPT, but not the other way around. (Is that backwards?)
- The other is BSPP. It is a parallel thread, and relies on a gasket, o-ring, or machined surface (hydraulic fittings) to seal, as it could conceivably thread in forever. (Similar to our machine threads.)

Interestingly, the Japanese "copied" the British taper thread and call theirs "PT". Taps and dies may be found possibly at NAPA stores; definitely at a "Tool Crib" that supplies to the industrial markets.

Hope this helps. Probably more than you wanted to know about threads.

Regards, Vic Snively 75 TR6

I asked Nelson for his comments: I had thought the NPT was used on the plugs on the TR6 --- the sump, gearbox and differential plugs. Now suspect it to be the BSPT. Those plugs are a real pain because of the square head. You might point out that the 7/16" 8 point socket from McMaster-Carr makes dealing with those plugs a snap.

Well – I better get this on the printer before it gets too late. See you folks at the Summer Party.

Bruce Miles bmiles@INTInfo.com

And now also: Bruce.Miles@BuckeyeTriumphs.org

P.S. Don't forget to get you "official" BT email address! Contact Nelson@BuckeyeTriumphs.org for details.

Next Newsletter Article Deadline – August 25th, 2002

July Meeting Minutes

Since there wasn't any business meeting this month, there are no minutes. We did, however have a pleasant time at the Longaberger Homestead. It was a nice drive, too! It will be a nice pastime for some of the participants in September, so keep it in mind for that weekend!!

We are looking forward to the Dayton Show this weekend (Aug. 3rd). The body shop said the car MAY be finished by then (we are not holding our breath! :-)) We'll let you know how it went next month. The overrides are the wrong size and some new ones are supposed to be delivered tomorrow (yeah, right!!)

That's it for this month. See you in August!! Respectfully submitted, Margo Washburn, Secretary

President's Corner

August, 2002

Our club was well represented at the Triumph-Show within a Show at the Immke Classic on Saturday July 6th , congratulations on another fantastic TR show day to everyone there and some special recognition for those trophy winners. Check out those SMILES in the photos of the parade of winners that Murry has to share.

The Saturday driving event on July 20th was another very enjoyable jaunt thru the twisty miles of Hiway Miles' country miles to and from the Longaberger factory site via EBF and Zansville. It was a great TRial run for the September TRials driving event. Thanks again Bruce. The weather was Trrriffic and the Ice Cream Bowls, too. How do you do it?

August events will NOT include a First Tuesday evening social; it's too hot and many folks are too busy with the preparations for the Big Drive to the TRF Summer Party on Thursday morning. Lots of details in this newsletter. So, plan to caravan on Thursday with Tracker Jim and Johnny 'Rutherford' Huddy or meet us there.

John has plans for the Third Saturday Drive that will follow an endless Last Open Road route to the Air Force Museum near Dayton.

Then we are looking into a very, very busy September.... Runoffs at MidOhio and TRials in Granville.....Whew and WOW. Let's keep on the roll, we are picking up speed now.

We can still use some help in planning for our local social activities and drives, please raise your hand and take on an event. Renew you memberships by sending your check to Jim VanOrder and plan to participate in our next events. See y'all real soon.

Bob Mains bob.mains@ode.state.oh.us

Photos from our July Events...

Editor's Note: Several of you have sent photos this month – I'm not sure that I can use all of them, but I'll do my best!

Welcome to new BT member Paul E. "Pete" Gallo as he receives "best of show" award with his 1949 Triumph 2000:



Bob Hams it up with the award person:



Looking good, Charma!



Glad to see that John still has his Spitfire:



Jim VanOrder's TR3 gathers a trophy:



What? No Kiss?



Carl and Elaine's new toy turned over 4,000 miles just last week (hard to believe that such a car even exists!)



John Models the latest in the "Car Shirts":



All this spraying and wiping:



Murry gets excited:



...and speaking of excited! Charma gets a special visit from "the king"



A Chronicle of Triumph: how I became addicted

Editor's Note: I give up trying to pry words from Ryan. Today I asked him if I could get an article but instead he is "swapping" his differential and getting our cars ready for TRF.

Ryan rjhmile@yahoo.com

Officers and the Fine Print

The Buckeye Triumphs Newsletter is a publication of Buckeye Triumphs, and the content herein is not officially endorsed by the staff or members of Buckeye Triumphs, their families, or lawyers. If you decide to follow the advice of anything inside this newsletter, you do at your own risk. We are all adults here, so if you do something stupid, own up to it and don't sue the club. Heck, we don't have any money anyway...
Club address: Buckeye Triumphs, P.O. Box 584, Lithopolis, OH 43136-0584

Annual Dues: \$20.00 General email: buckeyetriumphs@ameritech.net
Web Site: <http://www.BuckeyeTriumphs.org>

Our current crop of Buckeye Triumphs Officers include:

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Affiliations: 6-Pack Chapter -- Center of Triumph Register of America -- VTR Zone Member

Buckeye Triumph Upcoming Events

Date	Event/Location	Host
Aug 9-11 th	The Roadster Factory Summer Party 328 Killen Road, Armagh, Pennsylvania, USA	The Roadster Factory (800) 234-1104 www.the-roadster-factory.com
Sep 15	11th Annual North Coast Triumph Association Fall British Car Show - National Packard Museum in Warren, Ohio	Cindy Palmer CPalmer799@aol.com 330-274-0017 (This was formerly held at Alpine Valley)
Sep 26 - 29	6 Pack TRials 2002 Granville, OH	Murry Mercier TRsixer@Yahoo.com Home: 614-888-0838 Work: 614-424-7291

Notes from Nelson:

Lawn update: You all might recall my complaints about the new lawn fertilizer company a couple months ago --- mowing every day or two. What a change a few months can make.

A couple weeks ago I answered the door to the lawn fertilizer guy. He said that he was here to explain the brown spots to Mrs. Riedel. I said she wasn't home but he could explain them to me and I'd pass it on. He said that the whole lawn was a little brown because the temperature had been in the 90s for several weeks and it hadn't rained for a month. That made sense --- seen the same thing in the desert.

He then said that there were a few spots of fungus. He said everything (except for the forest floor) would green up if it cooled down for a few days and we got some rain.

He said the best thing I could do for the lawn was not to mow it when it is hot and dry ---- which means o me that **I shouldn't mow again until after the first frost. This guy knows his grass!**

While walking with him to his truck he noticed my TR6 in the garage and asked if he could see it. The bonnet was in the normal position and he said that he had carbs just like those on his British cars. Needless to say, we had a really long conversation. He has some old Jaguars. The more we talked about the cars the more I came to respect his lawn care knowledge.

Now that we've had some rain and a few cooler days, the lawn has turned green again as predicted by the expert. I am however refraining from mowing it. I plan to hold off, in the face of considerable pressure, for the sake of a healthy lawn of course.

BuckeyeTriumphs.org: The website continues to have brisk activity and a growing number of features in the technical area. The Webmaster gets interesting emails from time-to-time and I thought you might enjoy a couple. The first is from Francois:

Est-il possible d'avoir une documentation traduit en Francais concernant le reglage et depannage d'un over-drive type A pour reparation de ma Triumph TR3.

Revevez mes respectueuses salutations

I studied French in graduate school. The classes were very small (~ 10 students) and very intense. I remember the teacher vividly --- a sweet little thing about 25 (I was late 20s), big brown eyes, had burned her bra and wore very short mini skirts (that was the late 60s). I guess I'll have to say I studied the French Teacher since I remember very little about those noun and verb thingies ---- never understood those thingies in English class either. Ce le vie. Anyway, I had a crack at the translation and think he is asking if a French translation of the A type OD articles is available or if I can have one done. Kim was here and she used to be able to hack right along in French (she's also fluent in Portuguese and can understand some Spanish --- I'm impressed). She came up with the same translation. Used the online translator and it was very precise with everything except whether he is asking for a translation or if I have a translation or if he can have a

translation done. Anyway I responded that I didn't have a translation, gave him permission to have a translation done and asked for a copy if he had it done. I responded in both English & French.

And how about this one:

We had some folks last year, from Ohio, with Triumph-Powered Amphicars, joined us at our Loch Norman British Car Fest. and Antique/Classic Boat Festival. We'd like to invite you all, this Sept 7th, at Queens Landing, Mooresville, NC. Please take a look at our web-site for more info: www.pbmclub.org.

Thanks,
Piedmont British Motor Club
L. Tyrone Stoner

(our show is a pre-registration only, please register early for your pre-assigned space)

Amphibian: My knees have recovered from the ravages of running so I'm now able to take long walks where I have plenty of time to think about many things including how one could assemble a TR based amphibian. It didn't take long to realize our neighborhood could field one overnight. Everything is available except maybe a couple dozen bungee cords that we could get at Odd Lots in NerK.

Such a scheme would rely on system engineering from the top of the hill with reduction to practice by Ryan and his buddies down in the valley. (Ryan and friends have much broader interests than just TRs. For example, this spring I learned that he and friends were restoring a manure spreader for some sweet young thing. Sure enough, on a later visit to Ryan's workshop there sat a bright red spreader, excellent workmanship too. As is my custom I took this opportunity to pass on a little wisdom to Ryan by pointing out that when you fool around with woman, you can expect to end up in deep manure sooner or later, he just got there sooner than most.)

Now to the amphibian (or as we shall call it the TR-Duck): Ryan could drag one of his TR250 carcasses out of the weeds where he keeps them hidden from you know who. For this application, the body could be a little rough, same for the interior. As for bumpers, no problem, Ryan doesn't believe in bumpers.

The engineering challenges are:

1. Buoyancy (make it float)
2. Propulsion (make it go)
3. Steering (make it turn)

As a start on the buoyancy, Ryan could use those balloon tires he's always moving from car to car. There is a concern a big bump (wave) could cause the tires to rip off a fender or two, so if the carcass has fenders, they should be removed. The neighborhood is also fortunate to have a boatyard. Ryan can get any additional required buoyancy by strapping catamaran hulls (bungee cords) to each side.

If the hulls are adjusted such that the waterline is about axle height, then the spinning rear wheels will provide a measure of propulsion. Ryan can enhance this by welding plates to

the wheels, making them into paddles. This would make something like a side-wheeler.

The front wheels would provide a rudder like function that could be enhanced by strapping (yep, more bungee cords) catamaran keel boards to the front wheels. (Don't you love how those nautical terms roll off my keyboard?)

Yes, there is no doubt; Ryan and the gang could have a "TR-duck" operational in the neighbor's pond in less than a day. Unfortunately, it's not appropriate at the moment and I'll have to ask each of you to not pass these ideas on the Ryan. The first problem is that I don't want to help him adjust points while treading water. More importantly, Ryan is heading off to college in a few weeks and he must wean himself off manure spreaders and TRs and start to focus on higher education – you know, beer and coeds.

TR Painting: Many of you folks recall that I had my freshly painted white '76TR at the Easton show in the spring of 2001. The following Wednesday a guy in a pickup truck made a left turn from the right lane. Unfortunately, my TR was in the left lane beside him. The major damage was to the hood and right fender, both of which I replaced. Several other areas had minor paint damage. I finally finished repainting it and have everything back to near perfect condition. I even have the front spoiler installed and an original Triumph AM/FM radio operating.

Thinning the Fleet: With my limited storage and limited use of the TRs, I guess it's time to thin the fleet. This freshly painted '76 is for sale if any one locally is interested. I'll probably put it on ebay in a few weeks. I also have a freshly rebuilt late gearbox with J type OD that'll go on ebay in the near future. *(Editor's Note – Although I think he should keep it - here is a chance to own a perfectly restored TR6 with a brand new clutch, rebuilt OD and perfect interior- check out the classified section)*

The next project is to paint the blue TR250 that has the pox. It will be returned to the original BRG. I've had a set of chrome wire wheels for about 15 years that'll I'll be putting on it. Hopefully it will be running again for the TRials. It will also go on ebay after it is finished.

After the TR250 I have a '70 TR6 that I spent some time working on last winter. That should be about finished by the end of next year. I think I have room to keep that one.

So, what will I do with no TR to work on? I've always wanted to build a 1/12-scale live steam locomotive. That I can store in my basement workshop. Those of you that have been in the workshop might recall that the back door opens on grade to a board walkway. I should be able to spike 1/12-scale rails right to the boards on that walkway and run the track into the forest. Thinking about firing up a little steam engine really has me excited. I bet a steam whistle would send Squeaky (the old lazy fat workshop cat) into orbit.

Don't worry about the website, it can become Buckeye Triumphs, Amphibians and Steam Locomotives.

Reliable Clutch: The following is excerpted from a note titled Reliable Clutch on the website. I've defined reliable as getting 100K miles before the gearbox must be pulled.

The clutch seems to be a constant aggravation for many TR250/TR6 owners. Apparently a few years back there was a quality problem with the standard RHP release bearing. At least one of the big three claim the current RHP bearing is still not of the quality of the OEM bearing and advise against using it. I've used the RHP bearing recently and found no problem, but will do about anything to avoid pulling the gearbox. Other people have had the same reaction and many purchase kits to replace everything in sight. Unfortunately, some of these kits contain components that were not designed for the TR6 application. These components cause other problems, with failure as likely or more likely than with the RHP bearing

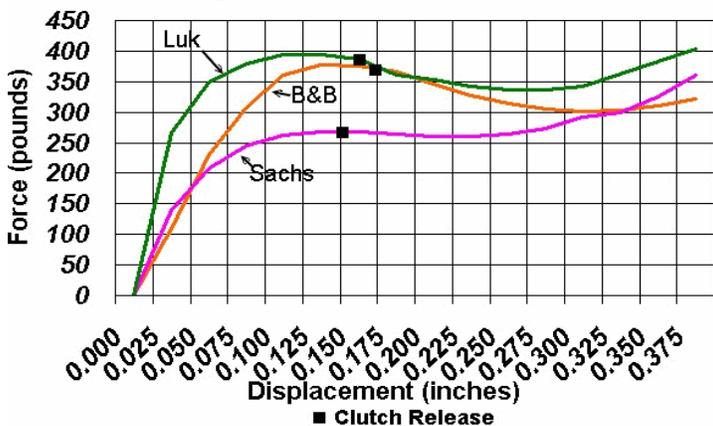
The part of the clutch system that requires removal of the gearbox to get at includes:

- The clutch pressure plate & disk
- The clutch operating shaft & fork
- The clutch release bearing & sleeve.

Clutch pressure plate & disk: I've never had a problem with either the clutch pressure plate or the clutch disk. From the comments on the email lists others also seem to have little trouble in this area.

What I want is a high quality clutch that has sufficient force so that it doesn't slip while not being overly stiff to minimize the forces on the clutch release mechanism. I'm aware of three different high quality clutch pressure plates currently used in the TR250/TR6. The major difference I see is the amount of force needed to release the clutch. I measured samples of each of these pressure plates and reported the results in the [Clutch Measurements](#) note on the website and repeat in the following graph.

Clutch Pressure Plate- Release Bearing Force vs Displacement



The Luk Clutch (#19-030) requires the greatest release force and is probably overkill for the TR6 application. I've had good luck with the Borg & Beck (AP# HE5132Q) and will not hesitate using it. The Sachs (#3082 100 041) clutch is very interesting in that it requires much less release force and should have less wear and tear on the release system. With the reduced horsepower on the US version of the TR6, the Sachs is probably the best choice for the long haul. If I had an enhanced HP engine, I'd probably use the Borg & Beck pressure plate.

Most of these clutches are supplied with the Luk brand pressure plate that seems to perform very well and I will use it in my TRs

Release bearing & sleeve: I'm aware of three different release bearings used in the TR250s/TR6s plus a new addition. The photo below shows the four.



The RHP is the OEM bearing. The TR250/TR6 is designed to have the release bearing held against the pressure plate at all times. There is a spring in the slave cylinder that provides a small preload to keep the bearing against the pressure plate when the pedal is released. The RHP bearing turns fairly easily and this preload is probably sufficient in most cases to keep the bearing turning. The small preload is integral to the self-adjusting feature. Each time the pedal is released the bearing and hydraulics are positioned with all slack removed from the system.

As mentioned earlier, there have been considerable problems with the quality of the RHP bearing in the last few years. Many have failed after a few thousand miles or less. While I've had no problem myself, I'll not going to use the RHP bearing in the future.

The Green bearing is similar to the RHP. I believe it is an "after market" version sold by local auto stores. I've seen several dozen release bearings and the only one I've actually seen that has failed is the Green bearing in the picture. It had less than 50K miles service. I'm not going to use the Green bearing in my TRs.

Folks started using the KOYO bearing after the flurry of quality problems with the RHP bearing. This KOYO bearing is OEM for the 1975-1986 Toyota Land Cruiser. It has the feel of a very high quality bearing --- a real confidence builder. The KOYO bearing has the same ID as the RHP bearing so it can be pressed onto the standard sleeve. Unfortunately, the KOYO has it's own set of problems.

1. First, if the KOYO bearing is used as a direct substitute, in many cases it won't work properly. The problem is that it is much stiffer (harder to turn) than the RHP bearing. In many if not all cases, the small spring in the slave cylinder provides insufficient preload to overcome the bearing resistance. The net effect is that the bearing is held against the pressure plate but doesn't turn. The symptom of this is a continuous chirp or squeal that goes away if a slight pressure is applied to the pedal. A far more serious consequence is that the squeal or chirp indicates that

the bearing is eating through the spring fingers. Murry had this problem with his clutch.

2. Many suggest solving the insufficient preload problem in (1) by changing the design to pull the bearing away from the pressure plate using the TR3/TR4 scheme. With this arrangement, the clutch doesn't chirp or squeal all the time, just every time the clutch pedal is pressed. Friend Dick Taylor says he won't drive a car that squeals every time he presses the clutch. (Maybe he needs louder mufflers so you can't hear the squeal). I don't like the scheme because it introduces slack into a system that has very little margin and it disables the self-adjustment feature. It is like replacing the front disk brakes with drum brakes from an early TR3.

Not in my car!

3. OK, so I don't like the adjustable clutch and squeal in (2). How about we increase the preload. That does work and cures all the operational problems. Dick Taylor has found 10 to 15 pounds preload works. One problem I have with this is that the KOYO bearing doesn't rotate all the time in the Toyota application. I don't know whether it is designed for continuous operation. I don't think I'll risk it.
4. Another problem with the Koyo bearing is that the ring which engages the pressure plate spring fingers is a larger diameter than the RHP bearing, so much so that it is near or at the bend in the fingers on the Borg & Beck pressure plate and probably should be not be used with that pressure plate. The larger diameter ring means that it presses against the spring fingers closer to the fulcrum necessitating a greater force to release the clutch. I compared the force required to release one of the clutches using the RHP and KOYO bearings and found that the KOYO requires a little over 8% greater force.

The KOYO bearing is really nice. Unfortunately, it doesn't match the TR6 application and I won't use it.

So, I won't use the RHP, Green or KOYO bearings --- what am I to do? There's the Gunst Bearing shown on the right in the above photo. Before talking about the Gunst bearing I want to address the sleeve.

Another common clutch problem is that it sticks when pressure is taken off the pedal and then jumps causing a jerky engagement. I've called it the sticky clutch -- others have called it the binary clutch. Both Murry and I had this type of clutch problem. Many of us have traced the problem to rough front covers and sharp edges on release bearing sleeves. I understand that there have been problems in this area for years. However, it seems these problems have been worse recently. The inside edges on the current new sleeves are very sharp and the sleeves seem to be hardened making the situation even worse. (One is probably better off using an old used sleeve that is of softer steel and has smoother edges than one of the new

sleeves.) I've had 100% success curing sticky clutches by merely smoothing these edges and the front covers and using a high quality lubricating grease.

The Gunst bearing was described in the April Newsletter, available on the website. Gunst has a business repairing British Autos -- TRs, MGs, etc in Germany. Some time back he had to redo several clutch jobs -- release bearings failed very quickly or the sticky clutch ---- just like us over here. He then had a sleeve manufactured in bronze and fitted a high quality release bearing --- one that he says is used in a high quality automotive application. The bronze sleeve is similar to the brass sleeve used on the TR4. Bronze is a common bearing material that won't hang up and cause a sticky clutch. The Gunst bearing with sleeve is shown on the far right in the earlier photo.



Gunst now sells a kit (pictured above) that contains the bearing and sleeve as well as a pair of dowel pins, a bolt, a steel strap, a spring and a packet of grease. The spring, strap and bolt are used to provide a preload of about 15 pounds to keep the bearing spinning when there is no pedal force. The grease is to lubricate the sleeve - front cover interface. The pins serve to align the gearbox with the rear engine plate. The Gunst bearing is the only one I've found that meets the requirements of those that have actually changed a clutch and I plan to use it exclusively.

Implementation: I had intended to use this clutch arrangement first in my TR250, which I will be dismantling for painting later in the summer. When painting my '76 I noticed a big puddle of oil under the engine-gearbox joint. So I decided to pull the gearbox, fix the leak and install the reliable clutch as described above. The leak was from the countershaft end cover. That cover had leaked before so I replaced the end cover and then stood the gearbox on end for a couple days to make sure the cover was really sealed.

What I did for this project was:

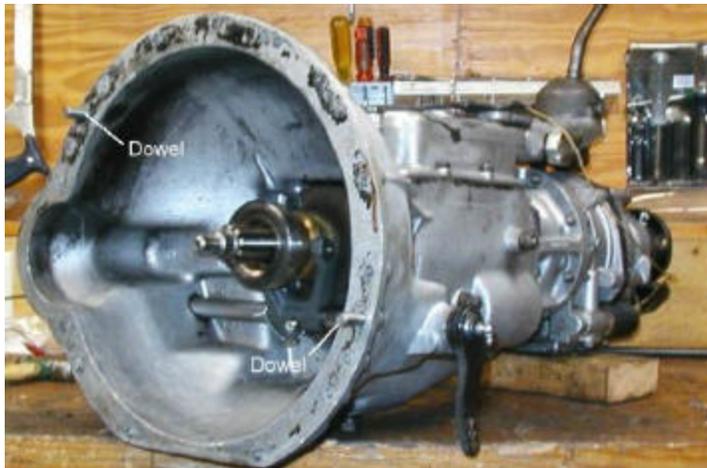
1. Replaced the engine rear main seal.
2. Replaced the pilot bush, but didn't stake it.
3. Reused the standard LUK friction disk that had less than 2K miles on it.
4. Installed a new Sachs #3082 100 041 pressure plate (TRF # HP123).

5. Measured and recorded the crank end float. Now if I can remember where I recorded it.....
6. Replaced the clutch operating shaft bushes with the TR4 long brass version (#36998)
7. Replaced the clutch operating shaft with the TR4 version that has grease fittings (#108887).
8. Replaced the clutch fork. Didn't grind a flat on the side of the pins that engage the release-bearing sleeve. (I never understood why these should be flat as I've seen on most the forks I've removed.)
9. Installed a new clutch fork pin.
10. Cross drilled the fork and shaft and reamed the hole for a #5 taper pin. Threaded the small end of the pin 1/4-28 and used a nyloc nut to secure the pin.
11. Replaced the gearbox front seal.
12. Polished the gearbox front cover with emery cloth.
13. Used the Gunst release bearing and sleeve.
14. Applied a thick coat of the grease in the bearing kit to the front cover. Also applied grease to the front of the bearing where it presses against the pressure plate.
15. Used the alignment dowels supplied with the kit in the 3/8 inch holes between the gearbox and gearbox and engine rear cover.
16. Used a small turnbuckle instead of the strap supplied with the kit to secure the rear end of the preload spring. I did this so that I could adjust (play with) the preload force. Initial adjustment was at a little over 1/2" spring stretch with the spring in the upper hole.

Photo below shows the operating shaft, release bearing and associated components.



Next photo shows the gearbox on the bench ready to be installed. Note the indexing dowels.



Next photo shows the spring and turnbuckle connected to the operating shaft arm. I have the spring in the top hole in the photo that was taken from the right side.



Wussy Clutch: The first test drive was a real shocker --- barely had to press a very soft pedal to release the clutch. I measured the pedal force at ~25 pounds and the motion to release the clutch at about 1.5 inches. I'm using the 0.7-inch MC that was standard for the '76. This is exactly the opposite of most clutch problems -- it requires too little pedal motion and too little force. Interestingly, the actual operation exactly matches that predicted for the Sachs clutch using the measured release force and displacement with the graphs in the Clutch Calculations note on the website. I increased the pedal motion some by moving the slave cylinder push rod to the lower hole on the operating shaft arm. This however, made the pedal even softer. In a previous newsletter I referred to very soft clutches as "wimpy woman's clutches". The club officers, the newsletter editor and I received threats involving firearms via email as a result. So ---- I'll use wussy and hope no one tries to shoot me for exercising my 5th amendment rights.

While the wussy clutch is certainly nice from some perspectives, I prefer a little stiffer operation so I plan to use the Borg & Beck pressure plate in my TR250. Should have results on that by mid October.

Nelson Riedel -- Nelson@BuckeyeTriumphs.org

Late TR Guy

The Continuing Adventures Of...



August 2002: By Bruce Clough (clough@erinet.com)
 Long one this month—lots of stuff stored up, trips, and tech tips!

Wedgemites Unite!!!!!!
 (@ TRF Summer Party)

The official notice is out – Wedges galore will be at the TRF Summer Party. Hot off the presses we have info on Wedge Cruise Night at The Grapevine Restaurant:

*****Press Release*****

The Grapevine and the TR8CCA announce the 3rd annual WEDGE gathering in conjunction with the Roadster Factory Summer Party for all the early arrivals – Thursday Aug 8th, 4PM til 10PM. All TR7 and TR8 owners welcome!!! Just mention you drive a Wedge & get 10% off your dinner. This 10% discount is available to Wedgies all weekend long!!!!

Wow – can't get much better than that! The Clough Wedges are going this year, and hopefully they won't break down going to get a part for Huddy!

Parts Report: UKC6482 - TR8 Accelerator Cable

Purchased from Wedgeparts (Clarksville, TN – 931.645.5283 – www.wedgeparts.com)

Purchase Price: 22.95, USPS Priority Shipping: \$4:50

Grades:

- Fit: A
- Form: B+
- Function: A

Narrative: Wonderful product. It's not exactly the same as the original, the original was yellow, this is gray, the original snapped into a hole in the firewall, this is held in by a nut – buy hey, who cares! Installation time was ten minutes, from opening the bonnet to shutting it. Can't ask for much more.

I actually like the gray color – looks much better with the rest of the car (gray), and the engine (mostly gray), and the name of the car: The Grey Ghost. If you have a TR8, buy a couple of these. Sure, the local bike shop can make one up, but probably not for this price!

Wedgeparts is also great to deal with. Brad Wilson, the owner, accepts PayPal, and gets the order out the next day. I had it the second day after I ordered it.

UKC6482 – What a Beaut!

This Month's Wedge Tech Tips

As usual anymore, more stuff off the wedge email list. You can always tell when I have a busy month – I suck information that I find for the column. This month's been a bit busier than the rest, and it shows no signs of stopping. This month the starting topic is one my favorites – timing...

TR8 Timing

When trying to set the timing for the Buick 350 distributor on The Grey Ghost I was faced with the problems usually seen when the tech manual editor stole a spec sheet from a parts vendor. I just couldn't find what the static timing was for the engine and fired out this email:

Okay folks, I went to time the car today (actually to check the advance curve on the Buick 350 distributor I'm using on the car. No vacuum advance or retard is being used.) and I got the following readings:

RPM	Timing
600	12 Deg ATDC
800	8 Deg ATDC
1000	4 Deg ATDC
1750	2 Deg BTDC
3250	10 Deg BTDC

Hmm, this seemed a BIT retarded to me (since on the old TR4 the static setting is 4 Deg BTDC), but when I went to the ROM to find the actual curve I realized that the comment in 86.35.00 of "no advance to occur" means that the reading should not be advanced over the static number, not that it should be TDC at rpms below 800. Okay, so where is the static number – no where that I could find except a 7 Deg BTDC in step 2 of 86.35.15.

So, I've got questions... What advance curves are folks running out there? > >What should the timing curve look like? What degrees ATDC or BTDC do you see at what particular rpm? My gut feel is that without vacuum advance the timing should be around 10 Deg BTDC (based on other 8.5 compression ratio engined cars), so maybe I should go with the 7 Deg BTDC number? Comments?

I almost immediately received this reply from Gene Thompson;

Check page 5 in the ROM. I'm not sure it will help. It gives the static timing spec as 7btcd and 5atdc at idle for carbureted cars.

So, let's see... 7 before = static, 5 after at idle with hoses disconnected - that's gotta be a typo!

Speaking of advance curves, a while ago I made a real live graph of the centrifugal advance using the numbers in the ROM. It's attached.

I can't tell you how mine is set up, since I've got a Mallory Unilite and the DPO left out the woodruff key and used random orientation for the crank pulley. I just set it by driving!

Gene corroborated the line in the ROM (figures that the ROM would only list the static timing in one place, and that wouldn't be where it tell you how to set the timing! Reset the car to 7 Deg BTDC and the car runs fine. The timing curve information is a little farther back in this column. Most of the other folks polled used 10 Deg BTDC, but I kept it at 7 since the Delco curve advances to about the same number as the Lucas unit does at 5000, but it rises sharper at lower rpms. Since I spend most of the time operating at those rpms (speed demon I'm not, trust me) I didn't want too much of an advance.

The Infamous Wedge Bobbing Headlight:

John wrote:

Could someone please re tell me what steps I'm missing for a bobbing headlight?

Symptoms: Right headlight goes up and down continuously if the car is off or on, headlights off or on, so, it is unplugged. It used to having problems coming up (!) and I would jiggle the connectors and then it would work fine, and usually turn off ok (go down), although on occasion I'd have to jiggle it to get it to go down.

What I've done: I have removed the relay for the right side, opened it up and checked it's operation, it is in great shape. I have replaced all the connectors with some very nice AMP connectors, that are sealed and have gold contacts (these are fantastic!, if any one is interested I can send part numbers). I have not touched the left side or it's controls.

I know this is a common pain in the ass problem that's been talked about before, but I don't have the solutions in my files?

Ideas?

The first reply John got was from Carl:

My spider had a relay with burnt contacts that were causing me the same problems. Sounds like you've hit all the other trouble spots except for the grounds.

Then Dave chimed in:

John, it sounds like the limit switch in the pod has gone crackers. The three wires that go to the switch are blue/light green, brown/light green and green. (these are the wires from the pod not the wires in the main harness) The Red/light green and the black/light green are the motor wires.

The green wire is the switch common and there should be continuity from this wire to either the blue/light green or the

brown/light green wire for half of the travel. It sounds like yours is a three wire short. (note: there are doides in here so a direct meter measurement may prove ambiguous)

Try this: remove the relay for that side. connect a voltmeter to the green wire from the pod, connect the other lead to earth (ground). It should read 12 volts if this is the cause of the problem. Manually raise/lower the pod through it's range and watch the voltage on the green wire as the pod goes up and down. On a properly operating pod the voltage will be present through most of the cycle but it will disappear at either the top or bottom of the travel depending on whether the lights are on or off. You might find that your voltage never goes away. If so this is your cause and the limit switch is in need of service.

As a diagnostic, swipe a pod out of your other car and hook it up and see what happens.

Finally John came back with:

First off, thanks for the great suggestions, you guys are great. I forgot to mention that I had taken apart the motor switch box thingie, it was very clean as well. Switch contacts looked like new, diodes tested ok, so I just reassembled and re sealed it.

Problem turned out to be the relay. When I set down to go through it again, I realized I hadn't looked at the right relay!!! (stupid). The correct relay wasn't clicking at all, so I replaced it with a spare I had, and viola!, it all worked great. My theory is that the very crappy connectors at the pod were making intermittent contact (they were) and this caused the relay to burn up over time. Now I have new connectors and new relay so it should be good for some time!

Read First, Ask Next

The next topic concerns continuous email traffic on all Triumph lists, so I thought I'd list the advice here...

Mike Madden wrote:

> I am going to be installing new rear KYB shocks on my TR8...

> ...can anyone out give me some step by step instruction on the install.

> I've never changed shocks before.

To which Wayne replied:

Step 1: Get a factory repair operations manual.

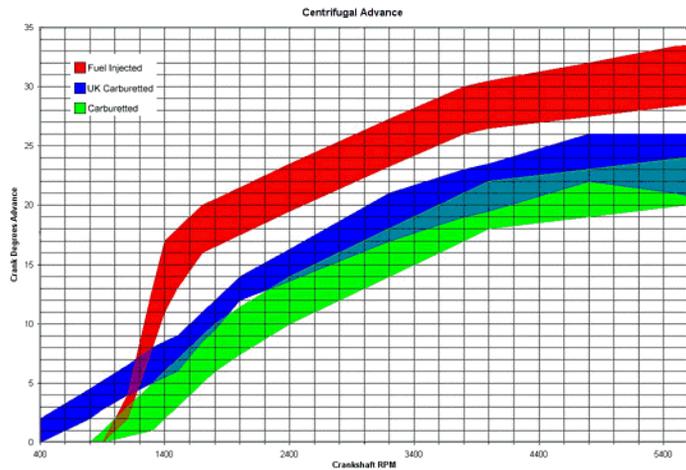
Step 2: Find the appropriate section

Step 3: Follow the procedure given there.

It works every time. There is no substitute for the factory manual.

Wayne Simpson wsimpson2@comcast.net

How true, a little looking up stuff on your part would be appreciated before you go to the web for answers. Although you can get answers quick enough on the web, you might want to take time first and look it up!



TR8 Timing Curve – Good Luck Reading It!

Priming The Old Oil Pump

Priming a TR8 (or any Buick/Rover 215/3.5 engine) oil pump after removing it is a pain! One has to pack it full of Vaseline to ensure a vacuum will draw up oil into the pump. We had a question on how to prime the pump before starting and got this answer via Scott Walker:

If you don't want to pack the oil pump with Vaseline you can try overfilling the crankcase with oil. Add 2 quarts above the fill mark. This worked for my TR8. After you bring the oil pressure up with your drill and special slotted tool, don't forget to GENTLY drain the excess oil back down to the fill mark BEFORE you start the engine.

This technique was in a Chevy magazine and it works!

The special slotted tool mentioned above is just a metal dowel slotted to fit the oil pump so one can pump oil through the engine using a drill – something useful for other types of Triumphs also.

Finally, a word about replacement fuel pumps:

When Your Fuel Pump Dies, And It Will...

Ben Zwissler Wrote:

It appears my fuel pump has died. Its putting out barely 1.5 psi and the fuel just dribbles out of the hose. When starting the car with the choke on, the engine dies from fuel starvation. Given that its about the only mechanical part I haven't replaced in the car in the 6 years I've owned it, its due. I replaced the hose connecting the pump to the pipe in the tank several years ago when I replaced the level sender so I'm pretty sure that's not it.

I remembered some discussion earlier on the list about using a commonly available part to just replace the pump. I found a reprint of the email in edition #50 of the TR8CCA newsletter from 1998. It says its a BorgWarner P2 pump available at Pep Boys. I'm wondering if anyone has had any more recent experience at purchasing the pump at a national auto parts store. We don't have any Pep Boys

around here, but have AutoZone, PartsAmerica and NAPA plus a few local places. I can always bring it in and match it up, but it'd be easier to know what I want.

Also, I've got a little under 1/2 tank of gas in the tank. Is that low enough that when I pull the plug I won't get gas all over myself? Last time when I replaced the sender I pumped most of the gas out with the pump, but that's not an option this time.

A bunch of folks replied to Ben, telling him their choices on pumps, and the fact that he'd better get as much gas out of the tank as possible. He closed this chapter with another email:

Thank you everyone for the helpful messages. The car has been successfully returned to service for less than \$50. I can add a few more part numbers to the "interchangeable" list.

The original message said a Borg-Warner #P2 pump available from Pep Boys would work. Pep Boys didn't have it in stock, but cross referenced an AutoZone pump #E8381 distributed by "Master" but made by AC. Lifetime warranty for \$39.96. Another message I got said a Delco part #EP30 was also a perfect fit.

Rimmer Bros., TRF and my local import place (Beck-Arnley part) all quoted \$200 or more for a complete assembly or recommended an aftermarket universal pump. Several people said they had good luck with Facet and other universal pumps but for the money sticking with the original design seemed like the best solution.

I can vouch that the Master pump was a perfect interchange and came with a piece of hose, clamps and other useful bits. Also, you "must" replace the inlet screen which is an additional \$5-10. They seem to be relatively generic. It did not come with a tank seal, but I had replaced it a few years ago and it was still in good condition. One note is that I replaced the hose in the tank a few years ago. It had swelled and softened considerably but still seemed to be working. The hose supplied with the new pump had fiber reinforcement that the generic fuel line I used didn't have. I don't know if there's a difference between fuel line intended to be submerged and run-of-the-mill fuel line at the parts store but I hope this new fuel line holds up better than the last.

Finally, if you want to avoid a gasoline bath, you need to get most all the gas out of the tank. I had emptied it down to where the needle was on empty and low fuel light was on and then jacked it a good 12-15" under the rear axle. I still had another gallon come out when I cracked the seal on the pump. Otherwise its a pretty easy job.

I have to think the same pumps can be used on other cars during an emergency since the input pressure requirements for CD175 2SE family of Stromberg carbs are the same and similar to SU's. Something to think about when a failed fuel pump leaves you stranded.

That's all for this month. See you at the TRF Summer Party!



Classifieds:

These classifieds are free to BTC members, given, of course, that they relate to Triumphs, and are for private (not business) use. No, you cannot sell that old couch here! We'll run classified ads for two months, beyond that you'll have to ask for an extension.

FOR SALE:

'76 TR6 For Sale:



Unknown mileage. Has ~33K miles since body-off restoration during mid '80s. Engine rebuild included new block and reground crank and '73 head that is slightly shaved. Falcon stainless dual sport exhaust. Air injection, pump and EGR valve removed. Most of these parts are in a box and included. Gearbox with J type OD overhauled ~ 5 K miles ago. Within last two years and 2 K miles have redone interior --- seats, interior panels and carpet. Also new white paint, top and redline tires. Just installed new very soft clutch using uprated German release bearing. Many parts powder coated. Original Triumph AM/FM radio. Everything works except windshield washer that will be replaced before sale. Photo slideshow at:

<http://www.buckeyetriumphs.org/TR6/TR6.htm> \$12,000.

Call Nelson at 740 587-2509 or

Nelson@BuckeyeTriumphs.org

PARTS...PARTS...PARTS - Triumph and LBC parts available. New, Used & NOS... The Roadster Factory, Moss & Victoria British items at discount prices.

Many common parts in stock.

Doug's Parts 614-878-6373 Braden.13@OSU.edu

<http://www.triumphparts.com>

1959 Triumph TR-3A



Complete body off the frame restoration (2001), everything new or rebuilt, TRA national show winner, 2001!!

Signal red, tan interior, chrome wire wheels, heater, top, side curtains, boot, powder coated frame, suspension, rebuilt engine, transmission, rear differential, wiring, BEST OF EVERYTHING NO \$\$\$\$ SPARED \$ \$ 24,499.00

Steve Goldenberg - Newark, Oh

PH. 614-778-8989 Cell

FOR SALE: 1971 TR6.



Signal red w/ black interior. New rebuilt engine, rebuilt carbs, new fuel pump (original available for restoration), newly rebuilt brakes and clutch, new stainless steel exhaust system -- all done by expert Triumph mechanics Ryan Miles and Artie Clark. New carpeting, paint job only two years old.

Differential mounts and X-frame just reinforced by Auto Metal Masters. No rust. Daily driver -- runs great. Asking \$10,800. Contact Bill Seegers @ 740-587- 3714 or email at

seegers@denison.edu



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