

# **SDF OVERVIEW**

March 2018

Efforts continue to rebuild the trust and mutual cooperation and benefits between the SDF and The TR Register, and we were encouraged to hear clear positive statements made by Paul Hogan and Mick Forey at the TRR AGM at the end of 2017. However, little appears to have been changed regarding the composition of the board and the policy towards the SDF, however Paul Hogan and Mick Forey had stated that space would be available in TR Action for the SDF to update all TRR members, not just on the work completed over several years, but also to inform all new members joining in the last two of the existence, purpose and operation of the SDF. To that end, an initial article was prepared by Ian Cornish, in conjunction and agreement with Paul Hogan, and submitted for publishing in TR Action. As we stand, we have yet to see what may or may not be published.

Very much encouraged by Paul Hogan, we have also written and submitted the draft for the second update, and this second update contains new information regarding some of the latest projects which are nearing fruition. There are a number of other updates we are able to produce which covers early double thermostat housings, early rear light bezels, passenger crash pads for RHD Michelotti cars, a potential development of a new supplier overseas relationship, and a number of projects undertaken by the PQI team.

We hope you will appreciate that the SDF team have continued to be true to its mission, active, innovative and positive in all their efforts to “preserve the marquee, and keep cars on the road”

Unfortunately it is with much regret we have received notification of resignation from long term contributor Alan Graham. Alan outlined his reasons for leaving and we greatly appreciate that he is willing to continue in the role as adviser to the team in areas of his expertise. In order to fill the gap left by Alan’s resignation, we have co-opted Roger Hogarth onto the team, we feel sure Roger needs little introduction and his experience and engineering skills are valuable additions to the operation of the team.

Later this year we will need to convene our constitutional meeting, probably to be held at Lincoln during the IWE, however more formal notification will be circulated nearer to the time.

Please also respond to the request to the request with respect to the changes in data protection regulations outlined in the parent email.....

## **SPARES DEVELOPMENT FUND (SDF)**

### **Part 1**

**By Ian Cornish**

September 2015 was the last occasion on which the SDF communicated with all members of the TR Register (TRR) through TR Action, and rather a lot has happened since then, so an update is certainly overdue. Also, we are mindful that newer members of the TRR might have no knowledge of the existence of the SDF, nor of its founding, constitution and aims. Consequently, we are best served by starting at the very beginning of

the scheme and, whilst bringing newer members up to date, asking for some latitude from the longer-serving members of the club. So, starting at the very beginning:-

## **The History**

### **New Spares Fund**

The New Spares Fund (NSF) was originally conceived and launched in 1970 to assist two enterprising individual members of the TRR, Pete Cox and Pete Buckles (C&B), in buying up as much as possible of the original spares and parts from dealers and the factory when the various TR models were going out of production. Very often such items were being sold as scrap, and that included the tooling.

TRR members lent money, repayable on request, to a fund to help the cash flow of the two Petes. This money was administered separately to TRR funds and continues so to this day. Members of the NSF benefitted from being able to purchase parts from C&B at substantial discounts.

Eventually, C&B became so successful that they abandoned their day jobs, formed their own company (Cox & Buckles Spares), and repaid the original loan. C&B Spares grew to become Moss, and all owners of TRs can count themselves very fortunate indeed in having such a successful supplier of parts for their cars.

### **Accumulated parts as patterns for future use**

Once C&B had repaid the NSF's loan, attention turned to the long term benefits that might accrue to all TR owners from these funds. Original parts and panels began to be acquired as patterns for reproduction purposes at some point in the future (see Alannid's Cave, below). Around the same time, and recognising the change of status and objectives, the Fund's name was changed from the NSF to the Spares Development Fund (SDF).

### **Other Activities**

#### **Assisting the finances of the TRR Register**

The TRR has occasionally encountered some financial problems, and the SDF has been happy to assist. For example, there was an unexpected and very large VAT demand from HMRC which threatened the very existence of the club. These problems were resolved by loans from the SDF, each of which was repaid in full.

#### **Support for TS2**

When the TRR acquired TS2, the SDF donated £1000 towards the car's restoration, along with a loan of £5000 (since repaid) to ensure the restoration process was completed.

### **Today - SDF Committee & Parts Quality Initiative (PQI)**

The SDF morphed out of the previous NSF and is run by the members listed below. The SDF's objective is to preserve TRs by keeping the cars on the road, and it does this by helping to make available suitable parts for the restoration and maintenance of the complete range of TR sports cars.

Thanks to members and suppliers, the SDF identifies parts which are no longer available and assists in the re-manufacture of such parts, albeit that some of these might be in small batches. The SDF does not and will not manufacture or sell parts. It acts as an investigator and as a pump-primer where a supplier agrees with the potential opportunity, but may need up-front funding in order to undertake manufacture.

PQI seeks to resolve difficulties when a purchaser believes that a part is not of good quality but the purchaser has failed to resolve the problem with the supplier, or believes that further action or investigation is required. In addition, PQI tries to ensure that parts offered by suppliers are of good quality.

All of those involved are volunteers and give of their time freely.

**SDF:** Ian Cornish (chairman), Ian Gibson, Alan Graham, Ian Brown, Dave Gibson (treasurer). **Advisers:** Pete Cox, Tony Sheach, Roger Hogarth.

**PQI:** Ian Brown and Roger Hogarth

### **Subscribers and Funds**

The Fund has some 262 subscribers, and has adequate funding for the current projects. The SDF currently has no need of more funding, however who can say what problems might arise in the future, so if you might be interested in becoming a subscriber in the future, please register your interest (see "Getting in touch", below) and we will keep you up to speed with developments.

### **Alannid's Cave**

This is a collection of original parts purchased by the SDF from Alan Robinson (hence the name!), Bob Butson and Peter Lynn, and held to provide patterns for future production of parts. The SDF is constantly looking to purchase suitable quality original parts for this purpose – so please advise the SDF if you have any items you believe may be of interest.

## **What we have done so far and plan for the future**

### **SDF projects**

Since its inception, the SDF has tackled a number of projects designed to keep our cars on the road. Below is an update on some of the current ones.

### **TR4A Cylinder Heads 511695**

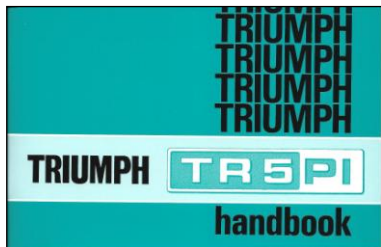


Sales of TR4A Cylinder Heads have exceeded all expectations. By the end of 2017, Moss had sold 644 heads, with approximately two alloy heads being sold for every one in cast iron. Although the competition people must account for some of the sales, had these

heads not been produced, one might wonder how many 4-pot TRs now might be mouldering in barns or have been scrapped.

The photo shows the two parts of the mould from which the cylinder head (in the centre) has been cast. The mould is approximately 40½" x 17" (103 x 43 cm) – not small!

#### **TR5 Owners Handbook 545034**



The SDF facilitated the reproduction of the Handbook by Brooklands Books. Although Triumph manufactured only just over 1200 TR5s, over 220 copies of the TR5 Owner's Handbook have been sold. With relatively large numbers of TR5s surviving, it is expected that even more copies (available from the TRR's on-line shop) will be sold.

#### **TR4A/5/250 Sidelamp Assemblies**



With a loan from the SDF, Revington TR undertook the reproduction of these items, which were announced at the TRR's 2010 International at Malvern. The assemblies are of very high quality and virtually indistinguishable from the original Lucas part. They are on sale from RTR at a very competitive price.

#### **Main & Big End Bearings for 6-pot Engines**

In conjunction with the SDF, RTR tracked down the original manufacturer of these bearings and re-introduced them to its product line. The range extended from standard size to 0.060" undersize for both Big End and Main Bearings. Unfortunately, the manufacturer changed the production machines, getting rid of those on which the old style bearings were made, and RTR has been informed that manufacture is not currently economic unless thousands of sets are ordered, so the project is no longer commercially viable.

#### **Next time!**

In the next issue of TR Action, there will be coverage of the current, up-to-date activities of the SDF, and the SDF hopes to have exciting news on more than one of its projects!

#### **Getting in touch**

**SDF:** [a link is available from the TRR's website.](#)

**PQI:** accessible direct on the TRR's website, where a form is available to make reports.

## **SPARES DEVELOPMENT FUND (SDF)**

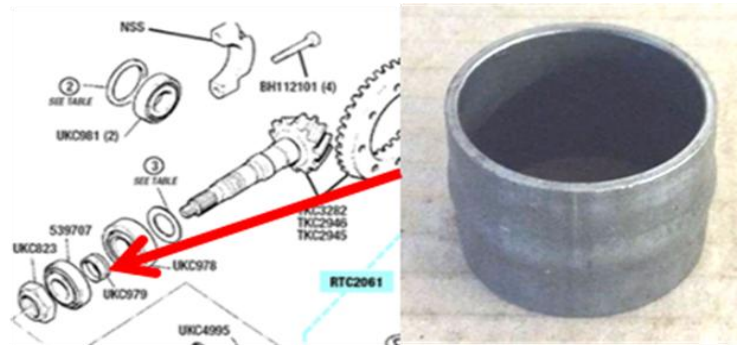
### **Part 2**

**By Ian Brown & Roger Hogarth**

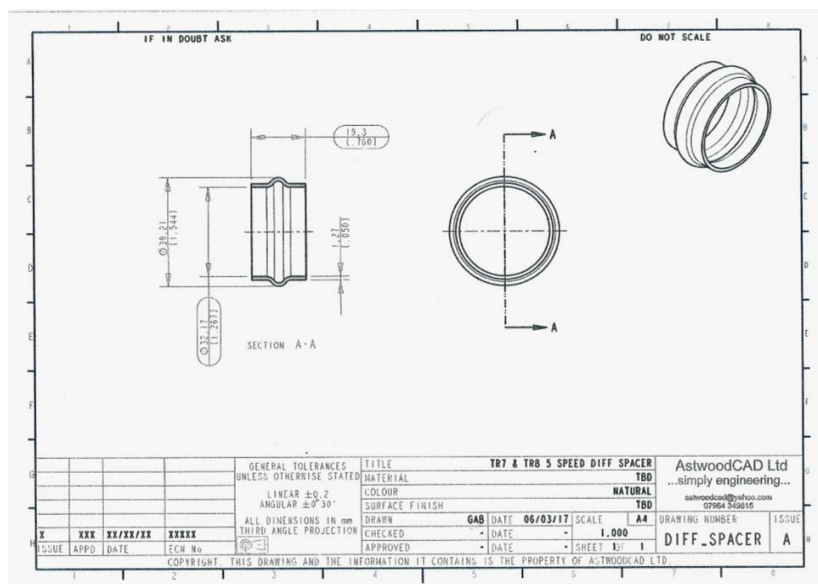
## TR7 PARTS

In the last update, we showcased the wide variety of projects that the SDF has tackled since its inception which has helped to keep our cars on the road. We now turn our attention to those new parts which the SDF are commissioning with the aid of various suppliers to enable us to fulfil the aim of 'Preserving the TR marque'

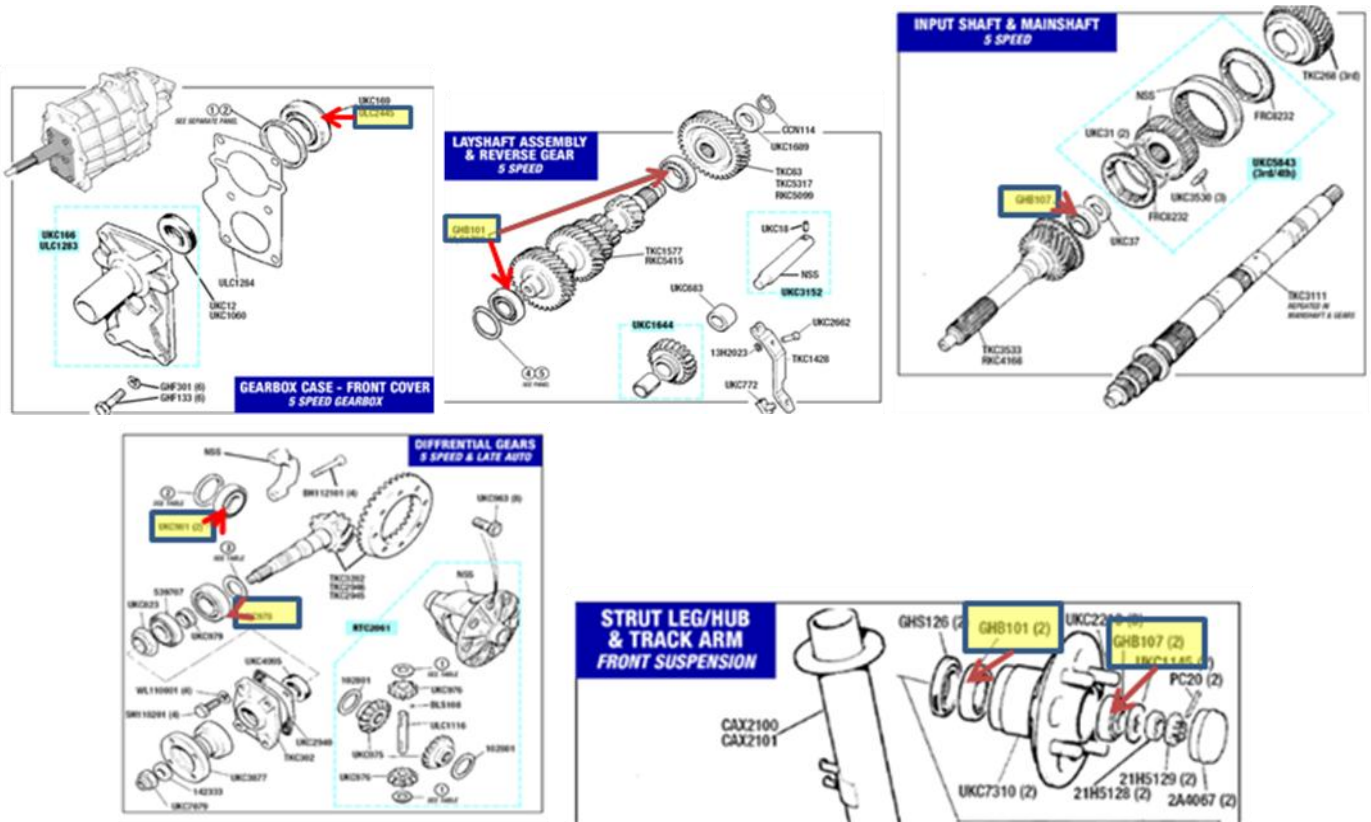
The first new project is aimed at owners of the TR7. Members have expressed their concern over the inferior quality of roller bearings in the market, and the complete absence of a vital part in the rebuild of the 5 speed axles: namely the collapsible spacer, UKC 979 as illustrated here which has not been available for a considerable number of years.



Before any approaches were made to potential suppliers, a degree of background research was undertaken, not just within the TR Register, but also with the TRDC. After some dialogue with a well-known supplier of TR7 parts it transpired that anyone rebuilding the differential had to reuse the old spacer, either attempting to reshape their old spacer or introduce shims to effect the appropriate torque on the unit. During the research process, a used item appeared on Ebay, which the SDF promptly acquired for reference purposes, and in good show of inter club cooperation, a TRDC member stepped forward with a CAD drawing for the part... (note copyright detail)



Rimmer Bros were the first port of call and, after a very constructive and positive meeting, agreed to offer a range of OE specification Timken bearings alongside their current offerings. Moreover, at the time of writing, a supply of the collapsible spacers has been negotiated by Rimmer Bros. and we are awaiting samples from the first delivery for testing and quality purposes prior to them being made available



## NEW CRANKSHAFTS for 4-Cylinder TR's

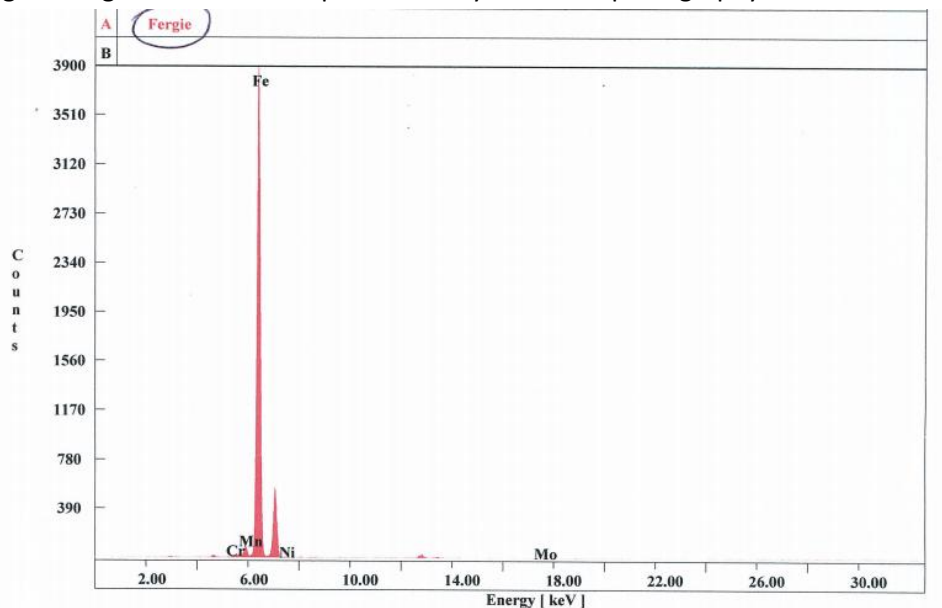
Although it could be claimed that this project was initiated in 2013 via a Forum posting “Are there any common parts between the Fergie T20 tractor and the TR sports cars?”, information on these parts was actually published in TR Actions 241 and 242 (March and May 2010) in articles written by Ian Cornish about the development of the 4-pot, wet-liner engine.

Further Forum postings revealed that a Fergie tractor crank would indeed fit into a TR engine; however they are not exactly the same as a TR Crank as we subsequently found out. One big issue related to the functionality of oil management within the engine, both keeping it within the sump and moving it to the places required for an engine running above the tractor’s governed and limited 2000rpm.

Suitably intrigued, Roger Hogarth researched a source for the tractor cranks and, via the SDF, purchased a sample crank complete with bearings (mains, big end and thrust), all for a pretty modest sum! (Extremely modest when compared with the only other source of new TR cranks at some £1500, these being items machined from a solid steel billet and designed for racing applications.)

Discussions with suppliers revealed that, whilst crankshafts were hardly on the endangered list, many were beyond tolerances for warranty to be offered (+40 thou), and given that some cranks could be 60+ years old, not to mention the reputation for breakages in earlier lives, an opportunity existed for an original specification crankshaft at a reasonable price.

Testing of the Fergie crankshaft commenced and CVTR member Dave McHattie was consulted as to the materials used in the castings. Using his metallurgy background and experience, the crank was given the thumbs up. More detailed testing was organised and a sample sent away for mass spectrometry examination:-



The results showed exactly what we wished to see, a perfect match with the TRaditional TR crankshaft. Armed with this information and mindful of the close working relationship with Moss on cylinder heads, the SDF decided to approach Moss to gauge the level of interest and commitment from a supplier's commercial perspective. The first meeting with Moss was extremely positive with a frank exchange of information regarding the source and pricing of the Fergie crank. Our contact at Moss was then able to determine the source of the original castings leading to the production of the tractor crank and was then able to arrange for the appropriate machining for application in the TR range of 4-pot cars, rather than the agricultural variant.

Two blank cranks were ordered and when they arrived they were despatched to the Moss's preferred machine shop. When the newly finished cranks were finally produced we found the pulley key slots were 180 degrees out! However, the cross drillings improved on the original ST design and so they were considered adequate for the intended application.

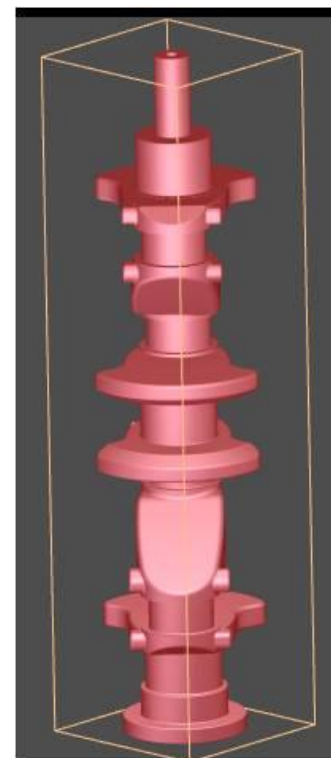
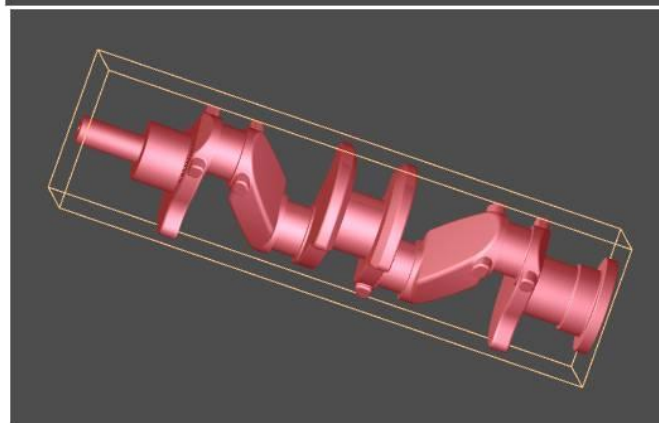
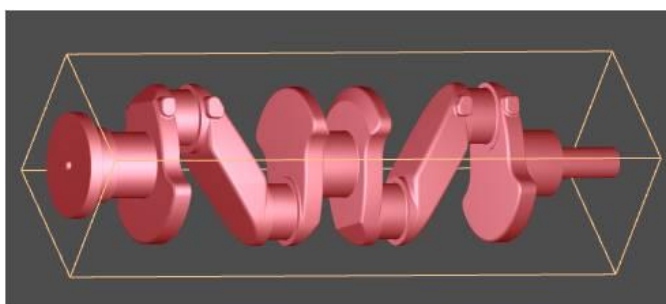
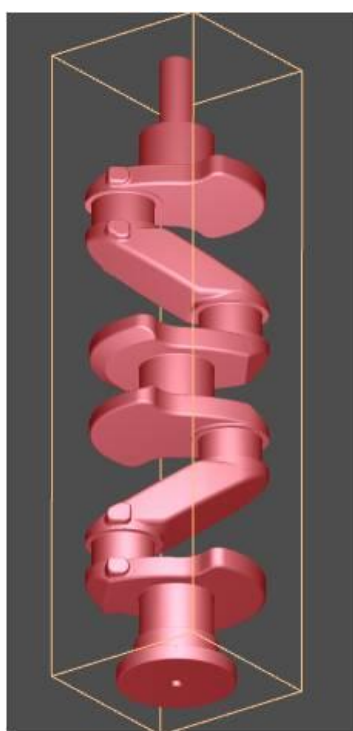
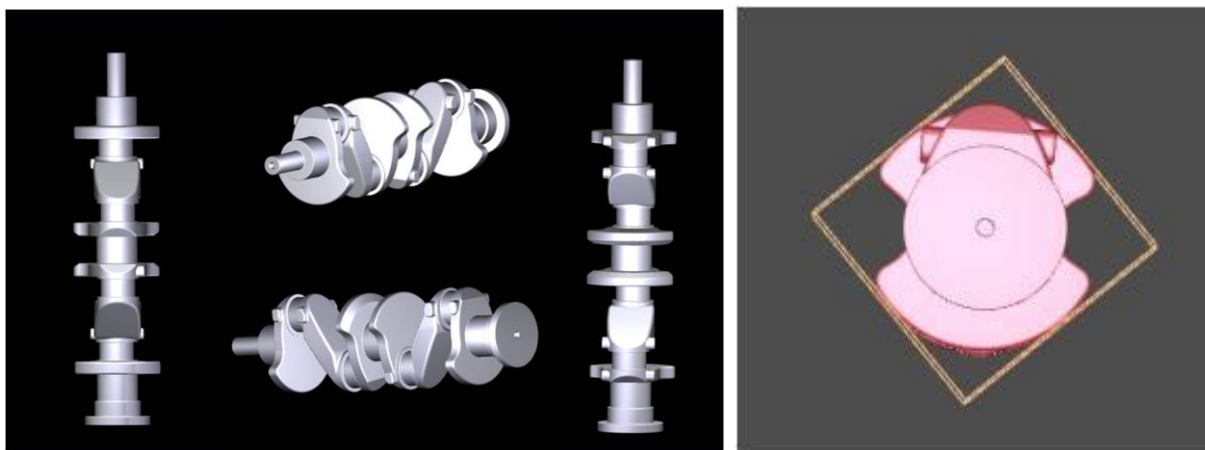
Testing now followed and the first of these cranks was fitted to Roger's own TR4A which now has covered in excess of 20,000 trouble-free miles. The second prototype crank was fitted to MVC575 as part of Moss's contribution to Glen Hewitt's restoration of this iconic car.

Having sourced the blank cranks and proved they were capable of producing OE specification items, the issue became one of cost engineering to arrive at a price attractive enough for TR owners and capable of producing a commercial return for Moss. What was needed was a set of accurately detailed drawings capable of being used for competitive pricing purposes.

Finding individuals or companies capable of producing such work is a pretty difficult task but just at the right juncture, we were advised by Nigel Cluley that a contact of his was capable of 3D laser scanning the crank and producing CAD drawings. These could then be transferred electronically to appropriate engineering establishments so that as much automation as possible could be introduced in order to speed up manufacturing and to reduce costs.

Central Scanning in Bromsgrove were chosen who allocated to the tasks to an apprentice who was overseen by the owner himself. This proved to be a great match, with the apprentice learning along the way, the SDF having a taste of

modern techniques and all at a price which would have been difficult to achieve by a man with vernier gauges and callipers!



As it stands, Moss is due to take delivery of three prototype cranks which will have been cast and first machined overseas, before being prepared for checking and final machining here in the UK in order to ensure quality control of the final product prior to further testing. So far, so good .... Watch out for news of further developments and possible availability of these brand new OE specification crankshafts!

## **EARLY TR2s**

The early TR2s feature a couple of items which have not been available for years: the double thermostat housing fitted before TS1201E, and the Lucas 471 rear lamp fitted before TS1307. These parts are shown in Bill Piggott's invaluable "Original Triumph TR2/3/3A", on pages 72 and 62, respectively. In order to put production in hand, the SDF needs to know the number of people interested in acquiring high quality reproductions of these items. So, if seriously



interested, please contact the SDF (address below) stating: your name, your contact details, which item(s) and quantity(s) required.

## **What Next?**

The SDF is always willing to consider researching projects for remanufacture providing there isn't already a supply available. We also know that some re manufactured parts can be of dubious quality and we are aware of several items on the repro market that don't perform as well as they should. The Parts Quality Initiative seeks to improve the offering of suppliers but if you are aware of any other parts problems, then please let us know. With new parts now actively being investigated for re manufacture, Membership of the SDF will once again soon be open to TRR members once we have worked out how to administer it effectively. As they say,... Watch this space for further details.

## **SDF's COMMITTEE & ORGANISATION**

After many years of service on the SDF's committee, Alan Graham, a farmer who lives in Dumfriesshire and is, as he describes it, "somewhat out on a limb", decided to stand down. The other members of the committee were reluctant to see him go, but understand his reasoning and know that he is always available for advice, especially on TR5s, TR6s and matters of quality (for which he is a stickler!). Being so intimately involved with a number of the SDF's projects and with PQI, Roger Hogarth has been co-opted to the SDF's committee, which now comprises: Ian Gibson, Ian Brown, Ian Cornish, David Gibson (treasurer) and Roger Hogarth. In addition, Pete Cox, Tony Sheach and Alan Graham act as advisers.

Under its Rules, the SDF must hold a formal business meeting every 3 years (colloquially called an AGM, but hardly annual!) and, as a meeting is due in 2018, it will be held during the International Weekend at Lincoln – date, location and time to be announced later. As far as is known, all existing members of the committee will be standing again, but any member of the SDF may stand, provided they are not a Director of the TRR and as long as they have a proposer and a seconder, both of whom must be members of the SDF.

Contact details for the SDF: [EMAIL ADDRESS to be inserted here.](#)

—————§—————