

**The article below was prepared for the Veteran Car Club of WA (Inc) monthly magazine distributed in April 2020.**

**A few Model A Restorers Club of WA (Inc) members suggested that I post it on the club web site as an example of what it was like to restore a 1915 Ford at a time when there was no email, no websites, no eBay etc.**

**Alex Kirkwood**

### **The Restoration of a 1915 T Named Tom**

In 1972, Linda and I purchased an early 1928 A Model Ford and that was successfully restored over the following three years.

Having now served my restoration "apprenticeship" I wanted a bigger challenge and I have always had a liking of T Model Fords.

In June 1975, when I was 29 years old, the Veteran section of the club advertised a collection of T Ford bits and I was able to acquire those. On arriving home, Linda was quick on the scene to inspect the new acquisition, but it soon became obvious that she was not at all impressed – explaining later that the expectation was something that resembled a car. The acquisition comprised a collection of disassembled mechanical parts (all of which had been left out in the weather for a long time and some had been stored in drums that had then filled with water), a bent and cracked chassis plus an assortment of other odds and ends.....all in a 6x4 box trailer.

On sorting what I had it was obvious that I had a big job ahead. Many people had T Ford parts at that time, but they all had a goal to build a T at some point so without eBay, email and an extensive VCC Parts Shed, it was a case of talk to older club members and go bush to seek out old tips, stations etc.

Some of the parts needed were as follows: all diff internals, a driveshaft, transmission drums and gears, all engine internals, steering rods, radiator, front spring, carburettor, coils, coil box and switch, a body and all body brackets, hood irons and wheels as well as a raft of small items.

As a family we travelled far and wide throughout the Goldfields searching for parts with our 1973 Cortina six wagon and trailer. One trip stands out when we headed off early from Meekatharra at daybreak and travelled to the Wiluna tip. In the early days the old boys would travel along bush tracks in a designated area and tip their rubbish off either side of the track. This same concept was used in all the old Gold mine towns and Boulder was for example one of those. The key was to find out where the old tips were. At Wiluna we spent all day finding odds and ends, patterns in some cases and good components in others. Our 2 boys (at that time) and I would operate a grid type pattern to try and cover the ground to optimise findings. Linda would read a book and the deal was we always had to be in Linda's line of sight. When we wanted to move on, we would signal Linda and she would move the car closer to where we were and then the process would start again.

At the end of that day we had a good load of T items and headed to the Wiluna pub where we had booked a room for the night. On arrival I found a compound around the pub and a number of drunk aboriginals in the front area and with Linda pregnant with our third son, I made a decision to not stay and drive to Leanora, a distance of some 300k away on a gravel road.

Off we went and halfway to Leonora I got out to check the load about 8pm and noticed that the trailer box tube frame had partially failed where the A frame joins the trailer box. We couldn't go any further and by now it was dark on a road that is not exactly well travelled. Then in the distance we saw lights coming towards us and thankfully they pulled up beside us. It turned out that it was a surveyor and his assistant who was an aboriginal...it was Friday night and they were on their way home to Wiluna. The aboriginal stood back and then said, "we will fix that with gimlets" (gum tree branches) ...and that he did. He cut gimlets with an axe so that they went along the A frame and back under the trailer. He then tied it all together with rope with a range of clever knots and would you believe that they followed us for a short period and then checked that we were ok. We arrived at the Leonora Motel at some ungodly hour as I took it easy and the rough gravel road had at that time a lot of creek crossings where the road went down and then up, putting a strain on the repair job.

We left the trailer at the Leonora Motel the next day and headed out to Laverton and it was there that I found the transmission that I used in the car. A Veteran T engine was partly buried in dirt at the tip, but the sump was covering the transmission from rain. I dug the engine out and removed the sump and then I was able to remove the crankshaft, flywheel and transmission. The crank and flywheel were not in good condition, but the transmission drums were fine, and they were not scored so as I mentioned above, this was rebuilt and used in the car. The trailer was welded and strengthened in Kalgoorlie and did many more trips over the coming years until I had gathered what was required to complete the car.

As part of these trips, a very straight pair of running boards were located in the bush at Coolgardie, the two front hood frame brackets were located at Kanowna and what appeared to be a piece of rolled up tin sheet turned out to be the rolled up front seat backrest panel and when unrolled, the two front hood iron support brackets were still attached to the panel. Mudguard and body brackets were sourced from various places like Mt Magnet, Cue, Meekatharra. And so, the story goes on and on.... I could go on for ages. During that period of tip exploring, it was obvious that a lot of enthusiasts had been before me and there wasn't a lot of T stuff readily available....it took a lot of searching.

My first step in the restoration process was to purchase a Myford ML7 lathe in 1975 and over the years that has been found to be priceless.

Once I had that I taught myself how to machine, thread-cut etc I went on to make the front axle kingpins and bushes, all spring shackles, a whole array of pins, bushes, small brass components too numerous to mention. I was lucky that the late Doug Patterson (who restored the T that Trevor Eastwood now owns) was as an Engineer and Doug advised me on steel choice, how to correctly machine various items so that there were no stress points etc.

The restoration process was traditional in that I dismantled the chassis, had it straightened, strengthened where it had cracked and then put it all back together. I then restored the diff and front axle and after mounting on old wheels, I had something that started to look like it could become a car. The front axle required minor straightening, but the diff was a major exercise. I fitted a new crown-wheel and pinion and took the inside Hyatt roller bearings from several diffs so that I had a good set of bearings. I then used A Model Ford rear axles (they have the same hub taper as the T) and after removing the gear on the end of the A axle, I had it machined to accept T Ford gears. I then fitted the roller bearings in the diff tubes with new bearing sleeves and made a dummy shaft to the internal diameter of each roller bearing. I then had the A Model axles ground to the correct internal diameter of the 4 roller bearings based on the size if the relevant dummy shaft. The result was a perfect fit. I had the crown-wheel carrier mounted in a lathe and then the flange faced to run true in relation to the machined hole for the diff axle gear shoulders. The drive shaft, which was supplied by the late

Peter Marley of Wagin, was metal sprayed on the bush and bearing areas plus it was checked that it ran true.

The engine was a huge task as it had been out in the weather for a long time, but it was a genuine 1915 block that was dated. I firstly had it crack tested and all was good so I then passed it to Ranch Automotive Engineers where it was sleeved, inserts were fitted to the valve seats, the crankshaft (obtained from Peter Marley) was reground and all bearings were re-metalled. It is interesting to note that the March 1977 Ranch Auto price to complete the above work was \$376.

I scraped the new white metal bearings, fitted the pistons, rings etc and went to a lot of trouble with a dial gauge to ensure that the flywheel and internals ran true.

The camshaft was reground by Camshaft Engineering (now finished). I reamed the valve guides and fitted Dufor K1504 valves with new springs and machined the valve length and slots to accept grey motor Holden valve spring keepers. The T Ford pin through the valve as a keeper worried me a bit. I fitted a crankshaft balancing accessory from the day in "Dunn's Crankshaft Balance Weights". These bolt to the crankshaft web (I located them with a ball bearing so that there could be no movement. ie. an indent in the crank web and the weight and a ball in the middle.) I then had Veem Engineering balance the crank and flywheel. The magnets were recharged by Denis Hextall at Lucas and after re-taping the magnet coils and coating them with an epoxy the motor was then done. The transmission from Laverton was rebuilt and fitted and I fabricated an assembly that included a needle roller bearing so that the fourth main bearing that supports the transmission could run with less friction. The interesting thing is that these needle roller fourth main bearings kits are now available from places like Snyder's in USA, but it was more fun making my own.

The day was Thursday 31<sup>st</sup> May 1979 at 6pm when the engine burst into life for the first time. What a feeling of joy that was given the rubbish that it emerged from. Believe it or not, some 41 years on and I have not removed the head or sump of that engine.

The next step was to fabricate the wooden body framework. Woodwork is not my best subject, but I was lucky in that the late Brian Hume presented me with a full set of original wood patterns from Beryl Hume's 1915 T (that is now owned by Peter Hume). I enrolled in a hobby class at Fremantle Tech and while everyone else built coffee tables, over the year that I was there I copied every piece of timber and assembled it on the chassis to form the wooden body frame to which metal body panels are affixed.

The late Eric Langton helped me with the wheels. I had four veteran clincher steel rims and that was it. Eric had given away making spokes, but he told me to purchase them from a chap by the name of D Carstairs in Victoria who used to advertise in the magazine Restored Cars. I did that and then Eric told me to contact Tasmanian Timber Bending Works to order the steam bent timber felloes. Eric then showed me how to press the felloes into the rim and leant me his equipment to do that. He then explained the process to accurately finish the spokes, drill the felloes and then fit the spokes. Again Eric leant me his equipment and I always remember doing the first wheel where the metal rim creaked and groaned and I was very nervous about the result....but it went well and by the time I reached the fourth wheel I knew the drill. I then had a pattern maker in West Perth machine the fitted felloes and the centre hole in the spokes for the hub.

Now up on real wheels we were going well. I went to Carlisle Tech to do the body work, but I found it difficult as a novice to achieve the standard of finish that I wanted so I gave it away and had a professional body builder clad the wooden frame. I had been lucky to find a good 1915 scuttle which was used as part of the body while I was lucky in that Ray Coyle had employed a chap to make T Ford

guards and valance panels so I purchased a car set of these so I then had a complete body. Over the years I had found every T body panel, and these were used as patterns by the body builder.

I painted the car at home using Dulux acrylic in a colour called Midnight Black.

The radiator was made by a Mr Fred Stiver of Los Altos in California. There was a two-year waiting list, but Fred produced a beautiful round tube core radiator like original with my engine number stamped on the rear tank panel plus "Made in Canada" on the front panel to give it a touch of authenticity.

The car was upholstered by a chap by the name of Colin Harris, but not long after he gave the trade away which was disappointing as he did very good job. The cost of a tourer with pleated and buttoned trim plus the hood was \$1300.

The car was completed and examined by Graham Henley in February 1987 and registered for the road with registration 7HO879. Over the years the T has performed beautifully and has been to places such as Albany, Kalgoorlie and many places in between.

How did the car get the name Tom?... as the car came together, and probably around 1982, our youngest son (now 43) one day referred to the car as "Thomas T Model" and over the years this has been shortened to Tom.

Alex Kirkwood



Collection of parts found above and completed car below

