

RESTORATION OF HUTCHIE'S HUPP

Our Secretary, Mary Anne asked me to do this, but how to condense 20 years without boring everyone, that is the problem.

5th June 1986

I purchased my 1934 K model Hupmobile from Roger Haas from where he had it stored, uncovered in his back yard at Mulgrave, where he still lives. Roger had been working on a 1928 Hupp for several years, when a friend, who was surveying a farm property near Bendigo, told him about this other Hupp "wreck".

The whole back had been cut out with a cold chisel, but the little skirt over the tank cover must have been a challenge, so they pulled it out with the tractor. Fortunately the back panel was left leaning against a tree. You can imagine what a job we had a few years later to straighten it all so it could be welded back in.

Roger was working, so found little time to work on his 28 model, let alone that eyesore in the back yard. Now I think Roger's wife Pam may have been pleased to see it gone, may well have even put a bit of pressure on?

History of cars is not easy to trace these days with the privacy regulations, but the car was supposed to have been used for many years on an outback mail run. What I found everywhere indicated the poor old thing had a very hard and long life. There was not a bolt or nut which could be removed with spanners.

I was able to get previous registration numbers and found that it had at one time been owned by a man who lived above one of the shops opposite the Camberwell Station. At that time it was registered as a commercial vehicle, so he may have been a commercial traveler?

Condition when I got it — Good news first.

1. The dash was good and complete with gauges, lenses were broken and dial faces were not good. (I wrote a Journal article some years ago, on how I made new dial faces).
2. Window sill plates were good and only 1 garnish moulding missing from windows. (Got it from parts car later)
3. There were 5 good wheels. (Got the sixth from parts car)
4. Horns in place but lacked trumpets.
5. Bonnet tops and aprons were complete with louvers.
6. Chassis and shockers were intact.
7. All brass bits were dented but repairable, like — wheel caps, horn domes, head and tail light buckets and rims.
8. Enough door handles and window winders for John Rolinson to use as patterns for castings.
9. Door locking mechanisms were all able to be restored.
10. Radiator repairable with new core.
11. Transmission intact, including free wheel box, but no cable. Crown wheel and pinion from parts car.
12. Large outer radiator surround repairable, so too were some grille bars.
13. Brass strip molding (2 long ones for valences and 3 short on trunk carrier) were there, so repairable.

Bad and not so good news.

- Nothing where roof patch should have been, no floor boards, almost no floor pan at all.
- All mudguards dented and split, running boards and valences almost non-existent, no rear bumper bar and dumb iron.
- No headlight lenses, in fact no window glass either, steering box NBG restored the one from parts car.
- Body and door panels rusted out to a level up to about 4" above bottom of doors, tyres perished and unusable.
- No timber was sound, in fact hardly any even suitable for a pattern. Worked off photos and measurements of Ray's.
- My steering wheel was badly damaged, so I made molds, put it all together with fiberglass. Then a few years later I got a NOS one from the US which was from another model. It had a smaller tapered hole, which I bored out to correct taper. I used the repaired one for years while working on the car, to save the new one.
- There was no floor timber at all, and nothing useable of the running boards.

NOS from the USA.

Hupmobile Graham Factory Services is a firm from whom I got 13 parcels over about 5 years. Only one of those packages went through customs, it was not as large as some had been but was quite heavy. It had a full set of spring shackle stuff, including the silent rubber bushes. I had to pay about \$30 duty. All the other 12 parcels came through the post, with no duty required.

I was luckier than most of the other Hupp Nuts, most have had trouble getting stuff from them. When I was looking, a man named Tom Poinsett was dealing with orders, and he was most helpful. It was amazing just what they did have. Things like—all the small brake bits, including the tailed springs; king pins and their bushes; petrol tank unit; amp/gas gauge; stop light switch; floor mounted dip switch; full gasket set; shocker links; full set of female door dovetails; window winder units for all 6 windows; sliding rails and locking plate for the front seat adjustment; pair of tail light stalks; front wheel grease caps; horn button and spring, (I had to make the threaded bakelite surround and the aluminium base it screws onto).

There were many other small parts which Tom was able to supply, which I would otherwise have had to make, or improvise from something available here. I would send a bank cheque for \$200 (when our \$ was above 85cents) to remain in credit and if he found things on my list, he just sent them.

Parts which had to be made. There were quite a few things which had to be made for my car, which were also needed by others, so I made more than just mine. Some of these were advertised for sale both here in our own Hupp Newsletter and also in the one in the USA. This enabled me to cover costs, while helping others who did not have equipment or expertise to be able to make their own.

Dash dial faces Ten sets sold, five went to the US or Canada, one to UAE (United Arab Emirates), four sets here, plus mine and Ray's. There were six sets printed and when they sold out, I had to get another lot done. The last set went to a chap in Texas in April. I don't intend doing any more as the man who did the prints is no longer around.

Brake Clicker Washers. One in each wheel. Originally they used very thin spring steel washers with a raised crimp across the centre, which engaged with the brake adjusting nut, which is like a castellated nut. If the spring washer cracked on the upset, it jammed and the nut could not be turned. I made a punch and die set to form the upset in a standard TM washer and put a standard wave washer behind it. 11 sets sold and a few given away. I make these to order these days.

Robe Rail. This extends across the back of the front seat, and consists of a pair of casting legs each side, into which tubular rail is fitted. This was missing on my car, and since they were die cast, they broke easily, as people in the back seat grab it to assist them when getting in and out. One of Ray's was broken, but I was able to repair it enough to enable John Rolinson to use it and the others as patterns to cast in his "silver bronze" as he called it. It is nice soft metal to work on, like nickel silver, with no blow holes, but strong. John cast three sets, one for Ray and two sets for me, as there was a Hupp chap in Sydney who wanted them.

Rear Floor Foot Rest. This was missing in my car of course, so I borrowed Ray's, and copied it. While on the job, I made another set for the chap in Sydney. Then one of the Adelaide Hupp people wanted one for his car too, so I had to set up the bending jigs again. Ray has never put his in his car because he thought people would trip on it. After seeing mine folded back against the back seat, he thought he would now put his in too.

Tail Light Rims. There were no rims on my tail light buckets, so they just had to be made. I took the buckets down to Tighe Metal Spinning (Moorabbin), and a sample rim. They spun me seven in copper, and they did a great job, as they just clicked on perfectly. As they have a small inward facing lug to take the screws, I had to use a small nibbler to reduce the top and bottom of the inside edge, leaving the two inward facing bits. Then a small punch and die set to form the counter sunk hole and knuckle, (which fits the recess each side of the red lenses), to take the two holding screws. *My ill spent youth as a Toolmaker to the rescue again.*

Floor timber. The main side floor timbers on mine were almost non-existent while Ray's were rotted on ends only. I used his as a pattern, and made a set for each of us. When Ray put his in, they only needed 1/4" off the front corner, otherwise they fitted perfectly. The ends were an educated guess, which turned out to be a good guess. I used "Form Ply" for floor boards, kick boards and seat bases for both of our cars.

Front Seat Timber had to be made for mine, so a second lot was made for an Adelaide friend. I have a photo showing 43 clamps in use when gluing the bent top part of the back, laminating with seven layers of ply.

Bakelite Horn Button Surround mentioned above. I finished up making three of these, as the one on my steering wheel was complete but cracked. I knew of two other people who wanted to buy them, so while on the job, the others don't take so long. *Now you can see why it took me 20 years. I get sidetracked.*

The Parts Car. This has been mentioned above, so perhaps a few details. It was supposed to have been quite a nice car, which was being taken to a car museum at Swan Hill on a trailer. While parked on the side of the road, a truck hit the back corner of the trailer. The result was what you could expect from a heavy vehicle slamming into the back driver's side of a car. I named it the "parallelogram" car when first sighting it.

We had been aware of this wreck and another Hupp being stored on a rural property at Gisborne, by a man who always intended to restore the good one, using the wreck for spares. Well he must have fallen on bad times, because there was an auction to sell most of the stuff on the place. There were three Hupp people at the auction, Ray Nichol, Ray Sharman and myself. We agreed that I would do the bidding, share the cost, and take any parts we wanted, by agreement. It was knocked down to me at \$375. Not much between three people. We have all gained so many useful parts, that it was a great investment.

Individual parts of the restoration which have taken a long time

Grille surround and bars, took at least a year; the mascot "Flying H" and it's "Waterfall" bronze castings took a lot of filing etc. to get to plating stage. Body panel repairs took five years and running boards had to be designed and made from scratch.

The **trunk carrier and its levers** were off the parts car and had taken the full impact of the accident, so had to be straightened. All of the domed shoulder screws for these had to be made, as none of the original ones were repairable, that was good fun, with the lathe again used as a mill, to cut the slot in the domed heads.

The **mudguards** were in a real mess. When we got them repaired and back into shape, 7/16" steel rod had to be bent to the shape of the outer rolled edges, so that when welded in, the guards would retain shape and strength.

The **swivel loops on the “C” pillar, for the courtesy straps** were die cast and either broken or in poor condition, so they had to be stuck together for John Rolinson to use as a pattern for casting in his silver bronze. Then, as I don't have a milling machine, I had great fun making fixtures to allow me to turn the bits in the lathe. The little backing plates were screwed into “D nuts” in the steel pillar, and the No. 10-32 steel screws had rusted in so the screws and D nut had to be drilled out. I had more fun devising an alternate way of attaching the new ones. Don't worry, I'm not explaining here, if you want to know, ask me sometime.

Doors were all badly rusted at the bottom. We had to replace inside and outside skins as well as the bottom strips. This is where the skills of a Panel Beater could be seen, as John Toohey went through each in turn.

Gabrial KT arm type shock-absorbers were entrusted to a fellow in Moorabbin who was supposed to be a shocker specialist. After two weeks, he said he didn't know how to get them apart, so I brought them home and made some special equipment, and removed the 4" diam nuts myself and returned them to him to fit modern seals. I also had to make a special spanner for him to get the filler plugs out and turn the tiny adjusting screw under it. They work well by hand and haven't leaked yet, but now the Hupp is on the road they will have to be watched.

The wheel caps was another interesting job which took a lot of my time, but since I took these to show one night at a CHACA tool display night, I won't elaborate here.

The Roof Patch. The timber frame was a challenge, as there were no bows and only bits of the outer edges, so I had to copy Ray's. While he had his top opened up, there were three rotten on the ends, so after experimenting with a curved former, to laminate ply strips, I finished up with an exact curved form, so made ten for me and three for Ray. **The outer patch** we decided to use 3mm marine ply, instead of chicken wire originally used, which doubled in the old days as an aerial if a radio was fitted. I attached a large sheet of brass mesh on top of my ply and ran coaxial cable down the A pillar, in case a radio is required later.

I used aluminium half round to screw into the little channel around the top opening, to hold the hood fabric down tight. Ray and I spent a whole day bending the outer aluminium extruded moulding we got from one of the Hupp people in Adelaide. I had to experiment with the oxy torch, as I had only heard about how it was done.

The Engine. I am not going into detail here, except to say **take care when choosing “an expert”**. The bloke we chose was a disaster. I had to completely dismantle my engine, to fix his mistakes. Ray found his the hard way, when the car was on the road, so that I had the chance to fix things before getting to that stage. It was a further delay however. I have a 12 page report on the mistakes he made, (some CHACA people have seen it).

Door Handles and Window winders were all cast by John Rolinson, and had to be filed smooth, but because they all had a small rebate along the edge, the finish had to be very good, as if the electroplater had to polish too much, that small rebate would have finished up as a large radius. So time had to be spent to get a really good finish.

The inside door handles fitted onto a 7/16" diam. 18 tooth splined shaft in the door opening mechanism. So I had to make hardened steel broaches to produce that form in the bore of the handle. Nothing from any of the other car firms was anything like it, so there was no alternative. So the lathe had to be set up as a mill again. I searched high and low to find something with 18 teeth, (or a multiple of 18), to index it. Finally found one of the spider gears out of the spare Diff. had 18 teeth. Then there was the small slot, into which the small moon shaped collet fitted to retain the handle on its shaft. All in all, a very interesting project, which, when completed and working well, left a feeling of immense satisfaction.

Well, if you are still awake, thanks for listening.