

SPRUCE UP YOUR BOSS

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What I'm about to describe is not strictly authentic so if you are the pursuer of concours rosettes don't read any further. However, what is authentic these days in the restoration of our pre-war vehicles? Mr Fiennes uses CNC machinery to make things better than the original, others use modern materials not invented when the vehicles were made (e.g. neoprene, vinyl, etc.), but for those of us who wish to make our cars look original then some modern practices may be acceptable. This particular process is for the restoration of the steering boss. This is a black enamelled casting which is engraved and filled with white paint to label the various levers for throttle, ride control and timing. I have two Wraiths both of which I purchased with very good external paintwork and recently re-fitted interiors but the steering boss's on both vehicles were appalling compared with the rest of the car. Paint was missing in great chunks, the paint in the engraved labels was long gone or in one case an attempt had been made to refill the engraving with yellow paint which looked worse than if it had been left alone. I can understand why previous owners or restorers had left well alone; to remove the steering boss involves dismantling the linkages at the bottom of the steering column, draining the steering box, removing the horn button, disconnecting the horn wiring behind it and then releasing the boss by removing the 3 bolts fastening it to the lever fulcrum base. That's just to get it off but how to refurbish? I'm told that the enamel should be stripped, the engraving removed by turning on a lathe, re-enamelling black, re-engraving the labels, filling the engraving with paint and finally polishing off the excess white paint over the engraving. Very labour intensive and for the re-furbishing part needs a time served expert – I guess, very expensive! Tony James' has had good effects with the following. After painting the black background which was left to dry hard, a finger tip dipped in white paint was spread over and into the letters. Alternatively, a Staedtler chinagraph pencil was dipped in white spirit. After the white paint has dried, polish the surplus off with 3M Finesse, though T-Cut or Brasso will do. These methods are ok if the engraving is still deep enough but if not then it has to be re-done. However, what I'm about to describe needs a bit of artistic flair, a computer, and a steady hand. The cost of materials is less than £50.

Have you ever wondered how logos and product descriptions get onto electrical products, vehicle switches and other items? Well they use a variety of processes such as silk screen printing and hot blocking but before they get to the mass product the marketing men want to see what they look like before committing so they 'mock up' the product or switch using a method known as rub-down dry transfers. If you know what Letraset is you will know what I mean but basically a transfer is made photographically onto a translucent sheet. This is placed over the spot where you want the logo or label and then you rub a pencil over the transfer to transfer it to the product. This then looks exactly like the finished product will look when manufactured. I have just used the same method but because it is not permanent (it can be scratched off with a thumb nail) I have added a further procedure to the process. Only time will tell how permanent this is but I think using the vehicle with care is part of the preservation process and providing you don't go running your nails or other sharp objects over the area it should last a considerable time.

So here's the complete process after removing the boss (plenty of members will be happy to advise how to get to this stage). First it's a measuring job. Since the computer will be used to prepare the artwork needed for the manufacture of the transfer you will need to measure the size of the type in the labels and the radius of the bend of the print. This should be done as accurately as possible since, unless you go to the trouble of machining the engraving out you will want the new printing to drop into the old engraving (this can never be done completely accurately due to various reasons but the engraving will in any case be quite shallow or even disappeared). From the centre of the boss measure the radius of each line of the printing. (on the

Wraith there's just 2). Then measure the height of the print (font size). These are best done in millimetres.

A drawing package is necessary on the computer. I use CorelDraw because I have done for years but I also prepare and print our wedding car brochures with it. Almost all drawing packages can do this and if you don't have one you can buy one on Ebay for as little as a couple of quid plus postage. You don't even need the latest version since even early version can do what I'm about to describe. If this part of the process is a problem find a friendly 13 year old and give it to them as a project! The procedure is known as 'fitting text to path' i.e. you make a circle with the diameter from the measured radius, type the text of the label (e.g. 'THROTTLE') in a font comparable to the one on the boss (I found a Truetype font called Dotum to be nearest) and re-size it to the height measured on the boss. This will obviously appear straight and since you want it bent you need to fit it to the path of the circle you have just drawn. Look at the help system of the software to find how to do this or read the manual that came with it. See fig. 1 to see my initial drawing.



Fig. 1

The straight lines in the middle are the indications on the boss but do not need to be positioned. The R-R symbol is two letter 'R's' superimposed at an offset (very easy to do). The boldness of the labels and logo can be adjusted to suite using the software. The circles are then deleted from the drawing leaving just the wording. I recommend that you then duplicate as many times on the page as you think that you might make mistakes on the finished job. I made 4 duplicates of the labels and 8 logos (the latter in case you might need them elsewhere on the car). My finished artwork looked like this in fig. 2.

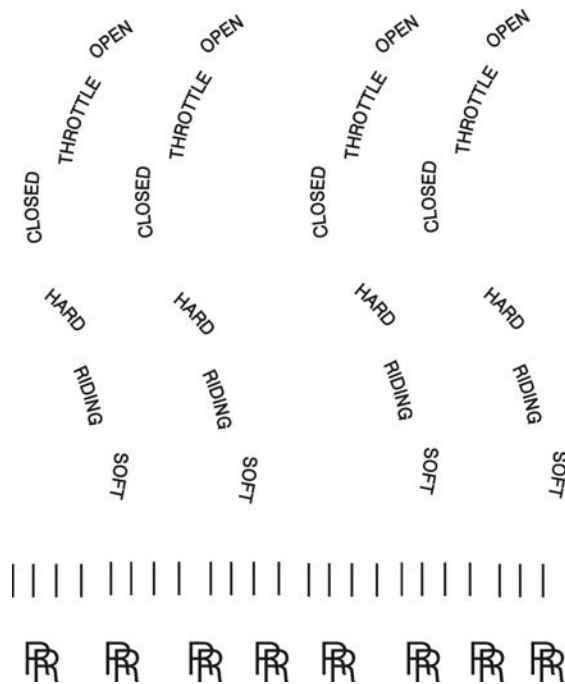


Fig.2

Time to bring in the expert. The artwork now needs converting into the transfer. I found the cheapest and quickest to be based in Canada (www.allout-graphics.com). This guy needs the artwork in a format that he can read and the drawing package should be able to 'export' your file to his requirements (if you're technical the file type I used was Illustrator 9 for Mac) but he will advise what he can and can't read. He charges by the size and number of colours used but in this case they are all white so only one colour. Be sure to specify this since your artwork will be in black. See the sizes on his web site for pricing. I used 6" x 9" and it cost about £27 including tax and postage after exchange conversion. Payment can be made by credit card either over the phone, by fax or email.

Whilst the transfer is being produced the steering boss can be prepared. Strip off the old paint back to the bare metal. Clean thoroughly to remove any stripping chemicals then clean with thinners. Using aerosol paint give the boss a couple of coats grey primer, leave for 24 hours, rub down with fine grade wet and dry then give it two or three coats of black gloss as required. You will find that the original engraving will have almost gone – it being filled with paint. Leave for about a week for paint to cure. Matt the gloss back using fine wet and dry or Scotchbrite pad.

When the transfers arrive they will look like Fig. 3. The transfers are on the underside of a translucent sheet to which is attached a protective paper backing to stop the transfers coming off accidentally.

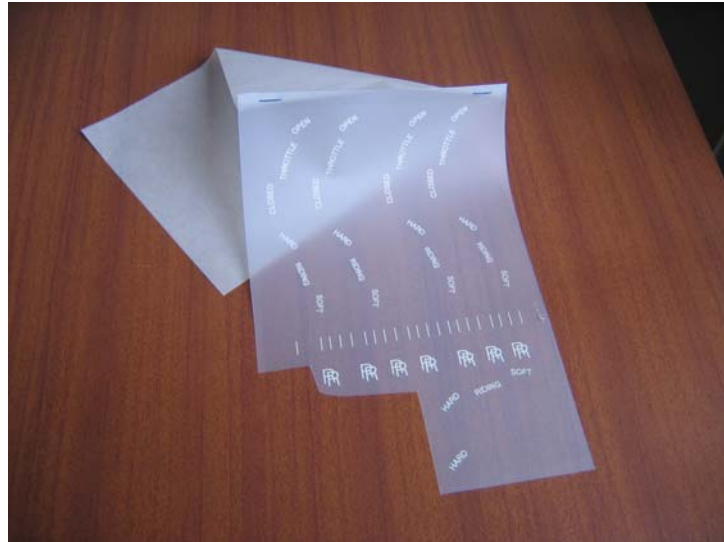


Fig. 3

Before fixing the transfers make sure that the paint surface is clean and dry. Wipe over with cloth dampened with meths to remove any grease or dust. Cut out each transfer leaving a couple of mm space around the lettering. This is where the steady hand comes in! Use a bit of low-tack sticky tape (not ordinary Sellotape) and fix to the edge of the transfer sheet that you have just cut and place it over the original engraving and tape down to the boss to hold steady. The positioning of this is probably the most difficult part and I had a couple of misfits. However since you have more transfers than you need you can simply rub off the transfer from the boss using your fingernail (nothing harder since you will damage the paint). To fix the transfer use an ordinary pencil which is not too sharp, write over the letters one by one which will transfer them from the backing to the boss. Do this with each word, logo and indicator line. Try not to scribble the pencil over the whole word since you will transfer excess adhesive around the letters which will show. Fig. 4 shows one of the words transferred and one which is positioned with the backing still in place and Fig. 5 with the low-tack tape holding in place.



Fig. 4



Fig. 5

Finally when all transfers are fixed it's time to finish the job. Remember I said that this process is not permanent. The transfers you have just fixed could easily come off by a scratch of your nail so to make them permanent the whole boss must now be sprayed with clear lacquer the type which is used for the finishing touch on metallic paint jobs. Two coats spaced 30 minutes apart will give the boss a brilliant shine and seal in the transfers. Fig. 6 shows the finished job.



Fig. 6

If you have a Wraith you can short-cut the artwork bit by emailing me for the one I used (john.green at greenholdings.co.uk). This can then be sent to the transfer maker by email.

Of course you can use this method for any of the switches on the dashboard also but a simpler method for this is to use the computer to prepare the wording as described above but set the lettering on a black background with the lettering in white. This can then be printed onto a sticky label which is then 'laminated' with clear tape for durability and simply stuck over the switch backplate as in fig. 7.



Fig 7.