

The early Morris Minor Coachbuilt Saloon bodies

By Mike Houston



1930 Season Morris Minor Coachbuilt Saloon (Morris Motors image)

This short paper is designed to highlight the early development of the Morris Minor coachbuilt saloon in an era of rapid change in engineering development and technique. The small saloon market was a vital one to an ambitious company, but W.R Morris, later Lord Nuffield was acutely aware of the need to keep down cost. This factor alone, made even more important by the economic depression, was behind many of the changes, as were the advances in engineering capability. Amazing reductions in price were achieved in a few years partly by cost cutting, partly by the benefits of rapidly increasing output. These changes were brought home to me by the ownership first of a 1930 saloon, (with decayed body!), followed by a very early 1929 body. At first the differences were mildly interesting, but then became more absorbing. The following attempts to cover hopefully most of them.

The term 'Coachbuilt' tends to be regarded these days as applying to the exotic bodies adorning Rolls Royces, Bentleys, Bugattis, etc. However this belittles the efforts of the mainstream manufacturers of the time. The sheer effort and man hours which went into the production of the small car of the time is quite amazing, and of course man hours cost money. Little wonder then that most of the early development went into simplifying the assembly procedure. The early chassis and running gear were little changed, and well documented, but some of the changes, and the savings, took place in the body and its fittings as the prices were reduced with the rapidly increasing output of the time.

So a good place to start is with the actual body shell. This largely comprises the rear 'tonneau', the main part of the body taking in the side and rear windows. This seems to always have been manufactured from three pressings. However the first of the 1929 bodies had plain sides and

back, and the decorative aluminium waist moulding was separate, in three pieces, and attached by ten substantial screws either side and eight across the back. A total of 28 screws to be laboriously inserted into the moulding and correctly aligned with pre-drilled holes, the rear ones going right through the main frame under the rear window. The side nuts were separated from the metal shell by thin ply panels. Contrast this fiddly procedure with the later '29 onwards mild steel panels which had the moulding stamped into them at the Pressed Steel factory. These early bodies were the PO series, followed quickly by the MP series, of which more later.



L.H. image shows the two seams resulting from the coming together of the three separate pressed body panels on the 1929 body, while the R.H. image of the late 1930 body shows no such joins or seams.

Thus the panels themselves differ from early to late. Furthermore the three panels were welded differently. The early ones were seamed to the inside which were turned and welded, and a cover moulding piece welded, maybe in one operation, over the top. Thus the cover piece is visible inside the body. The seam is visible from the outside as a depressed line running down both rear quarters. On the later body there is no evidence of the panels being welded either internally or externally. The joining line only becomes visible when considerable force is exerted across the join, when the line of the join becomes clearly visible. Which begs the question, how were these later panels joined? Most likely appears to be the use of the Flash Welding technique. The panel edges would have been brought together very accurately in a jig, and a high current 'flushed' across them, thus fusing them. These production techniques are worth further research.

It is interesting to note that the door skins and the screen surround panels had the pressed mouldings from the start. Also significant is the wheel arch formation, of which there is more below. One final point concerning the rear of the shell is the shape. It would appear that during the changes noted earlier the outline of the rear changed slightly. The rear became slightly more rounded towards the bottom when viewed in profile from the side.

The body frame itself looks at first to be identical, but there are differences. In all probability the coachbuilt saloon frame was developed from the earlier fabric saloon which predated it. In the earlier coachbuilt body the rearmost roof support was packed upwards at the point it meets the cant rail in order to fit and support the curve of the metal apron panel. Also the upright at the rear of the side windows was packed out in order to meet the line of the elbow rail beneath the window. This entailed fiddly work to achieve, and it could not have been too long before the hardwood patterns to produce the frames were altered to pad out these areas, thus cutting out the rectification work. The early frames incorporated wooden wheel arches of an inch thickness, apparently band sawn to shape from flat sawn ash in the wood working shop. To

complete the arch they had metal inner and outer pieces nailed into the wood. The later bodies had metal arches stamped into the side panels, again eliminating labour and material costs. The upper frame was later supposedly sprayed a red oxide colour, the base being black. However there is no evidence of this colour on the very early frame that I have seen, it being a uniform black.

Mention was made above of the side elbow rails. These altered between the '29 and '30 bodies, although I don't know exactly when, as did the below window rail in the door frame. This was to accommodate the changes in the window clamps to secure the sliding windows. The earlier car uses a 'Widney' eccentric cam with nickel plated operating lever to raise the window channel upwards at the centre point, thus jamming the glass panes in place. This required an almost full circle cut out of the aforementioned rail to accommodate it. The following year came the 'Widney clamp', patented in 1930. As its name implies this featured two metal, (I've seen both brass and ferrous ones), clamps sitting on contra threads which are drawn to each other by rotating a round knob (chromed brass?), thus clamping the glass through the runners from the sides. Again I would think cheaper to produce. The earlier lever type was fitted with rectangular escutcheon, or cover, plates. The round variety had a triangular type of plate. Both were produced in brass, and some were chrome plated.



The Widney Eccentric Cam from the 1929 body while the Widney Clamp was used for the 1931 season cars.

Another body fitment to change was the hinges. The earlier bodies sported three substantial brass hinges on either side, plain with no name. These had a two into three leaf arrangement with a substantial peened pin through the centre. Thus there was no method of adjustment for fit meaning that the initial fit had to be spot on. The indications are that these hinges only went on the very earliest bodies. The later hinges are cast by 'Beatonson'. They are of similar construction to the old railway carriage hinges, the lower supporting part on the body, and the upper part on the door. The upper sits on a brass ball cupped between both parts, connected by a pin with a keyway in the bottom. A spring is placed in the bottom part of the hinge, then a securing tab washer fitted into the keyway, then the lower nut secured by folding over the tab. Rounded washers can then be used to fit under or over the brass balls for adjustment. These hinges are each individually numbered, presumably to assist in the ordering and fitting process. The nearside numbers are: - top 25 – middle 27 – bottom 29. The offside numbers are: - top 32 – middle 34 – bottom 36. Aesthetically the brass hinges have, I think, the better appearance looking less bulky. There may have been supply issues, or it might have been thought that with the heavy saloon doors the brass might have worn quickly? Again cost, and continuity of supply, may have played a part.



The R.H. image clearly shows the differing types of door hinge used – the early body was fitted with the substantial plain hinges (top) while the 1930 body was fitted with the numbered 'Beatson' type. The L.H. image shows the pins and fitments for use with 'Beatson' hinges.

What has always been of interest is when exactly did the building of the coachbuilt saloon commence? In a footnote to his excellent *Vintage Minor Genome*, Ian Grace states that chassis M15178 was fitted with the 33rd coachbuilt body, which is known to be body MP133, built 19/10/29-22/10/29, (although the *Genome* shows ch.no. 15081). He conjectures therefore that coachbuilt production started at around ch.no M15000, which would have had a start date around 17-18/10/29, and that saloons earlier than that were fabric bodied. However there are some earlier chassis shown on his excellent chassis database which are shown as coachbuilt. Furthermore two of them have body numbers in the PO series. The earlier is ch.no PO30 on chassis 14501 built between 7/10/29 and 10/10/29. As with this number it probably wasn't the first it seems reasonable to assume that the first of the PO bodied cars was probably built from around 1/10/29. A further pointer to this might be indicated by the fact that the MP series appeared to start at the number 100. Could it be that the first coachbuilt saloons totalled nearly 100 in the PO series? The fabric saloons appear to have had bodies numbered in a straightforward M series.

However research in this area is hampered by possible anomalies, probably where body swaps have occurred, and alterations made. For instance body number PO40 appears on a late November chassis, 15596, but there is probably a rational explanation for this. I would contend that the very first coachbuilt saloons were probably a little experimental. They were probably modified fabric frames, and using the first Minor pressed panels. They would have entailed a lot of work to get them produced and would have been subject to constant modification and update. Those early bodies were given the PO series numbers. However it appears that that situation only lasted just over two weeks. The improved pressings arrived, and with the other updates, they commenced the MP series of bodies which continued. I would imagine that MP probably stood for Metal Panelled, although you then wonder what PO stood for. (Prototype perhaps? There are many other early anomalies which I haven't covered such as chassis mounting plates, scuttle frame bracing, hood and trim etc.

In conclusion I can only hope that these few pages have not been too dry and have shed a little light on the early days of the coachbuilt saloon. It was a name it truly deserved because a lot of those early coach building skills went into making each one, (plus in excess of 500 tacks and pins). However for each question apparently answered, more are raised. As has been noted before, changes occurred during production runs and not necessarily for the annual model

updates. Thus it is difficult to be certain when changes did occur. If there are any more of the PO bodies out there, or very early MP bodies, I would be very interested. The body number is stamped into the centre of the cross member above the rear heel board.

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