



The M1 arrives on a BMW delivery truck, with a MINI painted on the outside – as a disguise?

A MUNICH LEGEND IS REBORN

— THE STORY OF '255 BMW'

It's probably up there with one of the most exciting phone calls I've ever received at Munich Legends. 'Would we like to restore BMW UK's famous M1 '255 BMW'? Yes, we would. 'Can we have the job completed in three months, in

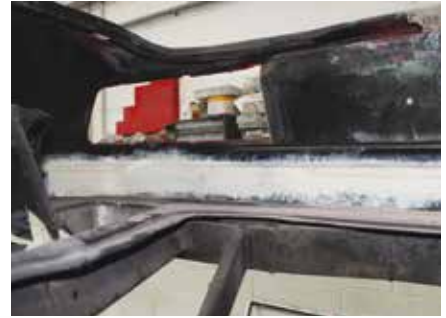
time for the centenary display at Goodwood?' Yes we can.

For anybody whose business is the restoration of classic BMWs, there is no more prestigious commission than to restore an M1

for BMW themselves, and in such auspicious circumstances. But there is a double edge to a project of this calibre. There is no room for error or omission. And there is no compromise on finish dates. If it's not ready on time, there will be a big, M1 sized gap on the BMW stand at Goodwood, come show time.

There's always that question: how far do you go? Usually defined by budgetary parameters, this is one client for whom the finished result is more important than the financial imperatives. Then there's parts supply. BMW themselves have very few parts on the shelf and most of those are so old, they're unusable. Being asked by BMW to source specialist parts is always going to produce something near a smirk, but then the serious business of scouring the world for the right components and suppliers begins.

The decision was made to carry out a full 'nut and bolt' grade restoration, renewing or refreshing every single component from the smallest rivet to the complete suspension lay out, fuel and brake lines and systems to interior trim, engine, body and everything in between. We quote, we get the go-ahead. The purchase order comes through on BMW headed paper. Its game on!



It's always worse than you think! Rear bumper is removed to reveal a huge fissure the length of the rear panel. The split is 'V'd' out, ground, roughened up for the glass fibre to be keyed on to the split. Firstly a course layer of fibre glass is added for strength, then a finer layer of mesh is added to give a perfect cosmetic finish. It is then coated and primed ready for paint.



The workshop team immediately begin stripping the car and reporting back to BMW as to the condition. With an M1 it's the bits you can't see, the panels being fibre glass and therefore non corrosive. Even with the car in the air, very little is visible due to the whole underside being flat panels. The main body panels are peeled off, the underside covers are removed and the space frame begins to reveal itself.

Headlights were another known quantity. As they are one of the first places the oncoming weather impacts on the car (and they seem to be designed to retain water) they are in bad shape. These can be got to work on straight away while the rest of the car is stripped.



One known issue was the heavy corrosion in the lower part of the doors. The doors are immediately sent to the body shop to be stripped, re metalled, primed and made ready for painting.



The tubular space frame and box sections are the main structural aspects of an M1. They're almost completely hidden from view, so it's only once the car comes apart you can see any damage or deterioration. In many ways this is the most vital part of the restoration. Once the car is back together, the space frame is hidden again, and the structural integrity of the car relies upon this job being done properly, to last at least another 35 years. The metal structure is stripped of paint and inspected, revealing significant corrosion. The affected areas are re metalled, treated and primed. The rest of the car is then covered with protective film and masked up, and the whole space frame can then be painted in the correct factory finish.



Finally the main car is primed and ready for painting. A base coat is applied for the colour followed by a clear PPG lacquer to give depth to the finish and protect the paint. A decision was made to use a modern paint process for longer durability and better finish



The painted shell arrives back in the main workshop on its specially adapted trolley. The refit can begin, but more than any other car the M1 is fragile in this state, so watch out! Is it a race car or a pick-up truck?



The engine is hung on the hoist and gently lowered in to the engine bay. This takes an inordinate amount of time to guide correctly, and three men. As the engine strains on the chains of the hoist, it is raised past the fragile fibre glass – freshly repaired and painted – rear panels.



The inside of the engine bay is masked up to protect the newly restored interior from any minor scratches or damage as the engine is inched slowly into place.



Meanwhile that fabulous M88 engine is tested, stripped and examined. Compression tests reveal poor figures so the decision is made to strip the head and investigate the reason. Closer examination reveals that the valves weren't seating properly due to excessive carbon build up. The valves were removed, checked and measured, cleaned and relapped.



The engine can now be rebuilt using all new seals, gaskets and other ancillaries, with every component restored to its original factory finish. This is what a race engine looks like in a road car, complete with trumpets!



The transaxle - gearbox and differential - are now ready to be mated, having been fully overhauled, resealed and refinished. Best not get that toothbrush mixed up at home!



Finally the engine is seated precisely and can be mated to the transaxle. After a stressful stage in the project, the engine bay is starting to look complete as wiring and plumbing is carried out.



The front compartment of the M1 begins to be assembled and connected as the cooling system is installed and the fuse box and electrics are connected up. The M1 cooling system is of course a one off for BMW, as the radiator – mounted up front – has to send and return coolant to the engine mounted in the rear. As the pipes run through the cabin, every millimetre has to be checked and rechecked. M1s are notorious for coolant leaks inside the car, which require the interior to be stripped to trace the problem.



The seats are returned from the trimmers, having been re-stuffed, the bolsters repaired and the leather and fabric treated. The aim was to keep strictly to the original, so it was decided to restore the interior rather than replace it. Great care is taken to clean and inspect every inch of the interior, rugs, trim and switch gear, to ensure it looks as good as the day it left the factory.



The rebuild nears completion, it's time for the brakes to be fitted and connected along with checks on all fluid hoses and lines. Then the undertrays and covers will be fitted, and the magnesium Campagnolo wheels, freshly back from the specialist refurbishment, finally make the M1 a movable beast.



The engine bay is complete, the engine has been timed and tested, new heat shields are in place, we're now looking at a running car.



James puts on the finishing touches. Every aspect of this restoration has to be perfect, so even studying archive photographs for the exact spot for the stickers takes time - engine bay, front compartment and of course the iconic M1 sticker for the tail gate. Steady, James!



Official transport arrives to take our baby off to its first show – straight to the biggest event of its life, the BMW centenary at Goodwood



And it's there! Three months of sweat, toil, and yes, tears. Finally the M1 takes pride of place on the fabulous ///M Avenue at Goodwood Festival of Speed.



The boys take a bow. Mick and James get their lives back, and bask in the warm Goodwood sunshine in front of 'their' M1. Fancy another M1 project lads? Maybe a little break first....

