

ENTHUSIAST'S RESTORATION MANUAL SERIES

November 1952 when Reliant exhibited a Regal Mk I at Earls Court in London. With a few modifications, the car entered production in 1953. Incidentally, it's said that the Regal got its name from the fact that it first appeared in the same year that Queen Elizabeth II was crowned. For many years, Reliant had been building 3-wheeled commercial vans which had the front wheel mounted amid two forks, like a motorcycle. The Regal, however, was the company's first vehicle aimed at family motoring. The Mk I had an aluminium body that was fixed onto an ash frame, which in turn was mounted to a steel box section chassis. Unlike the Regal's predecessors, the steering wheel now operated a steering box that controlled a front wheel supported by a rear-pivoted leading arm. Around 149 Regal Mk I models were sold, and only four are known to survive today. In 1954, the Regal Mk I was replaced by the Regal Mk II.

The Regal Mk II was essentially the same as the Mk I but was an improved design. The car no longer had a cast grill over the air intake, and the Reliant emblem on the bonnet (hood) now had a design that was drilled out rather than being solid. It was claimed that the Mk II could carry four passengers in comfort, though only if no one was actually taller than 5ft 2in (159cm). Powered by the same 747cc side valve engine as the Mk I, the Regal had a good dose of power when compared with other 3-wheelers at the time and, with its top speed of around 60mph (96 kph), could match the power found in many 4-wheelers. The need to stick your arm out of the window when you turned corners was also eliminated, as the Mk II was fitted with trafficators on the wings.

By 1955, Reliant had discovered the benefits of fibreglass (strength and light weight), and the Regal Mk II now came with a fibreglass top, and a fibreglass bonnet and rear end. The first all-fibreglass vehicle, the Regal Mk III, first appeared in 1956.

The Mk III still had an ash frame, onto which the fibreglass sections were mounted. The plastic clip down, side windows were replaced with sliding door windows, and flashing indicators were fitted. The interior of the Mk III is quite snug and, as attractive as the Mk III is, getting into one when you are tall is no easy task. It seems to me that Reliants were designed for tall people with short legs and long bodies, rather than long legs and short bodies, myself being the latter. By 1958, things were continuing to move



A 1953 Reliant Regal Mk I (in the National Motor Museum, Beaulieu, UK).



A 1954 Reliant Regal Mk II.



A 1957 Reliant Regal Mk III.

forward and Reliant introduced the Regal Mk IV.

The Mk IV, which was the last Reliant to feature a soft-top option, now featured 12-volt electrics, an air filter had also been added to the engine, the suspension and steering linkages were redesigned and, for the first time, this was a Regal that had winding windows. The Mk IV had quite

large doors due to the surprisingly good amount of headroom the car offered and, as the result of the engine being moved forward slightly, had more room inside. The Mk IV was only produced for just over five months, and around 1300 vehicles were made. Today, with only three or four vehicles known to survive, it's now as rare as the Mk I.

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The body inside the wings should be fairly smooth. Rough fibreglass work like this indicates past damage that has been repaired.



If a roof rack is fitted, ensure there are no leaks inside.



From the same vehicle as shown above, you can see a number of cracks along the wing and patchy repairs. Chances are that damage like this is going to involve a lot of work to put things right.



"Honey, guess what I've bought!" In some cases a Regal really is beyond economical repair, but may still be good for spare parts.



Watch out also for damage around the door handle, as this could weaken the handle mounting points.



Finds like this 1973 Supervan III will require a lot of patience, time and money.

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the wheel. Also, don't forget to mask off the exhaust if the engine is in place. Inside the engine bay, mask off the whole area with an old sheet. If necessary, mask off the door openings with a sheet of plastic, and, inside the car, mask off the dashboard, windscreen and immediate floor area with newspaper. You may also have to mask objects immediately around the vehicle as spray will get carried in the slightest of breezes. Also ensure the vehicle is on a plastic sheet, when painting my Regal I also painted part of my girlfriend's gravel drive - she was not very happy! Once everything is masked, wipe the car with a tack cloth (a sticky cloth that will remove any powder residues) and finally a fine cloth that has been dipped in thinners/spirits to cleanse the body and remove any dirt, grease or silicone that may contaminate the paint.

PLANNING THE PAINTING

Before you start painting, it's important to think about how you're going to proceed, and about the items you'll need to do the job. Unless you're going to get the car sprayed professionally, using either two-pack or cellulose paint, the chances are that most paint jobs done by enthusiasts will be using a cellulose paint. Two-pack paints have a long drying time and they are highly toxic, so require the use of suitable breathing apparatus that is often beyond the reach of most enthusiasts. Although two-pack has a very high quality gloss finish, cellulose can be cut to give an equally superb finish and, unlike two-pack, it dries fast. As the paint pigment in cellulose is not as dense as that in two-pack, a good cellulose finish will require at least three coats of paint. So, while you need to think how much paint you'll need, you also need to consider where you will buy your paint from. A lot of auto-centres sell every colour imaginable in spray cans, but as most of these are either 330ml or 500ml, you would end up buying dozens of cans. It's worth noting that some spray cans can actually contain as little as 25% paint, as the rest of the can is made up of thinners and propellant. These small cans are not really designed to spray a whole car and, essentially, are just for touching up small areas.

The most effective way to buy cellulose paint is by the litre from a paint specialist, who will either have the colour you want on the shelf or, for a bit extra, mix up the required colour. Buying paint by the litre may sound expensive initially, but remember, you will also need to add thinners. As the ratio of paint to thinners is about 50/50 this means that a 2 litre

can of paint will actually double up to 4 litres when mixed with thinners. On my Supervan I used 3 litres of cellulose paint added to 3 litres of thinners, and this allowed me four coats of paint. Most paint specialist can also provide a small quantity of the same paint in a spray can, which is ideal for touching up.

There are a number of types of thinners available for use in a variety of conditions. Fast thinners are designed to evaporate quicker in a colder environment, while slow thinners will ensure that, in warmer conditions, the paint doesn't dry too fast. There are also antibloom thinners that will help prevent blooming and blistering before the paint has had time to dry. This type is ideal in colder conditions.



Buying cellulose paint and a large can of thinners is much more cost effective than buying several hundred aerosol cans.



To ensure you have the right colour, test it on a model ...



... or paint a section that you won't see, like the brake cowling.

EQUIPMENT

There are a multitude of sprayers available, though it's always wise to buy (or borrow) the best you can. While electric sprayers are good in their own right, they can be very slow for painting a car as they often have a low output. The ideal tool is a good capacity air compressor (anything under 25 litres can constantly run out of air and will need to recharge while your paint is busy setting).

There are two main sorts of spray guns: the gravity-fed type, where the paint sits in a bowl above the gun and drops into it; and the pump action spray gun, where the paint is in a canister below the gun and, once the can is pressurized, paint is forced up to the nozzle. Each works equally well. **Note!** - It's essential to ensure that you have a water and oil trap attached between the airline and spray gun. This will capture any water and oil stored in the air chamber. A water trap is more important if you're spraying outdoors, as the compressor will suck up water from the atmosphere. If you're spraying outdoors, the ideal temperature is



If using an air compressor, use a powerful one, and fit a water/oil trap on the pipeline.



Remove the selector forks.



Remove the reverse gear lockpin, tap out the reverse shaft, and lift out the reverse gear assembly.



Pull out the main cluster from the end of the gearbox ...



The laygear shaft can be withdrawn along with the main shaft assembly that goes through into the bell housing.



... making sure that the centre bearings are not damaged.

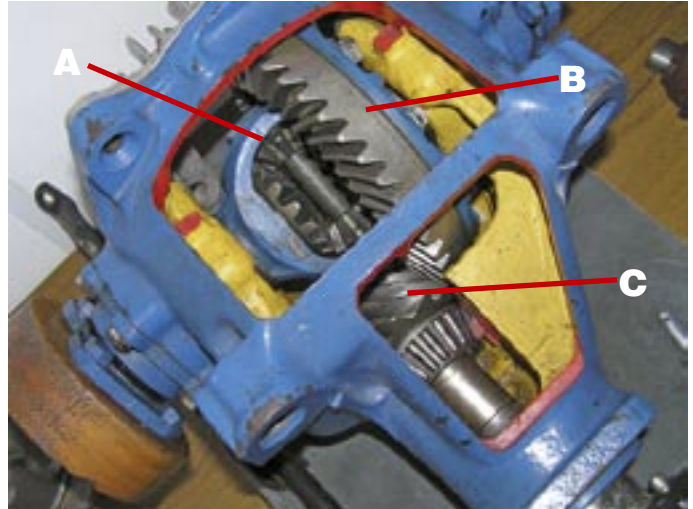


Lift out the main shaft.

REAR AXLE, PROPELLER SHAFT, & WHEELS



The differential bearings are held behind a retaining plate. Removing the four screws will give access to the bearings.



... better shown on this demonstration axle with the addition of the pinion.
A - Differential pinion; B - Crownwheel; C - Pinion.



The rust inside this axle is a result of the oil level never being checked.



Remove the lock pin (A) and then press out the differential pin (B). The eight rivets around the crown wheel need to be faced off and drilled out.



With the outer casing removed you can see the position of the differential case, pinion and crown wheel. This is perhaps ...



Unbolt the four bolts around the coupling flange to release the pinion assembly from the axle housing.