

Improving the look of your GKN wheels

by Syd Gallagher

With a little time and effort, you <u>can</u> improve the look of your Triumph GKN alloy wheels.

As with all DIY motoring projects, you should only try this one if:

- ? You are confident in your abilities;
- ? The material worked on is sound;
- ? You are comfortable working with power tools;
- ? You are able to work with awkward shapes and weights;
- ? You use appropriate personal safety equipment;

If you are in doubt, consult someone you trust to assist or advise you.

GKN (Guest-Keen-Nettlefold) supply alloy wheels to British vehicle manufacturers. GKN 5 spoke Pentacle Star alloy wheels were fitted to the Stag and the 2500S and the 8 spoke wheels fitted to the Dolomite range. The Pentacle star wheel was not unique to Triumph vehicles, they were also fitted to later MG sports cars, particularly the MGC V8 models, and Jensen-Healy, GKN later manufacturing a specific wheel for the Jensen. GKN also manufactured alloy wheels for the Rover 2200, 2600 and 3500 (SD1 & SE) range. The SD1 with a number of 6 cylinder variations replaced the 2500S in the late 70's.

My comments apply equally to the 5 and 8 spoke wheels.

The alloy wheels were factory coated with a heavy polymer varnish to preserve the polished raw alloy and the black paint applied to the spokes, This was to limit the amount of alloy corrosion on wheels destined for the UK home market, European and North American markets to particularly counter the effects of salt and grit used during severe northern winters.

With our milder climate, the coating is likely to suffer from sun damage, breaking down to the extent that the coating becomes opaque, takes on a "nicotine" colour, the polished alloy appears dull, and the coating cracks and flakes from the alloy surface. This will allow moisture to penetrate beneath the coating and corrosion sets in, in severe cases pitting the alloy and possibly rendering the wheel useless – particularly around the tyre bead-sealing rim.

You will need the following;

- ? A clean, clear workplace.
- ? Safety glasses, disposable gloves, earmuffs and NO loose clothing.
- ? A firm work surface.
- ? Good quality degreaser, 100% liquid hydrocarbon is the best.
- ? Household Paint stripper and narrow paint brush
- ? Power drill and suitable wire wheels.
- ? Three grades of waterproof emery paper.
- ? Steel wool, I find the "Steelo" pink soap pads from the kitchen to be ideal,
- ? Metal polish (Meguiars or Brasso) and suitable polishing cloth
- ? Gloss Black enamel paint
- ? 2 kg can of elbow grease!!

You can improve the looks of your GKN wheels at home, and whilst the work is easier and lighter with the tyre removed from the rim, with care, it can be undertaken with the tyre in place. For cars in daily use, one wheel can be completed at a time, allow 4 to 5 hours per wheel, not including paint drying time.

If you undertake the job with the tyre on the rim, take care not to damage the tyre with paint stripper or abrasive material. Paint stripper can affect adhesive wheel weights, so ensure paint stripper does not contact the adhesive. One solution is to remove the weights and have the rim balanced later.

How do we do it? There are five steps to improving the appearance of the wheel

? STEP 1 - CLEAN THE WHEEL!

An obvious point, let's start with the spare, remove the wheel from the vehicle and thoroughly degrease the inside and outside of the wheel, particularly around the wheel stud holes and the centre hub that contacts the stub axle. Wash the wheel thoroughly and scrub the inside part of the rim. The inside should be black paint.

Dry the wheel and take it to the workbench, remove the centre plate and securing spring steel. Mask the tyre valve stem with several rounds of masking tape. Wear disposable rubber gloves and safety goggles. Divide the wheel into quarters and brush a liberal coating of paint stripper to the entire quarter, coated alloy and painted sections **ensuring you minimise the amount of paint stripper on tyre and tyre valve.** You will observe the coating on the rim and unpainted alloy will start to bubble and lift almost immediately and the majority of the affected coating will lift away easily, more

than likely exposing a quite bright alloy rim. The painted section takes a little more work as the paint stripper will work on one coat of material at a time. Simply add more to the painted surface, and when the paint bubbles lift the material away. I use a selection of lolly sticks with sharp-cut edges and later a scraper for stubborn paint spots, believe me there will be some stubborn areas.

Repeat this process on the remaining three-quarters of the rim until all areas of coating and paint have been removed. Do not bother to try this on the centre disc, it won't work, and the disc can simply be polished later. Inspect the wheel for corrosion and pitting, most pitting and corrosion – identified by a white, chalky residue will respond to a decent effort with a drill mounted wire brush.

? **STEP 2** – WIRE BRUSHING THE ALLOY

Time for safety goggles, ear muffs and caution when using power tools. Select a drill mounted wire brush, 3-inch diameter, starting with the centre of the wheel and **working parallel with the rim** commence to polish the alloy surfaces. Remember, the alloy can be easily scored and if you overwork an area you will spend more time that is necessary to remove the scoring. It is better to go back over an area lightly, than attack one area heavily! Check your work regularly and try to apply an even pressure. Remember, the brush will shed small strands of wire, eye safety is a must. The alloy wheel has minute striations running around the rim and spokes parallel with the rim, you will flatten out the striations on the rim, this is the desired result.

? **STEP 3** – SANDING THE ALLOY

You need waterproof emery paper and water, this is a messy job and your work will be coated with dirty water as you smooth the alloy surface. Use a heavy grade of paper and progress to the lighter grades as the alloy, particularly the rim, polishes and brightens. This may take several hours depending on the state of the alloy, the amount of wire brushing and your patience! Finish with a light grade of emery and you will start to see a bright result.

? **STEP 4** – POLISHING THE ALLOY

The light grade of emery will leave the rim and unpainted spoke area bright. To obtain a high gloss, use damp Steelo, the pink soap ones are best, following the line of the rim continue until an even, satisfactory gloss is achieved. This may take several pieces of steel wool and again, is a dirty job, but the lubricated steel wool is an essential component of the polishing method. Dry the wheel, and start the final polishing with a suitable material pad and abrasive polish like Meguiars Metal Polish or Brasso, again following the line of the rim. Polish a small area at a time, again, the residue will be black as the abrasive polish does its work. Buff the polished area to a high gloss; repeat as often as desired, the more polishing, the better the result. Hand polishing is best, but if you are confident to try a drill mounted buff, do so, the result may be the same for less effort.

? **STEP 5** – PAINTING THE WHEEL

You are reaching your goal! I recommend a good quality gloss black enamel and decent brush, a 1" brush is adequate. Brushing the paint is simple and less complicated than attempting to mask and spray paint the rim, the brushed paint is more durable and chip resistant that spray paint. Thoroughly wipe over the areas to be painted with a tissue dampened with turps and allow to dry, this will prevent paint reaction from elbow grease!!! Usina another wheel, or the picture at page one as a guide, paint the spokes and centre area ensuring you avoid runs through the stud holes and the sectors adjacent to the rim. Do not overload the brush, as you will be giving the blacked out areas a second coat for depth and durability. Take care to avoid smears on the newly polished areas, wipe off with another small tissue pad dampened with a little turps. If you are adventurous, you can easily mask off the extreme outer edge of the rim on the five-spoke rim and paint a black line around the machined, flattened rim edge. Following the paint directions, give a second coat.

Take your time with the painting bit...it will make all the difference to the look of the wheel, avoid runs, smears and thinned areas.

The titanium wheel nuts can be spray painted gloss black to add that finishing touch.

? THE LAST BIT

Now that the paint is dry, go over the rim again to give it that final polish and refit to the car. There is no need to attempt to varnish the wheels, as the exposed, polished surfaces require little maintenance. I generally polish the wheel rims with Steelo at every other car wash to maintain the bright look. Disc pad dust will affect the polished surface and, if left, can lead to minute surface corrosion and discolouration.



The finished result, together with decent tyre paint (although I prefer to polish the tyres with black shoe polish) will lift the look of your Triumph. Five wheels can be done with a couple of weekend's work and at less than \$20 for material – or you can take the job to a professional at \$200 per wheel.

There is no reason why a reasonable condition wheel can't be changed into a Concours standard wheel. GOOD LUCK