M45 Tourer Screen Frame Advice

Written by Mark at Aug 07, 2019 9:15 am

I need to strip down the screen frame on my M45 tourer for rechroming and glass replacement.

As far as I can assess the top rail and sides do not come apart and would be rechromed as one piece. Is this correct?

If so,then I have to remove the bottom curved rail to remove the glass. There are two steel screws on each side about 30mm from the base and what looks like a 'brass dowel' in each bottom corner but no slot for unscrewing this.

I have drilled out the steel screws as they were heavily rusted but the frame remains solidly together!
I am now considering drilling out the 'brass dowel'. But am I correct in doing this?

As ever advice gratefully received
Regards
Mark

Re: M45 Tourer Screen Frame Advice

Written by Mark at Aug 09, 2019 2:44 pm

Well, I have made progress.

Firstly the 'brass dowel' I mention above is actually the way in which the end of the channel is closed off and plays no part in holding the corners of the frame together. So it should not be drilled out!

The bottom corners are secured by steel angle brackets. Drilling the two steel 2BA screws out on each side should enable the bottom curved rail to come away from the top section. However, the steel angle brackets rust in place making it difficult to separate the bottom rail from the uprights. Using a soft drift and tapping gently it eventually comes apart.

You are then left with the steel angle bracket remaining in each side of the bottom rail. The problem is the steel bracket having rusted and expanded through 86 years is stuck fast in a small box section! So lots of WD40 has been applied and we will see what happens.

If anyone has a means of removing these rusted brackets from within the box section of the bottom rail I would be most grateful for the advice

Regards
Mark

Re: M45 Tourer Screen Frame Advice

Written by bill at Aug 11, 2019 8:41 am

Try some heat with blow torch or oxy. The expansion may do the trick.

Re: M45 Tourer Screen Frame Advice

Written by h14 at Aug 14, 2019 8:47 am

I've found vinegar is pretty good at dissolving rust, even heavy deposits. Leave immersed a couple of days, check, and repeat as necessary. Some provisos. Firstly, the vinegar will attack plating if it is poor, or in poor condition. As the metals are dissimilar, there is a possibility of electrolytic action. Due to guests staying I overlooked checking a copper brake pipe with wound steel wire protective covering. After 5 days, the steel had disappeared ... Hmmm, that could be a result for you...
Laurence

Re: M45 Tourer Screen Frame Advice

Written by Mark at Aug 14, 2019 11:50 am

Grateful for both replies.

I have applied some heat but with a brass screen frame I have to be very careful not to distort it !

The vinegar option is one I had not thought of and I will try it. The chrome needs replating so any discoloration is not a problem.

Another option is to seek to cut down the length of the rusted bracket inside the small box section with a hacksaw. It would have to be a ground down hand held blade or a jig saw. However their is only about 10mm clearance so that is difficult and risks damaging the frame that is in quite good order.

I will report back on the vinegar!

Thanks

Mark

Re: M45 Tourer Screen Frame Advice

Written by bill at Aug 15, 2019 10:33 am

Assuming that I have understood the problem correctly (can you post any photos ?) is it possible to use a 1mm cutting disc in a small angle grinder very carefully ? Without applying too much side pressure one can also use these discs for grinding in confined spaces.

Re: M45 Tourer Screen Frame Advice

Written by Mark at Aug 15, 2019 5:17 pm

Hi Bill

I am having problems resizing the photos so a description will have to suffice.

The bottom corners of the screen frame on the M45 tourer (and other models with a T7 body) is held together in a mitre by a small right angled steel bracket. This fits inside the brass upright and the bottom curved rail. It is held in place with 2BA steel screws which are countersunk into the brass frame.

On the bottom rail it actually sits (and rusts!) inside the rectangular box section formed in the bottom rail. This box section has internal dimensions of approx 10mm wide by 18mm deep.

It may be possible to get a hacksaw or jig saw blade down in the box section to cut through the remnants of the rusted bracket. However, I cannot see how a Dremel driven cutting disk could be used but one of the small grinding attachments might help.

The main issue is to not damage the brass screen frame so the first option is a soaking for several days in vinegar as suggested by Laurence.

If that fails then more aggressive solutions will be tried! Progress reports to follow.

Regards

Mark

Re: M45 Tourer Screen Frame Advice

Written by h14 at Aug 16, 2019 9:28 am

Hi Mark,

I hope the vinegar does a good job for you. Don't forget to check daily, and every couple of days, take it out of the vinegar and wash with an old toothbrush or whatever gives good access, with washing up liquid, and rinse. Riffle around with a suitable tool to break away detached rust and debris, rinse and dry, then back in the vinegar. This will enable the vinegar to act on fresh surfaces and speed up the job, as well as giving you an idea of progress.

Laurence

Re: M45 Tourer Screen Frame Advice

Written by bruffsup at Aug 16, 2019 9:53 am

I have successfully used molasses (trickle) to un seize badly rusted cast iron pistons stuck in the bores of an old Motosacoche engine. Like vinegar immerse for several days or longer and gentle heat may be beneficial.
