Rust RESISTANCE

John Wickersham embarks on a vital motorhome mission – to take on and beat corrosion

When I bought the Fiat Ducato chassis cab for my self-build motorhome in 1999, I had the chassis members treated internally with a rust inhibitor. Nine years later, while commercial specialists North East Truck & Van (NET&V) were fitting a new load-reactive air suspension system on the motorhome for me, the chassis and running gear were checked. And it wasn’t a pretty sight!

Several structural members on the original white chassis were developing surface rust. The rear axle tube, spare wheel cage, captive ‘spare’ and bespoke towbar (fitted in 2001) were all in a far worse state.

So, after the air suspension system was installed, NET&V spent four hours cleaning and painting the corroded areas. In practice, not a lot of remedial work can be achieved in four hours but, with the vehicle safely elevated, improvements were duly achieved.

LIFE EXPECTANCY

The fact that rust was becoming an issue on my van prompted me to wonder how long a typical coachbuilt motorhome can remain in active service? Light commercial vehicles (on which most motorhomes are based) are probably scrapped sooner when used for industrial work than they are when used for leisure purposes.

I hadn’t expected my vehicle to start corroding so quickly. Moreover, the chassis members that had been spruced up by NET&V were showing surface rust again three years later and the front cross member behind the front bumper had to be replaced in 2010. Although that wasn’t a difficult task, I had learnt that the life of these steel members is disappointingly short.

Then, 20 months later, a badly rusting sump cover also had to be replaced. Age-related issues like these need to be considered if you’re in the market for...
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In the front wheel arches of this Fiat, a plastic shield at the forward edge was removed. At first, the enclosure behind looked fine but surprises emerged later.

Near the coil spring on the driver’s side, a hole had developed that needed welding. Of course, damage like this isn’t visible if the wheels remain in place.

After thorough wire brushing, the reported ‘minor corrosion’ to the sill of the driver’s door turned out to be a disaster. Rebuild work here took three hours.

Even the rear brake drums received the close attention of a coarse wire brush. Eye protection and masks are essential for this type of work.

A ‘scrabbler’ drives thin rods to create a hammering action. The powerful percussive action is especially effective on brackets mounted in confined places.

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To gain access into enclosed zones, bungs and grommets of various sizes were removed (and later replaced). Here, the first coat of clear Waxoyl is applied.

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a second-hand coachbuilt motorhome. Those models based on an Al-Ko galvanised chassis might avoid some of the rusting problems that I have experienced, but elements aside from the chassis are equally vulnerable. However, the most serious wake-up call came in June this year.

WORK CUT OUT

After the not-unusual replacement of a hydraulic brake pipe, my motorhome passed its MOT. However, corrosion had been noted on the sill below the driver’s door and I was advised that action needed to be taken.

Rust treatment services are offered by several specialists, so I sought information about rust retarding products, application procedures and preparation strategies. Experiences reported by some other motorcaravanners were often candid and one thing was clear – long-term success is only achievable when there’s painstaking preparation.

In that dark world under the floor, there are often localised deposits of muck and mud which need to be removed. However, I dislike the use of high-pressure washers on the underside of a motorhome as they can drive water deep into rusting seams.

What’s more, underfloor products like security alarms might get damaged during an over-zealous pressure wash. I wanted ‘dry cleaning’ tactics.

It also transpired that some rust-treating specialists seldom remove a motorhome’s wheels. That seems strange because, on an older vehicle like mine, it would be a waste of time applying a treatment compound if its wheels remained in place. With the wheels removed it’s possible to gain unrestricted access to wheel arches, coil spring enclosures and selected brake assembly components. As the illustrations reveal, it’s similarly possible to remove (and later reinstate) protective plastic shields and rubberised bungs.

To elevate a vehicle and then remove its wheels, you normally need what is referred to as a split lift. This provides support even when wheels are removed and the hoist’s drive-on trackways have been lowered. Good access is essential for:

- Rust removal
- Masking-up components that should not be exposed to a rust-inhibiting product
- Effective coverage with the treatment products

As regards my project, I also needed to enlist the help of a company that would be able to fabricate and weld a new panel – just in case my cab sills were worse than predicted. Spraying over caked mud and rusted areas to hide advancing corrosion is no use at all. I wanted a specialist that could undertake all the painstaking preparations before treatment products were applied. Good workmanship was far more important to me than a ‘good’ price.

TREATMENT SPECIALISTS

During the enquiry stages, several colleagues recommended a long-established company called Rustbusters in Poole, Dorset. I knew of them from previous classic car restorations. Moreover, Steve Rowe, who also contributes to this magazine, used the company when renovating an old campervan.

Today, coachbuilt motorhomes are tackled, too, and I was advised that my 22ft-long van would typically keep two people busy for two days. A forecourt is available at Rustbusters for overnight parking and if welding work is needed, a job like mine could run into a third day. Although I live a long way from Poole, a date was duly fixed and the photographs here give an insight into the exacting challenges which followed.

CLOSING THOUGHTS

On reflection, I should have inspected and treated my motorhome much earlier. Like many motor caravanners, I probably paid much more attention to the living area than I did to underfloor components. The fact that my motorhome had never failed an MOT also gave me a false sense of security.

But now action has been taken, I’m confident that my motorhome will continue to provide me with good service for years to come.

INFORMATION

➜ North East Truck & Van – call 01642 370555
➜ Rustbusters – call 01202 524545 or see rustbusters.co.uk