

## **TAKE CARE OF YOUR CARAVAN**

This leaflet is prepared by The Caravan Club as part of its service to members. The contents are believed to be correct at the time of publication, but the current position may be checked with The Club's Information Office. The Club does not endorse the listed products and you should satisfy yourself as to their suitability.

July 2009

A caravan should give many years of trouble-free touring, but it must be afforded adequate care during its lifetime. A caravan is really quite unique; it is both a road-going vehicle and a home. It therefore deserves the same kind of attention you would pay to your car and your house. This leaflet gives general advice on basic maintenance; however, an annual service by a suitably qualified/competent engineer is essential to ensure all the LPG appliances, etc. are in safe, working order. It is not intended that the advice given in this leaflet be seen as an alternative. A current list of Approved Workshops can be found on the National Caravan Council's website: [www.nationalcaravan.co.uk](http://www.nationalcaravan.co.uk).

### **1. THE CHASSIS**

The majority of modern caravans run on Al-Ko galvanised steel chassis which, with minimal maintenance, are trouble free. The 'chassis' leaves the factory Complete Knock Down (CKD) or in other words 'kit form' and is assembled by the caravan manufacturer. A chassis can comprise four separate members, two bolted together (forward of the axle) each side or a single continuous section from front to rear each side. These are usually bright silver at this stage, and 'cure' to a dull grey on exposure to air, which completes the protective galvanising process. If the chassis members are exposed to snow, rain or condensation in this curing stage and are allowed to remain wet, then the result will be an unsightly *wet storage stain* appearing some months later. The same effect will appear if road salt is allowed to remain on a new chassis - salt attracts moisture which prevents curing. The stain is not detrimental to protection, but is unsightly.

Because the galvanising process requires exposure to air, you should not attempt to paint or coat your new chassis. A chassis properly cured by this process provides the best protection available and requires no additional treatment. However, salt is corrosive and attacks all parts including brakes, steadies and electrical or gas piping. Caravans of all ages towed in conditions where road salt has been used should always be washed down. Any holes made in the chassis will create an entry underneath the galvanising process and unfortunately the introduction of CRIS security numbering for caravans manufactured from 1992 onwards, where the 17 character VIN number is stamped into the chassis drawbar member after being assembled, may also disrupt the protection.

It is important to inspect this part of the chassis (generally the right-hand/offside front member) and use a rust inhibitor if necessary. Al-Ko advise that drilling of chassis members will invalidate any warranty (this policy reflects existing European standards where chassis and drawbars are 'type approved' and may not be altered in any way without being re-submitted for new approval certification). Because of this, if fitting a stabiliser, choose the replacement coupling head variety or, if using the conventional leaf spring kind, fix to the caravan drawbar using a clamp which bolts top and bottom of the chassis member and does not require any drilling.

Any winding mechanisms, eg jockey wheel and corner steadies, should be regularly cleaned off and *lightly* oiled or greased, do not use excessive amounts of grease on either, which will only attract dirt and grit.

A few caravan manufacturers still adhere to the traditional chassis design, using cross members, but this adds considerably to the weight of the caravan. The lightness of the Al-Ko chassis combined with the multiple-layered sandwich construction floor, gives strength with weight saving. The layers of the 'sandwich' consist of plywood (usually poplar) with an inner filling which is either white (polystyrene) or blue (styrofoam). The width of filling used varies from one manufacturer to another, but a thick styrofoam floor is considered to be superior. Sometimes the glue used in the bonding process comes unstuck and the floor becomes 'spongy' as it delaminates. This is usually over a small area and the accepted method of repair is drilling holes into the top ply section and injecting a strong glue. This job is best left to a competent professional, and if it happens early on in the caravan's life, consult the supplying dealer and/or manufacturer who may be persuaded to contribute to the cost of this work under the warranty terms.

## **2. BRAKES, WHEELS AND TYRES**

When taking delivery of a new caravan remember that the brake shoes will 'bed-in'. Bowden cables will stretch slightly and other components will settle when first used. That is why a brake adjustment is recommended at 500 miles and it is essential this is adhered to.

Thereafter brake adjustment can normally be carried out annually, but follow the recommendations set down in the chassis manufacturer's handbook. Slack brakes will allow the caravan to 'thump' the back of the car when braking, and can make the handbrake ineffective. Over-adjusted brakes will inhibit reversing and may result in the shoes binding on the drum; overheating and wear will result.

A regular service by a competent engineer will prolong the life of a caravan, keep it safe and enhance its value.

Wheels have a maximum permitted load which ties in with the caravan's quoted MGW/MTPLM (Maximum Gross Weight/Maximum Technically Permissible Laden Mass) usually allowing a safety margin. However, if the wheels have been consistently overloaded, fatigue cracks may be evident, particularly around the central bolt holes. Tyres seldom wear out their tread on a caravan, but long periods standing idle will cause sidewall deterioration and we suggest that, even if the tyres still look good, five years is their recommended safe working life, seven the absolute maximum.

## **3. BODY**

Due to the nature of today's road surfaces, it is inevitable that the caravan body will suffer a great number of shocks and will undergo a degree of flexing. This in itself should not

damage the caravan, but the mastic sealant used around joints and trims may be stretched beyond its normal elasticity and create a potential entry point for water. Prolonged hot weather may also encourage drying out. For this reason we recommend you annually check around all seams for signs of the mastic drying out, and if possible use a damp detector inside the caravan to double-check for problems. This problem certainly applies to pre-1996 caravans, which used a less sophisticated mastic which had a tendency to crack and dry out, allowing water to penetrate. After this date, most manufacturers adopted polyurethane-based sealants which should minimise such problems; however, water ingress problems are still being reported.

Any signs of water penetration must be treated right away before any lasting damage is done. Around windows, awning channel rails, grab handles, rooflights, vents and roof/body seams are favourite places for leaks to start. Ideally, if resealing areas covered by trims, the trim should be removed. Some manufacturers use staple guns to attach these items but you may prefer to replace using stainless steel screws - apply mastic sealant to any screw-holes you make and check in the caravan handbook for advice on what size screw to use (or with the manufacturer). Excess sealant should be removed using a 'spatula' which can be made from an odd scrap of plastic.

The aluminium outer panel should be kept clean and free from deposits. Frequent washing will prevent the build up of corrosive elements from the air, and this is particularly important if your caravan is kept under a carport, where rain cannot wash off any such deposits.

However, use car shampoo and not domestic cleaning products which are too harsh. For more stubborn marks such as black streaks and tree sap there are products on the market such as 'Fenwick's Black Streak Remover' and 'McKlords Black Streak Remover'. After washing, a good coating of quality car polish will preserve and protect the paintwork - liquid in preference to paste-types which are abrasive. Fenwick's 'Bobby Dazzler', which is applied during rinsing, provides a protective coating with no need to polish. There is also a product on the market called "A Glaze Protective Sealant", this is a protective sealant which is applied to the caravan body. This comes in a kit which comprises 1 x 500ml Surface Preparation; 1 x 500ml Wash 'n' Shine shampoo; 2 x 110ml Surface Sealant; microfibre cloths; and a polishing cloth. Costing around £66.60 plus vat, postage and packing, it is claimed that it will keep your caravan paintwork in good condition for 2 years or more.

Any acrylic/GRP mouldings should be treated with care - never use abrasive materials on this type of surface which will remove the protective gel coat and leave the structure open to attack. Surface crazing of GRP is common and should not be detrimental to its strength. However, any deeper cracks should be filled in using materials available from car accessory shops. Small dents can be filled in as you would with a car. For larger areas, it is usual to overlay the area with a new sheet of aluminium, which is best tackled professionally. See also our leaflet on 'Painting a Caravan'.

Any exposed timber used in the caravan construction will be pre-treated with preservative, and there is no need to add any additional treatment. If untreated wood is added, take care when treating as many timber preservatives contain a significant quantity of metal compounds such as copper sulphate, zinc chloride or mercuric salts, which will cause corrosion in aluminium caravan panels (or aluminium chassis). Wood so treated should be prevented from coming into contact with aluminium.

## **4. WINDOWS**

Acrylic windows are vulnerable to scratches from tree branches etc, and care must be taken when cleaning not to rub dirt into the window. Fine scratches can be removed using a cream metal polish or an acrylic polish. Farecla Products and Fenwick's make a polish specially for use on acrylic windows.

Double-glazed windows occasionally mist up between the inner and outer skin. They are made from Acrylic Plastic which is an outstanding material but it is to some degree hydroscopic (porous). This means that under certain extreme conditions moisture will slowly permeate through the material. For this reason Acrylic caravan windows are not sealed units. This is so any moisture can escape from between the panes. Under most circumstances there will be no moisture between the panes, but it can occur if it is cool outside, the air inside is moist and the inside of the caravan becomes warm very quickly. In this case condensation can form between the panes, as the temperatures and humidity do not have the time to balance.

If your window has plugged ventilation holes then remove the plugs. Park your caravan with the affected window slightly open towards the direct sun. This will slowly draw the moisture out of the air between the panes and from the panes themselves. It is impossible to say how long this will take; it all depends on how much moisture is there and on the conditions. You may need to be patient. The process can be speeded up by placing a warm, dry towel against the outside pane in hot sunshine. Please be aware that the condensation can appear to go away, only to come back very quickly. This is because there is still moisture within the hydroscopic acrylic material, which needs longer to be drawn out.

## **5. UPHOLSTERY**

Modern (post '89) caravans utilise fire retardant foam and coverings which, in addition to the major safety 'plus' point, have a few drawbacks. CMHR foam tends to be more dense, is less inclined to 'spring back' into shape and appears prone to dampness, particularly when combined with the new covers. To keep the cushions in good condition, it is therefore important to air them at every opportunity, and never leave them in the caravan over the winter - they should be removed and placed in a warm, dry attic etc. Most caravans now have slatted bed-locker tops to increase air circulation - if yours doesn't, lay a thick natural fibre blanket or other absorbent material under the cushion to prevent mattress staining. If the covers are dry-clean only this should be stated, if not a gentle hand or machine wash will suffice. If the material has any special anti-dirt treatment, like Scotchguard, this will have to be re-applied after washing.

## **6. CARPET, CURTAINS AND BLINDS**

To protect the carpet, a plastic runner, available from most large DIY chains, is ideal some stores also sell this by the metre if you want to cover a longer than average length of the floor. Generally, ensure all water pipe connections are securely made before 'christening' the water system, to avoid the risk of accidental carpet soaking. Curtains should seldom require much attention other than vacuuming, but will probably need dry cleaning if dirty (the caravan handbook should say). Blinds will be happy with a wipe over with a damp cloth - allow to dry before rewinding.

## **7. PLASTIC FITMENTS**

Although acrylic is quite tough, never pour very hot water onto it. Always add the cold water first, then the hot. Don't use abrasive cleaning materials - treat it much the same as you would your household acrylic bath.

## **8. WATER CONTAINERS, PIPES AND RELATED EQUIPMENT**

Whenever the caravan has been left standing for several weeks or so, before bringing the water system back into use, it should be cleaned using one of the proprietary makes of steriliser on the market - those used for wine/beer making are acceptable. **Follow the instructions carefully**, but remember that certain chemicals can react adversely with metal.

This is why if the water passes through a Truma/Carver water heater for example, you should only use the recommended cleaner – Truma, who took over Carver in August 2000, suggest either Milton 2 or Puriclean. Do not use domestic bleach, Camden tablets or sodium metasulphide. Remember to clean out any connecting hoses and fresh water containers at the same time.

The operator of any organised site has to comply with quite stringent regulations, and you should be able to trust the water when it leaves the standpipe. The same responsibility applies to CL owners. As far as the water in your caravan is concerned, The Environmental Health Department of the Borough Council of King's Lynn and West Norfolk offers the following guidance on the cleansing of drinking water containers and systems in touring caravans and motor caravans, which they recommend should be carried out each time prior to its use:

### **For Containers:**

All water remaining in the container should be disposed of so that the container is empty. The outside of the container should be thoroughly cleansed and washed down to remove any dirt, dust or other contaminant. Water at a suitably hot temperature, (60°+), containing an appropriate detergent, eg washing-up liquid, is recommended for this purpose.

Water should be put in the container, swilled around then emptied out.

The container should then be totally filled with water containing an appropriate disinfectant solution and allowed to stand for the recommended contact time, eg Milton 15 minutes.

The above solution should be emptied from the container.

The opening to the container should be cleaned thoroughly with an appropriate pre-prepared wipe impregnated with a disinfectant/sterilant.

The container should be inverted whilst stored overnight (if possible).

The container must be filled with mains water only and mains water must only be used for the above cleaning procedure.

On no account should garden hoses be used to fill water tanks.

### **For Systems:**

Drain down the system. (Open all taps to allow air in, enabling the system to drain quickly). Remove any water filters fitted, and replace with a short length of hose or empty filter cartridge, (this will ensure the filter is not affected by the disinfectant/sterilant solution).

Fill the system by using the pump with a disinfectant/sterilant solution. (Check that the solution at full strength appears at all taps/showers). Allow to stand for the recommended period of time.

Drain the system down completely.

Thoroughly clean the outside of all taps/connectors with a cloth soaked in the disinfectant/sterilant.

Flush the system through with clean drinking water until no traces of disinfectant/sterilant can be detected at any tap.

Replace the filter.

Filters should be replaced at the recommended intervals, irrespective of how often they have been used – the filter ingredients are activated at first use, and will continue to break down whether or not the filter is in regular service.

Some inferior plastic water pipes or containers can give the drinking water a 'tcp' type of taste, which is very unpleasant. This is usually triggered by a heavily chlorinated water supply, where the chlorine combines with phenol leached into the water by the plastic, to give trichlorophenol or TCP. Unfortunately once the pipes have been so affected the only known complete cure is pipe replacement with a food-quality grade of pipe as used by brewers etc. At the beginning and end of each season, sterilise the water system with one of the proprietary products on the market, i.e. Milton, Puriclean etc. Whenever the caravan is not in use, completely drain down the water system and leave unsealed (cover any exposed ends with fine mesh eg. stocking to prevent entry of insects). This discourages moisture-loving bacteria which can thrive in your water system, but perish if left high and dry. Waste water pipes and tanks should be disinfected, and likewise left open. (See also the leaflet entitled 'Wrap Up For Winter').

Fenwick's Products has Fendox Waste Water Systems Cleaner that is claimed to unblock drains, clean tanks and convoluted pipework, remove formaldehyde and lime scale, and diluted 10:1 will clean work surfaces (food safe and bleach-free), fridges and basins.

## **USEFUL ADDRESSES**

### Adhesives and Sealants

Apollo Chemicals Ltd, Sandy Way, Amington Ind Est, Tamworth, Staffs B77 4DS  
Tel: 01827 54281 Fax: 01827 53030 Website: [www.apolloadhesives.com](http://www.apolloadhesives.com)

Danfast Ltd, Leisure Components Division, English Street, Hull, East Yorkshire, HU3 2DZ  
Tel: 01482 599333 Fax: 01482 599345 Website: [www.danfast.co.uk](http://www.danfast.co.uk)

### Cleaners

Autoglym, Works Road, Letchworth Garden City, Hertfordshire, SG6 1LU  
Tel: 01462 677766 Fax: 01462 677712 Website: [www.autoglym.com](http://www.autoglym.com)  
(engine cleaner, interior shampoo, vehicle polishes, glass cleaner, caravan and motorhome cleaner)

McKlords, Bodelwyddan Business Park, Abergel Road,  
Denbighshire, LL18 5SX  
Tel: 01745 585995 Fax: 01745 585755 [www.mcklords.com](http://www.mcklords.com)  
Cleaner Polish, Spot Cleaner, Waterproofer  
(black streak remover & multi-purpose caravan cleaner).

Fenwick's, Fir Tree Farm, Chorley, Nantwich, Cheshire, CW5 8JR  
Tel: 01270 524 111 Fax: 01270 524 600 Website: [www.fenwicks.info](http://www.fenwicks.info)  
(caravan cleaner, motorhome cleaner, Bobby Dazzler protective coating, black streak remover).

Mer Products Ltd, 12 Centrus, Mead lane, Herts, SG13 7GZ  
Tel: 01992 512698 Fax: 01992 505257  
(PVC & vinyl interior cleaner) [www.merproducts.com](http://www.merproducts.com)

Farécla Products Ltd, Broadmeads, Ware, Hertfordshire, SG12 9HS  
Tel: 01920 465041 for nearest stockist Fax: 01920 466557  
(G10 Colour Restorer) [www.farecla.com](http://www.farecla.com)

Also available by mail order from:

• Autovan Services, 32 Canford Bottom, Wimborne, Dorset, BH21 2HD  
Tel: 01202 848414 Fax: 01202 848429 Email: [sales@autovan.co.uk](mailto:sales@autovan.co.uk)

Caravan/MotorhomeA Glaze Tel: 01795 599880 Email [enquiries@aglaze.com](mailto:enquiries@aglaze.com)  
[www.uglaze.com](http://www.uglaze.com)

Cleaners cont:

Water System Cleansers

Clean Tabs Ltd., Unit 6 Spring Gardens Ind, Estate, Whitland, Caernarfon,  
SA34 0H2

Tel: 01994 240925

(Puriclean - available from caravan accessory/marine shops; Aquatabs,  
Aquasol, Wasteguard, Purisol)

Fenwick's Caravan Products, Fir Tree Farm, Chorley, Nantwich, Cheshire, CW5 8JR

Tel: 01270 524111 Fax: 01270 524600 Website: [www.fenwicks.info](http://www.fenwicks.info)

(Fendox Waste Water Systems Cleaner)

Acrylic window polish

Farécla Products Ltd

Address and telephone details as before

(Caravan Pride Scratch Remover)

Fenwick's

Address and telephone details as before

(Windowize scratch remover)

Wurth UK Ltd, 1 Centurion Way, Erith, Kent, DA18 4AE

Tel: 08705 987841 Website: [www.wurth.co.uk](http://www.wurth.co.uk)

New Paint Polish, Paint Restoration Polish, Tar Remover, Insect Remover, Car Shampoo,  
Rubber Care (silicone-free care for rubber seals)

Stainless Steel Screws

Screwfix Direct (mailorder)

Tel: 0500 414141 Website: [www.screwfix.com](http://www.screwfix.com)

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