

# **INSTRUCTIONS FOR FITTING A "WOODIES" TRAVELLER TIMBER KIT**

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## ***Preparation***

The difference between an average woodwork replacement and one that will look and last as long as the original is the time spent preparing not only the wood frames but also the metalwork to which it is attached.

If you are lucky, the inner wings and the flange to which the wheel arches are attached will be sound but showing signs of surface rust. These must be made good and repainted using a rust converter/primer and protective gloss coat. The same applies to the rear boot-well floor to which the base rails are bolted. This area is prone to rusting due to leaking back doors and condensation. Drain holes, though not original, could help to prevent this problem. Most Travellers now need replacement rear boot-well floor and wheel arch flanges. These are readily available and fitting is well within the scope of the amateur welder.

Another area, which must be dealt with at this stage, is the B post. This is normally sound except for the lower edges, which will either need a repair section fitted or a limited amount of fabrication. It is advisable if the car is to be re-sprayed, now or at a later stage, to spray the inner and outer faces of the B post. This will give a better and longer lasting finish.

This also applies to the aluminium side and door panels. This is the only time it is possible to strip the complete panel to bare metal, etch prime and spray to the edges normally covered by the wood. The roof cannot be sprayed at this time because until the wood frames are in place the new drip moulding cannot be fitted. It may be that the paintwork on the roof is sound, in which case only the new guttering will need spraying once fitted. If the roof does need spraying, as it is aluminium, it will need stripping and etch priming.

Assuming all the metalwork is now sound and prepared, attention must turn to the wood frames. Time spent now will save future problems and make maintenance easier. The sides must be fitted as an assembled frame and thoroughly preserved and finished before being bolted on. The inside faces need special attention as once the frames are on the car further protection is difficult.

The system used to protect the frames is a never-ending source of debate. To simplify it for the purposes of this article, you either use a preservative and finish with a varnish that seals the wood, or go for a microporous system that allows the wood to breathe. The pros and cons and variations of each system could fill a book. However, time has shown that a well preserved and maintained varnish finish can last 25 years or more and has the advantage of the gloss finish that makes Travellers so appealing.

Microporous finishes are, by their nature, matt and all the exterior versions are slightly opaque. Sikkens probably offer the most extensive range of colours and one advantage of this type of finish is the ease of rubbing down and maintenance. It is especially suitable for coating old wood that is dark in places as one can achieve an even colour. A poorly maintained microporous finish will not look as bad as a poorly maintained varnish finish, but both will let in water and both will allow the wood to rot. It is of utmost importance that a good preservative/fungicide is used with ash, as it is not a naturally durable wood. It is not a resinous wood and will soak up water readily unless the surface is sealed. The microporous system will allow the damp to dry out whereas varnish, once the surface coat has deteriorated, will trap moisture and do considerable damage. Never varnish the wood with damp still

present as dark patches will soon appear and the varnish will crack and peel. This may seem as though the varnish finish is not advisable but it can be highly successful when applied properly and maintained on a regular basis.

There is also a new system that we have been using for the last ten years which has proved to be very successful. This is the Burgess Woodsealer range, which used in conjunction with Cuprinol 5 Star clear wood preservative gives the best of both worlds. Burgess Woodsealer is a microporous system finished with a clear top gloss. It is water based, dries in 15 minutes and gives a deep honey coloured finish that accentuates the grain. It is a marine grade system proven over the last few years and developed by the inventor of Hammerite.

Whichever system you choose, do it meticulously and follow the manufacturer's instructions. Complete the full process on the frames, inside and out, leaving only one top coat to be applied once the frames have been fitted.

Once this has been done, attention must be paid to the drain holes in the middle rail. It is recommended that these are not drilled until this stage as a build up of top coats will cause two problems. Firstly, the hole size will be diminished and secondly, a top coat will eventually peel and allow water into the end grain. It is better to fill the drain holes with a powerful preservative by taping up the bottom of the holes and allowing it to soak in overnight or until they will not accept any more. The advantage of this is that if, during your yearly maintenance, the same process is repeated by pouring preservative along the window runners then the preservative will be able to soak into the end grain of the middle rail and not only protect the wood but also prevent a build up of fungi on the window runners. Under no circumstances sleeve the holes with metal or plastic as this has been found to accelerate rotting in the areas of the drain holes.

With the frames prepared the panels should now be fitted. A bead of sealant should be run wherever metal contacts wood. Dum Dum has proved excellent over the years and is clean and easy to use. The panels are secured in place by  $\frac{3}{4}$  inch screws. Zinc plated pozidrive are preferable as a power screwdriver can be used, saving a considerable amount of time. It is also much easier at this stage to fit the rear wings as it can be done with the frame upside down.

Firstly, the wing piping must be fitted to the wheel arch with small tacks or a staple gun. This is easily done and it only needs cutting on the inner lip when working round the curve of the front wheel arch and the angle of the foot rail.

Originally the wings were fitted with bolts into a threaded sleeve. This has proved to be unsatisfactory, causing the typical dark areas seen on the original wheel arches. Plated or stainless screws and washers are sufficient and about ten will be required for each wing. Start from the front bottom edge of the wing and work backwards only using a screw where necessary to pull the wing neatly behind the beading of the wing piping.

The sides are now ready for offering up.

## ***Fitting***

If the rear base rails have been removed, now is the time to fit them. If you are reusing the original set then it is just a matter of bolting them through the original holes, using new coach bolts. If a new set is to be fitted they should be centralised and the bolt holes marked and drilled. In either case the metal rear valance will need to be fitted at the same time. This is tacked to the base rails using 1 inch sheradised nails and the coach bolts run through the

valance into the base rails. It is false economy to fit an old rear valance where rust is evident on the inner face as this will very quickly cause deterioration of the base rails. The base rails are also bolted through the extreme rear of the boot well floor. Originally no sealant was used. If it is decided to seal this area then drain holes will need to be drilled in the boot well floor, as water will undoubtedly find its way in through the rear doors at some time and it must have a way of escaping.

The sides can now be offered up to the car. Assuming the holes have been drilled in the front pillar, they will need to be checked for alignment and adjusted accordingly. Holes that have been drilled undersized on the new frame will give more leeway.

At the top of the front pillar a small cut out will need to be made to allow the edge of the roof to slot in.

If the roof has been removed, it is much easier to refit it now, as trying later with the wood in place can cause problems. If the T rubber between the cab and roof is sound then the bolts holding the roof can be fully tightened and the roof will be self-supporting. If the roof is to be sprayed after the wood and new guttering have been fitted, then fit the roof without the T rubber in place. Leave a gap sufficient to take the T rubber when under compression, about 5mm, and this will mean the guttering can be fitted into its final position. Once the spraying is complete, the top three bolts on the front pillar and the cab roof bolts need to be loosened to allow the T rubber to be inserted. Slots will need to be cut into the T rubber to facilitate this. Although this may seem long winded, it does mean that the paint can be sprayed to the edges under the rubber seal. Masking up to rubber is never satisfactory.

You are now ready to bolt the side to the B post, making sure a bead of sealant has previously been applied. Ignore what the frame is doing at the rear until the front pillar is in position and all the bolts are tight. Then pull the rear pillar into place making sure the wheel arch is not catching on the lip of the inner wing. If this is the case then it can usually be remedied by lifting the rear pillar slightly. The curve of the wheel arch does not follow the curve of the inner wing exactly, especially to the rear where it drifts away by about an inch.

The rear pillar will need to be forcefully pulled into position. A soft rope will help with this or a sash clamp on the side of the rear pillar to the bumper stay. This will hold the pillar in place while you locate the coach bolt through the base of the rear pillar into the hole in the metal framework. Any vertical adjustment can be achieved by the use of a jack under the rear corner or by lifting up the pillar.

The rear pillar will butt up to the rear valance on the base rails and a line of sealant can be used here, although this was not done originally. If both sides are being replaced the process must be repeated. You will now have the sides bolted to the front and secured at the base of the rear pillars. There will still be vertical movement on the rear pillars and they must now be lined up. At the same time the rear top rail will be located.

Place the rear doors evenly on the rear base rails. The rear pillars should now be moved until an even gap is achieved on both sides, about ¼ inch. With new rear doors it may be necessary to trim the outer lip to achieve a perfect fit. The rear top rail needs to be put in position at the same time and the height adjusted to leave an even gap of ½ inch. This allows for the doors to be lifted when bolting on, giving clearance on the base rails and room for the rubber seal top and bottom.

The brackets, which hold the rear pillar to the rear top rail and cant rail, can now be fitted. Glue can be used in the joint but as a design the joint is ineffective and relies on the metal

bracket. You can also fit the ply fillets to the lower inside face of the rear pillars between the metal bracket and the wood. These are held in place by two screws initially and further secured when the door hinge bolts are fitted.

The roof can now be pulled down into place and tacked on to the cant rail using 1 inch galvanised nails. Bronze or copper can be used but you run the risk of reaction between the different metals, causing deterioration of the aluminium, roof. Once the roof is tacked down and flattened evenly to the wood it remains to fit the drip moulding. This is easier than it first appears.

The new sections come as an open section in 7 foot lengths. Two will be needed and they meet in the middle at the rear. First, cut a square section out of the front top edge so it fits neatly round the rear face of the T rubber. Then, hold the guttering flat to the edge of the roof and drill two holes, large enough to take the tacks being used, through the guttering and the roof - one to the front and one just before the corner at the rear. The tacks can now be hammered in using a punch that easily clears the opening of the drip moulding. With the side of the guttering now in place, drill and tack every three inches. Now the easy part is complete, you have to form it round the corner. Carefully bend it through 45 degrees and make a single cut through the bottom lip in the centre of the corner. This will allow you to continue round the corner using a tack about every  $\frac{3}{4}$  inch. This needs to be done gradually, bend, tack, bend, tack, until the guttering has completed a 90 degree turn. At this stage it now has to be bent to conform with the curve of the rear top rail. Again, bend and tack about every inch until you reach the centre of the rear of the roof. The guttering will now need to be cut as if it is slightly over length. It helps if it is cut at an angle to allow a close fitting joint when the guttering from the other side is cut to meet it.

The top lip must now be flattened over the tack heads. Using a piece of wood about 9 inches long, work from end to end tapping it down a small amount at a time to prevent rippling. All that is now left to do is to cut about 1.5 inches off the bottom lip on each corner and to round the edges over. The whole process is easier than it sounds, providing it is done slowly and methodically.

The main structure is now complete. To fit the doors, first bolt the hinges to the doors in exactly the same place as on the original doors. Then they can be offered up and marked onto the rear pillars, leaving enough gap for the quadrant rubber seal. Do not fit the seal before the doors. Final adjustment can be made leaving all the nuts loose, which will allow up to  $\frac{1}{4}$  inch play. If new doors are being fitted, it is better to fit them without the panels and glass. This gives better access to the inner bolt heads and there is less weight.

Once the doors are hung and the panels, glass, mechanism and lock are fitted, the holes to take the locating sockets for the door mechanism need to be drilled in the top and bottom rear rails. If the original rails have been used, this will not be necessary. With these and the door seals in place it may be necessary to make further adjustment to the doors. The resulting fit should be tight and the doors will need to be closed together. If the doors are too loose at this stage, once they have settled onto the new seals, rattles and leaks will result. It is likely that until they have bedded in some leaks will occur along the top rail. After a few weeks a final adjustment can be made.

Fitting of the windows, capping rails, interior trim etc. is an exact reverse of the stripping down process. The important points to note are the seal between the capping and middle rail to prevent leaks and also the area where the front pillar and middle rail capping meet, again an area which must be properly sealed.