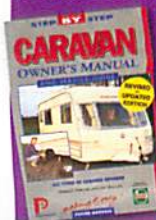




## Lindsay Porter



One of the UK's leading motoring and caravanning technical writers, Lindsay Porter started caravanning with his wife Shan some 30 years ago. He has written and published Caravan, Trailer and Motorhome manuals. Visit [PorterPublishing.com](http://PorterPublishing.com)

# Install perfect pipework

There is a better way to connect caravan pipes than simply pushing on and clamping. Here's how to make a proper job of installing water pipes in your 'van

### THE JOB

Water pipes can be connected using best building practice and you need very few special tools to do it.

### WHY DO THIS JOB?

Water pipe caravan connections have traditionally been a bit hit-and-miss but better products, such as those from

Whale, bring your pipework right up to date. Modern systems are far less leak-prone and are far easier to connect and disconnect when necessary.

### HOW MUCH WILL IT COST?

How long is a piece of pipe? It all depends what you're fitting. See below for a few sample prices.

## How to fit pipework



**1** For caravans, 12mm pipe is the optimum size. You could cut the pipe with a sharp craft knife, pushing down on a cutting board, but a square cut would be difficult.



**2** The pipe is held tight after pushing in firmly. To remove the pipe, you push the grey collar away from the pipe while also pulling on the pipe to completely remove it.



**3** This is a piece of 20mm pipe used in houses for water storage tank overflows. Here is what happens when you cut using a hacksaw – a frayed finish.



**6** You can see that the cut pipe, whether drain or water pipe, is smooth and ready. On some cutters a blunt blade can be reversed and new ones are easily fitted.

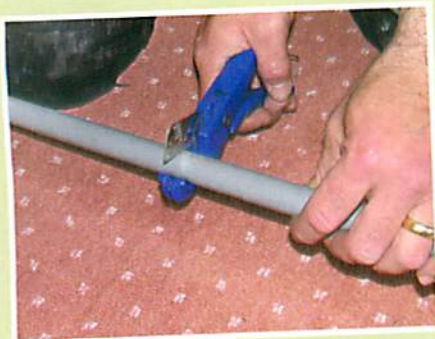


**7** Rigid PVC pipes are best welded together, though this does mean you can't get the joints apart later. The weld will permanently damage many other plastics if it touches them.



**8** You need to brush a continuous layer around the outside of the pipe and the inside of the pipe fitting. Solvent weld actually melts the surface of the plastic...





**4** You can buy a pipe cutter suitable for all of your caravan's plastic pipes for under £10. Make sure you that you hold it square to the pipe before starting to cut.



**5** Cut right through in one smooth movement. It pays to look after the blade because it's easily damaged if used for levering or for cutting inappropriate materials.



**9** ...so don't let it harden before twisting the pipe into the fitting until you feel it start to grip. Be careful, the joint can briefly heat up enough to burn your skin.



**10** CAK supplied our convoluted flexible drain pipe and fittings, including stainless steel clips. I find that a quarter inch drive ratchet is far better (and much safer) than a screwdriver for tightening.

### Lindsay says...

Whale pipe connectors might seem expensive, but you probably won't need many and the advantages are huge. A 12mm Whale System 12 Equal Tee Connector, in a pack of two, costs around £6.50, depending on supplier, while a pair of Equal Elbow Connectors cost about £5, with a pair of straight connectors about £1 less. Semi-rigid tubing can be bought for around £2 per metre.

CAK make the important point that before buying flexible drain pipe you should check that it is the smooth bore type, otherwise there is a risk of food particles becoming stuck in the pipe.

### Useful contacts

**CAK Tanks Ltd**  
10 Princes Drive, Kenilworth,  
Warwickshire CV8 2FD  
t 0844 414 2324  
w caktanks.co.uk

**Whale Water Systems**  
Old Belfast Road, Bangor,  
County Down BT19 1LT,  
Northern Ireland  
t 028 9127 0531  
w whalepumps.com