DIY FRIDGE UPGRADE

Installing a bigger fridge

Sam George shows how to replace a piezoignition Electrolux RM 4230 70-litre fridge with a 77-litre, electronic ignition RM 4271 **Time** allow a whole day **Difficulty** 5/10

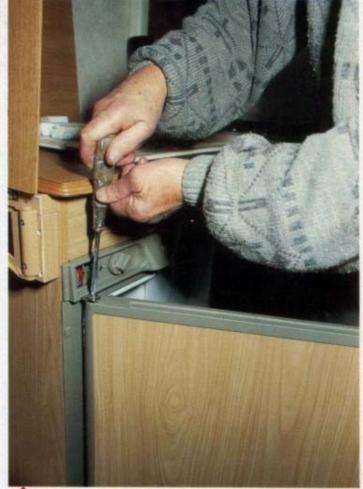
Tools required spanner, screwdrivers, wire cutters and stripper, tin snips, coat hanger wire, Materials needed twin 12V cable, 8mm to 8mm compression fitting, scotchloks or terminal block, 50mm-wide aluminium backed waterproof tape. Cost The recommended retail price of the RM 4271 is £649.95. The IK1 installation box costs £29.95. Allow £10 for 12V cable, tape and other bits and pieces. Top tip The RM 4271 needs a total depth of 520mm from front to back. This measurement takes account of the fact that no

pipes, cables, etc, should come within 20mm of the cooling unit at the rear of the fridge.

Important Ensure that both the 12V and 230V supplies are switched off and that the gas cylinder is turned off before commencing work. If you do not feel totally competent to carry out the electrical and gas connections, restrict yourself to the mechanical parts of the job and seek expert help. In any event it would be wise to have the installation checked

out professionally after it has

been completed.



If you are able to proceed, you will almost certainly want to use the door from the RM 4230 on your new fridge. Either way, handling and manoeuvring a fridge is much easier if the door has been removed.

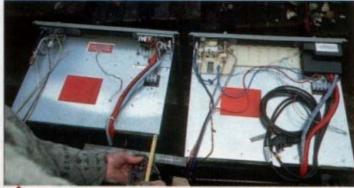
After undoing the top screw, the door of the RM 4230 can be lifted clear.



Remove the ventilator grills and measure the distance from the wall to the cooling unit on the RM 4230. If it is any less than 85mm, you will not be able to fit the RM 4271. See 'next step' for the reason why.



Next remove (and keep safe) the caps and screws that secure the RM 4230 in place. On Bailey and ABI caravans these are at the front. On other makes, they're more likely to be through the fridge sides.



The depth of the RM 4230 including cooling unit is 435mm, while the RM 4271 is 500mm deep overall. This means that in order to replace the 4230 with the 4271, the gap from the 4230's cooling unit to the wall must be at least 65mm + 20mm clearance (ie, 85mm or more).



After removing the securing screws, put your foot against the hottom of the fridge and pull the fridge forward. Because the fridge sits over the wheel arch, it'll topple forward if it's not supported in this way. Once it's clear of the housing, the gas and electrical connections are accessible.



G Use two spanners to undo the compression fitting at the gas pipe joint. By using two spanners you are much less likely to damage either the fitting or, more importantly, the copper pipe. The same applies when tightening any compression fitting.



Next disconnect the 12V and 230V cables. Take care to note which are the live and which are the negative leads. Note also that the mains cable incorporates an earth lead. To be on the safe side, mark the cables with strips of insulating tape or use a spirit-based pen.



8 You will need to run a 12V supply for the electronic ignition of the new fridge. I used scotchloks to connect to the 12V auxiliary circuit. When connecting the cable, make a note of which is the live lead as ignition polarity is important.



After I'd removed the fridge, I could see that there were gaps between the wall and the sides of the fridge compartment. To seal them, I used 50mm-wide aluminium backed waterproof tape. It should stop the drafts we've occasionally been experiencing in the past.



As well as changing the fridge, I decided it would be a good idea to seal it properly using an Electrolux IK1 installation box (less the bottom member, which isn't required as the fridge fits over the wheel arch). Plastic sealing strips were applied all round the rear edges.



In my case, due to the positioning of the upper ventilator grill, I had to mark and cut the box so that it wouldn't obstruct the flue. Take care when handling the installation box as it is made from very thin aluminium and can be easily damaged.



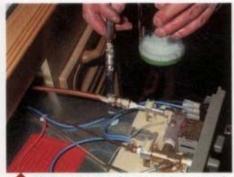
Use a couple of small screws to fix the installation box to the wall. Then bend the sides inwards slightly so that they will fit firmly against the sides of the fridge. Once the box is secure, make sure there are no kinks which could prevent the fridge from fitting snugly.



On Bailey and ABI caravans – or others where the fridge is fixed to its compartment by screws through the front trim – you will need to remove the two side trims from the original fridge and refit them to the new 4271. The screws will cut their own holes through the fridge walls.



An 8mm to 8mm compression fitting needs to be fitted to the end of the gas pipe on the fridge. When fitting it, DO NOT REMOVE what appears to be a white plug in the end of the pipe. It isn't a plug, it's a filter to prevent dirt particles from reaching the burner jet.



Connect the gas pipe and then the electric cables, ensuring correct polarity in each case. Turn on the gas supply, pressurise the system and use a soapy water solution – and your nose – to check for leaks. Also check out the electrical circuits to ensure all is well.



After turning off the gas and electrical supplies, the fridge can be permanently installed. At this point an extra pair of hands is a good idea – outside the caravan and through the ventilation grills to help guide the fridge into position. Finally, fit the door and grills.



The fridge is now ready for use, and ready for all your favourite chilled delights. In a few months time, when I have had a chance to use the new fridge in all temperatures, I will let you know how well it is performing. Watch out for the report in a future issue.