

The right input

Matt Stubbs concludes installation of a new mains electrical system in our old Sprite project caravan, fitting an appropriate inlet socket

If you have been following this project you will recall that when I installed the consumer unit (last month's issue) I wasn't able to complete the job because I didn't have a mains inlet socket to replace the original, continental-type socket. So, on returning to the Sprite, the first thing I did was to pick up where I had left off.

Note: this is not a DIY project. Should you decide to undertake any work involving 230v mains – or 12v DC – electricity or LP gas you should only do so if you are competent to carry out this type of work. If you are in any doubt, you should seek professional advice and assistance. In any event, it would be wise to have the installations checked professionally before use.



1 I had connected the consumer unit to two junction boxes, one cable being rated at 10 amp capacity and the other 6 amp. I intend to use the 10 amp for the mains sockets and 6 amp for lights and fridge



2 Having removed the old socket, I used the gasket supplied with the new socket to mark the enlarged hole which was needed. I then drilled some 6mm holes through the wall panel



3 The old rule 'cut undersize and open the hole up' applied here. Having cut the hole undersize, I used my power file gradually to remove material until the socket fitted



4 Having connected the cable from the consumer unit to the socket, I fixed the socket permanently in position, with the help of some mastic tape and screws that were supplied



5 Before testing the system, I went under the caravan and made sure that the earth connection to the caravan's chassis was sound. Then I connected to the site mains



6 Once I had connected to the site mains, the next job was to test the trip on the RCD unit. As soon as I pressed the test button the unit tripped out, cutting power, so all was fine



7 Having confirmed that the consumer unit was functioning properly, I checked that the 13 amp socket I had installed was wired properly, using my plug-in mains tester



8 Having removed a continental-type socket here, I fitted a new mains socket. I ran cable round the van using some plastic ducting to protect it, seen on the left of the picture



9 In the front nearside seat I connected the cable to the 10 amp junction box: brown (live) to brown; blue (neutral) to blue; and green/yellow (earth) to green/yellow



10 After connecting the junction box, I reconnected the mains and used my mains tester to check that the whole system was fine. I think the installation looks very neat



11 The final job was to remove the sink and drainer, and the hob and grill unit, which will eventually be replaced. I found this cable which was the old supply to the fridge



12 You can get some idea of the standard of wiring in the van from the state of the cables in the base of the kitchen unit. All were very light capacity and poorly connected