MY ALARM IS MALFUNCTIONING

When the alarm system starts to give you warning tones on arming it means that the system has detected a fault. The system should arm and disarm silently.

As these instructions are intended to be a guide to general fault finding to assist people, you will need to refer to your individual instruction book, to establish exactly what the alarm does to alert you to the fault (One beep, two beeps etc) You must realise that Van Bitz are the Country’s leading motorhome alarm installers and there are literally thousands of motorhomes driving around with Van Bitz systems on, each slightly different!

The most common fault is that the external accessory loop switch (AKA bike loop) is in the wrong position. The number of times that Van Bitz have received calls suggesting that there is a fault which transpires that the loop switch has simply been pressed when cleaning, or a child has been fiddling or simply that the loop has been used around an “A” frame and once safely home the “A” frame has been removed and stowed away, the loop unplugged but the override switch has not been used to turn the circuit off. Please check the position of the loop switch before going any further than this. It is normally a round black rocker switch. Normally either in the glove box area or the end of the dash board. It should be in at the top when the loop is not used.

If the loop switch is correct the next most common problem is that a contact switch has gone down, or the magnet is no longer functioning or is out of alignment.

Has any work been carried out on the motorhome recently? A door or locker door replaced? If so was the switch and the magnet been replaced when the door was changed?

Do you have any problem at all, closing ANY of the protected lockers and doors? Do you have to “lift” the gas locker door to get it to lock properly? If the answer is YES to any of these questions then we need to inspect very closely the door or locker and see how the problem could or is impacting on the installation of the switch. Remember that as doors and lockers get older, hinges drop and things don’t fit so well! Again, so often the “fault” is nothing more than a new couple of sun loungers bought and “only just fit into the locker” causing the door to bow slightly

The switches are in two parts and are referred to as “contact switches” but they do not actually come into contact with each other. One part (normally on the frame of the door or locker) is a tiny switch and the second part is a housing for a magnet. When the magnet comes into proximity with the switch the circuit is closed or opened depending on which type of switch is needed. If a door does not close easily perhaps the two parts of the switch are no longer in line or are now too far apart to operate correctly.

At this stage, without checking the records we don’t know the mix between Normally Open (N/O) and Normally Closed (N/C) installed on your motorhome.
N/C is a circuit that is always in touch with the alarm unit and the alarm will respond if that contact is broken.

N/O is a circuit that is NEVER in touch with the alarm and the alarm will respond should the N/O switch contacts the alarm.

The first test that we can carry out is to test that the fault is simply not caused by a faulty or misaligned magnet.

Look around the house for a magnet, the bigger (stronger) the better. With all the door and lockers closed, select a door or locker fitted with a contact switch to test. Open that door, hold the magnet against the switch part (the part screwed to the frame) and arm the alarm. If it arms silently, count to 30 slowly and then remove the magnet. The alarm should sound. This means that you have been lucky and solved the problem first time.

If when you hold the magnet to the switch and arm the system there is still an audible tone emitted then that is not the fault. Close the selected door correctly and move on to the next protected door or locker.

Should this not solve the problem once ALL the protected doors and lockers are tested, then the problem will most likely be on the switch side.

Go to each of the contacts in turn and remove the two screws that hold the white box onto the frame of the door (the white box on the door is the magnet remember)

Once the two screws are removed you will see two wires for example: RED and YELLOW on screw terminals. Undo the screw terminals and place the RED wire on the same terminal as the YELLOW wire. (or vice a versa)

Ensure that all the other doors and lockers are closed and arm the system. The system should be silent. If not continue to the next contact until the system arms with no warning tones. LEAVE THE SWITCH BY PASSED at this time.

Once you have established which is the faulty contact, try re-instating the other contacts in turn on the motor home, testing each time the YELLOW and RED wires are placed on their original terminals.

If the wires are say BLUE and BLACK then this circuit will probably be normally open and the wires should be separated and insulated whilst the tests are under taken. This would be a N/O circuit so the circuit must be broken for the alarm to function normally. Simply either remove the screws and leave the wires not connected whilst testing.

Remember when testing, that whilst you will get the warning tones to tell you that there is a faulty circuit, the system is designed to ignore that faulty circuit.

Also remember that the alarm will not respond to a working sensor (the opening of a door for example) for thirty seconds (except by flashing the vehicle lights to acknowledge the sensor) This is not a fault!
So when arming the alarm, no fault detected (no beeps) opening any door after only fifteen seconds will simply re start the thirty arming period.

To test a sensor, ensure that you either can see the vehicle lights flash to correspond to the door opening (an assistant can be used here) or ensure that you wait 30 seconds (the LED flash changes remember if you can’t count that high) before opening an door.

Waiting thirty seconds will trigger the alarm, waiting fifteen seconds will simply flash the lights and you will either enable you to test another sensor or turn the system off without making any noise.

The bonnet most commonly has a tilt switch installed, and it is very uncommon for these to be faulty, but like anything, if abused can fail.

If you have the ability to print this sheet out we would recommend that you do and read through the testing process a couple of times prior to attempting to fault find your problem.