

# SPANNERMAN ANSWERS YOUR QUESTIONS

## STICKING LEVELLING JACK

I have a 1999 American motorhome fitted with HWH levelling jacks one of which sticks during retracting. It was working fine last summer, but after sitting through December and January it now sticks down. The jack goes down fine, but is very slow going up and has to be pushed the last two inches. Do you have any suggestions as to what might be causing this problem?

*There is more than one possible cause of this problem. Because you mention that the jack can be retracted the last two inches with hand pressure, I wouldn't suspect a bent jack. The winter's storage period shouldn't have caused this condition either.*

*To narrow this down somewhat, proceed as follows: Level the coach and then store the jacks. Be sure to leave the switch ON for the complete retraction cycle. Inspect the jacks to verify your "low" jack.*

*Caution: Do not press the display panel's OFF button immediately after the panel's JACK DOWN lights extinguish. When possible, allow the panel to shut itself off, which it will do after several minutes. The reason is: If you cycle the key to OFF (or cycle from ignition to accessory or vice versa), you will cut power to the panel prematurely. You must avoid any premature closing of the jack system's "retract solenoids" because this will trap excess hydraulic fluid between the jacks and the pump's fluid reservoir and the jacks will not be able to retract completely.*

*To eliminate the cause being a restriction in the hydraulic fluids return circuit, loosen the hydraulic hose fitting at the jack and observe the jack. If the jack returns, you've narrowed the problem to something other than the jack - possibly a hose fitting or a velocity valve.*

*Caution: When retightening the hose fitting on the jack, tighten the fitting finger tight, and then, using the wrench, tighten the nut approximately one third of a turn. This connection is a flare fitting and it's easy to damage the fitting if it is over-torqued.*

*Summary: If the jack didn't return, the problem exists inside the jack. It could be hanging up due to a swollen seal or possibly foreign material inside the jack. I'd recommend contacting HWH Corporation (the levelling-system manufacturer) for information on returning the jack for rebuilding. That would be more economical than a total replacement, and turn around time is usually quick. HWH can be contacted online at [www.hwhcorp.com](http://www.hwhcorp.com).*

## WATER-HEATER LIGHT

I have a 1982 motorhome that came with an Atwood water heater. It works fine most of the time, but sometimes it doesn't ignite or its cycle is interrupted. Whenever this happened in the past, a red light turned on next to the on/off switch. The light used to flash when I turned the water heater on.

The operation of the water heater hasn't changed, but I now wake up some mornings without hot water and don't

know why. In the past, the red light would be on to indicate that the water heater had failed to ignite.

While I can live without the light, it was a very helpful indicator. It does not appear to be a replacement item, and I suspect there is a problem with the water-heater circuit board.

Do I have to replace the circuit board to get the light to function? If so, I don't think it is cost-justified, but the light was certainly a nice indicator of the water heater's status.

*Despite the use of LEDs (light emitting diodes) and other lamps that don't burn out, light in the Atwood water-heater switch is a small, ordinary light bulb. Since the light is not supposed to come on or stay on very long, the bulb lasts a very long time, but unfortunately not forever.*

*You cannot replace the light bulb, but you can replace the switch assembly that contains it if the bulb is burned out. Depending on the age of your switch assembly, it will either have pigtail leads or spade terminals. Disconnect the leads or pull the connectors off the spade terminals. Make sure you keep track of which colour wire goes on each terminal or connects to each pigtail.*

*Using a continuity tester or an ohmmeter, check the light bulb for continuity or resistance. A continuity tester should indicate good continuity; an ohmmeter should read 16 to 17 ohms.*

*If there is no continuity or the ohmmeter indicates infinite resistance, the light bulb is burned out. While you're at it, check the switch. It should turn on and off smoothly, and so indicate on a continuity tester or ohmmeter. A new switch assembly should be available from an Atwood stockist. A new switch is a lot cheaper than a new circuit board, and the assembly is very easy to install.*

## SECRET HOSE TRICK

My 1987 American motorhome on a GM P-chassis needs a new upper radiator hose. I can't work out how to gain access to the hose at the point where it attaches to the radiator. Is there any technical secret to this? It almost looks like it was never planned for replacement. Thanks for any advice you may be able to give.

*Changing belts and hoses on these models can be very difficult, nearly requiring a contortionist. There are only two ways to get at the area around the top of the radiator. One is by removing the engine cover inside the coach between the driver and passenger seats. The other is to take off the filler panel above the radiator by removing the screws that hold it; these can be accessed from under the bonnet.*

*If the hoses are original and you find one hose is bad, the rest are probably not long for this world. I strongly recommend that you change them all, including heater hoses, at the same time because a leak anywhere in the system can cause an expensive and potentially costly breakdown on the road. Many times, drivers don't notice the overheating until it's too late and the engine is damaged. If the belts are old, change them for the same reason.*

## NOISY WATER PUMP

I own a 1995 American motorhome which I have owned since new. The Shurflo water pump, which is fitted at the bottom of the wardrobe, has always been a little noisy but recently I have become aware that it has been getting a lot noisier. After reading the manufacturer's installation leaflet I inspected the pump and realised that it had not been installed as it should have been. The leaflet states that the pump should be installed with at least one foot of flexible pipe between the pump and the rigid plumbing of the motorhome. The idea of this is to assist in reducing vibration transmission to the motorhome. My pump had been installed directly to the rigid plumbing and to the wardrobe framework.

I decided to move and replumb the pump according to the manufacturer's recommendations. I purchased a short length of reinforced flexible hose and two Shurflo hose connectors for the pump and two hose connectors to connect to the rigid plumbing. I also moved the pump away from the frame of the wardrobe to a position on the floor screwed to a board which I glued to a thick piece of rubber. The flexible hoses made reconnection to the rigid plumbing a simple job.

Now at long last, after six years, I have a pump that just hums in the background. Why do motorhome manufacturers ignore Shurflo's recommendations.

*Water-pump noise is a common complaint. Virtually all the installations that I have seen on American motorhomes have been done in a similar fashion to yours. In fact, I cannot remember seeing one that has been connected with flexible hoses. On many occasions I have seen pumps fixed to wooden surfaces, such as, bed bases, cupboard frames, etc. The wood surface acts as a sounding board which amplifies the noise. Pumps located in outside lockers tend to be quieter but these are prone to freezing up in cold climates.*

*Most water pump noise can be eliminated with rubber insulators under the mounts, relocating the pump to a non-resonating location and replumbing with flexible water pipe. Shurflo do manufacture a quieter pump but its flow rate is not as high as the standard model 2088 which is usually fitted. I have noticed, recently, that the latest model 2095 pumps from Shurflo are now fitted with flexible mounts in place of the rigid ones.*

## TECHNICAL QUESTIONS

If you have a technical question that you would like answering please send it to: SPANNERMAN, ARVM, MONTROSE, CROWN HILL, GREAT DALBY, LE14 2ER. Fax: 01664 481400 Email: [apleisure@btinternet.com](mailto:apleisure@btinternet.com)

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