

# SPANNERMAN ANSWERS YOUR QUESTIONS

## SIX OR TWELVE VOLT BATTERIES?

I have recently purchased a new motorhome and one of the first things I noticed was that it had two six-volt batteries rather than one 12-volt. I have been told that two 6-volt batteries can have a greater capacity than one good 12-volt deep-cycle battery. I find this difficult to understand so perhaps you could explain.

*You don't need to be an electrical engineer to understand why 6-volt batteries are fitted by motorhome builders. Two good golf-cart batteries, wired in series have a much larger amp-hr capacity than the average 12-volt deep-cycle batteries. They are also a lot sturdier and will therefore take far more abuse. Finally, two golf-cart batteries will almost always be cheaper than equivalent good quality 12-volt batteries.*

## AUTOMATIC TRANS FLUID

I own a Dodge Ram which is powered by a Cummins engine through an automatic gearbox. The owner's manual says to use only Mopar ATF Plus transmission fluid and Dextron III only when the recommended fluid is not available. I have been advised to use Dextron III. Will Dextron III do any long term damage to the transmission?

Secondly, last winter when I was using the vehicle in temperatures from 0 to minus 10 degrees F I was using diesel fuel with an additive at a ratio of 10 ounces for 30 gallons of fuel.

The engine stopped running and fuel jelling was suspected, so the fuel filter was pulled, but no fuel jelling was noted. Is there a filter or screen somewhere between the fuel tank and the engine-mounted fuel filter? I've owned other diesels and never had this problem before.

*Naturally, your local supplier is going to try to sell you what it has and I'm sure lots of people use Dextron III in these transmissions with no ill effects. However, since the price difference is small over the life of the truck, I'd err on the side of caution and use the recommended Mopar fluid. There is a little strainer down low in the engine compartment, adjacent to the fuel heater and before the primer pump. You'll see a small 90-degree rubber hose elbow joining the top of this housing to the primer pump. If you suspect fuel jelling in it, try directing an electric heat gun at the metal housing for a short time. If there is a really severe cold snap, you may have to switch to a different type of fuel for a time.*

## PETROL STABILIZER - YES OR NO?

I own a petrol engined American motorhome and I am confused with the issue of whether to periodically run the engine, or not, when the motorhome will be sitting for several months (could be many months). I read somewhere that I should add a petrol stabilizer during the last fill-up, run it through the system,

shut the engine down, and not to start it again, because doing so would wash down the cylinder walls and cause damage. Prior to this, about once a month I would run the engine at high idle for about 30 minutes, run through the gears, then shut it down.

*I feel that adding a fuel stabilizer during the last fill-up is the proper procedure. A petrol stabilizer that is used often in the US is STABIL. It can be purchased in most automotive stores. Running the engine once a month could create a wash-down of the cylinders; however, if you run the engine approximately 30 minutes at a high idle, as you have noted you do, this should be adequate to heat the engine and dissipate the moisture from within the engine.*

## 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, 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).*

## CHEVY P30 BRAKE PROBLEM

I own an American motorhome built on a Chevrolet P30-chassis that currently has 40,000 miles on it. At Less than 1,500 miles, the shift lever was extremely difficult to move when in PARK. The local Chevrolet dealer adjusted the detent and the shift lever then moved easily, but the arrow indicator did not line up correctly. At 2,000 miles, the transmission went into second gear and locked up.

I limped into an RV park. The next day I had the transmission checked at the Chevrolet dealership and was told that the shift detent was off and that the electronic transmission had gone into "default" mode. I was instructed to merely stop, turn off the engine, and restart if it ever happened again. It has not happened again.

What has been a recurring problem is the fact that the "automatic apply parking brake" engages when the shift lever is placed in reverse, and the engine is hot (but not boiling over). For example, when I pull into an RV park and leave the engine running while I disconnect my car, then try to back into a space, 80 percent of the time the parking brake will engage. Needless to say, when it engages the coach will not move. I then have to either drive the motorhome around to cool down, or turn it off and wait. When cool down occurs, everything is normal.

I know the problem is heat related, and I suspect that it is electrical and that what is happening is that the parking brake is getting a signal that the transmission is being put into PARK when in reverse, thereby allowing the brake to engage. I basically understand the system, but all I have is the Chassis Service Manual and I do not understand much about the electronic transmission—can you help?

*This is a tough one to answer without the details of what exactly has been done to the coach, but we'll give it a try. The gear selector (PRNDL) switch is inside the transmission, so the transmission temperature can affect it. To check it out, it's best to ask a dealer to plug in a diagnostic code reader. This will allow the technician to download fault codes from the transmission.*

*The other problem with the gear indicator can be the input switch for the parking interlock system, which is inside the coach. That switch is not subject to extreme temperature due to its location; it most likely needs adjustment. Another possibility is a binding shift cable. All too often such cables drop down near an exhaust pipe, and heat takes its toll on the cables.*