

## SOLAR POWER SERVICE & MAINTENANCE – WHAT CAN YOU DO?

To ensure your power savings keep coming with every bill it's important to regularly check that your solar power system is working. Over the years we've received hundreds of calls from people who have forgotten to regularly check their system is working; don't let a high power bill be the first indication of a problem with your solar as has happened to many others.

We highly recommend checking your inverter is working regularly. This is very easy to do; simply check the inverter during the day and ensure the "run" light is on. For most inverters this will be a green light that is on constantly. If the light is not on, then it's not on! We recommend checking this weekly – don't wait until your power bill comes in! If your solar inverter is displaying a fault code find out what it means by checking your welcome pack documentation about your inverter.

There are a number of things that you can do to ensure your solar power system continues working at its best, but first it's important to ensure your safety:

### SAFETY

Your personal safety is very important to us. The following instructions MUST be followed to ensure your safety. Please ensure that you read and understand all the safety instructions, warning and cautions before using this system.

- DO NOT service or maintain your solar power system unless you are a licenced electrical contractor and it is completed in accordance with the Australian electrical safety rules and standards.
- DO NOT make any modifications to your solar system as you may endanger yourself and/or others and void the system and component warranties.
- DO NOT pour cold water on your solar panels when they are hot as the glass protective cover could shatter exposing your electrical danger and voiding the component warranty.
- DO NOT walk on the solar panels surface as you will damage the glass and void the component warranty.
- DO NOT throw or drop heavy or sharp objects on the solar panels. They are made of toughened glass, but might be damaged and void the warranty.
- DO NOT damage the back of the solar panels; this could affect the connections between the cells or the cells themselves, voiding the warranty.
- Planet Power Riverina does not recommend climbing onto the roof – this should be done by trained professionals.
- Observe all safety signs installed on your system. These signs must remain in place and visible to ensure both your safety and that of others
- DC voltages can kill or cause serious injury. Even when the system is completely isolated and all the circuit breakers are switched off there could still be DC voltages present across the solar modules.
- DO NOT open any of the components of your solar power system unless you are a qualified licenced electrical contractor.
- DO NOT remove the earth cable attached to the solar panel / framing. This has been installed to provide safety in the event of a fault. Removal of these could result in serious injury or death.



To ensure that your system is performing at its best, we have compiled a list of system maintenance procedures you should undertake on a regular basis. If you have any problems with your system, please contact Planet Power Riverina Operations.

## SYSTEM MAINTENANCE PROCEDURE

### INVERTER

Check inverter performance during the day as described in your inverter manual, at least once a week. Keep the inverter clean, dust free and check for any infestation by vermin. We have quite often found paper wasp nests under solar inverters – have a quick check before sticking your hand underneath the inverter! **Learn how to read your solar inverter by reviewing your documentation in the Welcome Pack supplied by Planet Power.**

### POWER METER

Check your meter during the day when there are no (or minimal) electrical appliances operating in your home. The meter should be showing energy being exported. If you are having trouble understanding how to read your meter, contact your electricity retailer for advice.

### CHECK YOUR POWER BILL

The easiest way to do this is to compare your current bill for the same period last year. Look at the number of kilowatts your household has consumed, which should be less than last bill prior to the installation of the solar system, provided your usage has not changed. During winter, sun hours are reduced, therefore, the solar system will not be as effective.

### CHECK CABLES & PLUGS

If you come across a damaged cable or any other wiring defect, please report it immediately to Planet Power Riverina Operations Manager

### CHECK FOR SHADING

Trees can grow quickly and they may have grown since your solar system was installed. Check for shading at 10am, midday and 3 pm. If you detect any shading, the trees may need to be trimmed. Be sure to check with your local council to ensure you comply with local laws before trimming or removing trees.

### CHECK FOR LEAF LITTER

If you are in an area with a high risk of fire or have trees surrounding your house it is a good idea to ensure that leaf litter doesn't build up and get lodged behind the solar panels and frames. This



maintenance is particularly important to include as part of your fire readiness plan. Flying embers in a bush fire could ignite tree litter lodged behind solar panels and be a real problem.

#### CHECK FOR DIRT BUILD UP & BIRD DROPPINGS

A build-up of dust and / or bird / bat droppings, or even lichen growing on your solar panels will reduce the systems performance. Refer to the section in this user guide on cleaning the panels and safety warnings. Planet Power Riverina does not recommend you climb on the roof. This should only be undertaken by suitably qualified and equipped persons and they must follow Occupational Health and Safety procedures and guidelines.

#### PROFESSIONAL SYSTEM PERFORMANCE & MAINTENANCE CHECK

The Australian Standards for solar power recommend an annual inspection and check to solar power systems; to make an appointment for a professional system performance and maintenance check please contact Planet Power Riverina Operations Manager

#### ONCE A WEEK

- Check inverter is operating by checking the visual display or a green light is visible. If there is no display or a red light is displayed, then refer to your Welcome Pack and follow the steps to reboot the system.
- Check inverter is recording export energy.

#### EVERY 3 MONTHS

- Check electricity bill to ensure you are being credited for power you are producing.
- Check for panel shading, as shading reduces performance.
- Check for tree litter behind panels and framing.
- Check for build-up of dust or bird droppings.

#### EVERY 1-2 YEARS

Professional system performance and maintenance check by Planet Power Riverina Technicians. The Australian Standard for solar power installations (AS5033) recommends annual checks on the entire solar power system to ensure it continues performing optimally. As the saying goes “a stitch in time saves nine”, and this is especially true in the case of a solar power system that operates at dangerously high DC voltages in an extremely harsh environment, your roof. Planet Power Riverina provide annual inspections with full maintenance reports and cleaning of solar panels, and will also provide recommendations on how you can further maximise the savings on your power bills.