

# Shore Power Connections

## What you need to know to stay safe



## Connecting to Shore Power

Marina Operators CANNOT LEGALLY supply shore power to a vessel without a current EWoF.

Before you connect you must discuss your requirements with the Marina Office and produce proof of the vessel's EWoF.

To connect your vessel to shore power the vessel MUST display a current Electrical Warrant of Fitness (EWoF).

The EWoF remains current for 4 years from date of issue.

As is the case with your motor vehicle WoF, the EWoF only deems the vessel electrical system safe at the time of inspection.

A lot can happen in 4 years and so it becomes imperative that you are vigilant and maintain your entire electrical system in good order.

The main area of concern are points of connection and the lead itself.

Though the lead is tested and is part of the EWoF, it is usually the cause of most shore supply electrical faults. Because of movement, how the cable is laid and stored, the way it is plugged in and weather, are all major contributors to faults existing in your shore supply connection.

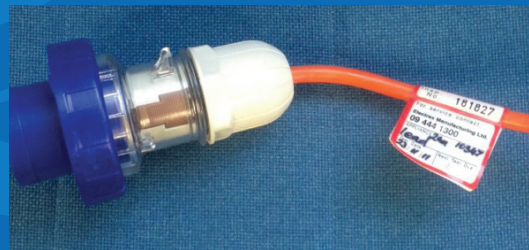


Do Not Coil Lead

Be Aware of Mechanical Damage

## Testing and Tagging of Leads

All temporary connection leads must be tested and tagged annually. A number of marinas will also require you to have your shore supply lead tested and tagged on an annual basis as an added protection against fault. This will be a policy of that marina and must be adhered to in that marina just like any other policy they have.



## Step by Step Instructions

### UPON ARRIVAL AT THE MARINA

1. Check in at the marina office advising of your power requirements.
2. Supply a copy of your boat's current Electrical Warrant of Fitness (EWoF)

### PRIOR TO CONNECTING SHORE POWER

1. Uncoil your shore power lead and thoroughly inspect it for any mechanical damage such as crushing, kinks, cuts or abrasions.
2. DO NOT connect to shore power should any fault be found. If assistance is required contact the marina office for assistance.

### CONNECTION TO SHORE POWER

1. Arrange the supply lead ensuring the lead is uncoiled and not causing a tripping hazard.
2. Connect the shore power lead to the vessel power socket inlet first, before connecting to the marina shore power.
3. Ensure the Plug/Socket weatherproofing lock ring is used to prevent water ingress and nuisance tripping.
4. Test the RCD by using the TEST button as described in this pamphlet.
5. If the RCD does NOT trip a dangerous condition may exist due to a fault. Disconnect shore power and notify the marina office immediately.

### BEFORE LEAVING

1. Switch OFF the shore supply. DISCONNECT lead from the marina socket outlet first.
2. Replace the cover on the marina outlet if one is supplied.
3. Coil the supply lead and store on board the vessel in a dry area where it will not be damaged.
4. DO NOT leave shore power lead connected and /or coiled up on the marina when departing.

## Temporary Connections

An extension lead may be used for short periods, to operate small ancillary equipment such as hand power tools, vacuum cleaner or battery charger, provided it is fitted with the correct plug connection to connect safely to the shore supply outlet.

The lead must be tested and tagged annually.

It is the accepted view of the NZMOA that a temporary connection is one where a responsible adult is in attendance on the vessel at all times whilst the lead is plugged in.

Should you leave the vessel for any reason the lead **MUST** be unplugged from the shore power supply and put out of the weather.

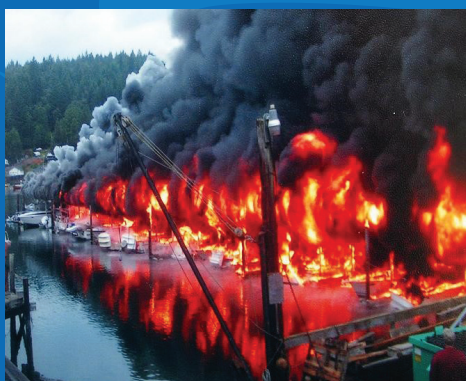
## LIVES AND PROPERTY ARE AT RISK

# DO YOUR PART TO KEEP YOUR ELECTRICS IN GOOD ORDER AND YOUR BOAT SAFE, WE WILL ALL THANK YOU FOR IT.

## Supply Leads

Any marina management and staff have the right to disconnect any electrical shore power supply from any vessel should that person consider that in their opinion the supply lead or connection is found to be in a state of repair that could be dangerous. This includes the lead being left in such a way that mechanical damage is likely or if a temporary connection lead has been found unattended.

Management and staff at marinas are not electrical inspectors and are not qualified to engage in any technical discussions.



IT ALL HAPPENS IN A FLASH

## Residual Current Device (RCD)

All Shore Power Supply modules are protected by a Residual Current Device (RCD). This is a device that allows for the quick disconnection of supply should a fault exist. This will give a person the best possible protection against fatal electric shock. It cannot be said however that this will work in every case as there are many variables. For your best chance of protection always test your RCD when connecting to shore supply.

## Testing the RCD

Always test the RCD each time you connect to Shore Power. To test, connect shore power, switch on power and press the RCD Test Button.



1. The RCD should trip to the OFF position.
2. If it does NOT trip a dangerous condition MAY exist due to a fault.
3. Disconnect the shore power and notify the marina office.

## THE RULES ARE SIMPLE

**NO CURRENT EWoF NO CONNECTION**

IF YOU ARE NOT IN ATTENDANCE OF A TEMPORARY CONNECTION UNPLUG FROM SHORE SUPPLY



The New Zealand Marina Operators Association in conjunction with the Clean Boating programme has developed this brochure.