# Flood Affected Rinnai Appliances

As clean up operations continue across the affected areas of severe weather, it is timely to provide guidance as to how to deal with Rinnai appliances that have been partially or wholly submerged.

Whilst many people are volunteering to assist with the clean up operation, it is important to remember that when it comes to dealing with gas and electrical appliances, all work must be performed by suitably licensed and competent persons as required by the applicable regulatory authorities.



## Rinnai

### In addition:

- Before working on any appliances connected to the mains electrical supply, an inspection of the electrical supply circuit to the appliance must be conducted.
- Before working on any appliances connected to the gas supply, an inspection of the gas supply infrastructure must be conducted.
- All appliances connected to the electric supply must be electrically isolated before conducting any other work.
- All gas appliances connected to the gas supply must have the gas supply isolated before conducting any other work.

### Appliances that have been partially or completely submerged:

Previous communications have stated that appliances that have been partially or completely submerged be replaced. This advice is echoed by other appliance manufacturers.

### The reasoning behind this advice is as follows:

- Electrical components such as fan motors, pumps, electromechanical controls and printed circuit boards may be damaged beyond repair. Even if they are still operational their safety and functionality cannot be guaranteed and their life is likely to be very limited.
- In the case of gas appliances, silt can lodge under the seats of the gas valves, injectors and burners and lodge in the operational mechanisms of modulating gas control valves. These may lead to poor combustion and unreliable operation. At worst, these may prevent 100% shut off of the gas supply which may lead to gas leaks or explosive ignition.
- In the case of solar collectors, submersion into water will permanently and negatively affect the integrity and functionality of the insulation materials.

The following pages specify by product category exactly what action must be taken.





### **Gas Continuous Flow**

### Includes such models as:

- Infinity Series
- Builder Series
- Enviro Series
- Heavy Duty Series
- Solar Boost S20, S26 and S32 Models

#### Action:

All models must be scrapped, rework is not permitted under any circumstances.



### **Electric Storage or Heat Pump**

### **Electric Storage models such as:**

- Hotflo Series
- Flowmaster Series
- QRE Series

### **Electric Heat Pump models such as:**

- Rinnai EHP32 Heat Pump Module
- Enviroflo Integrated Series

### Action:

The heat pump module must be scrapped. Rework is not permitted under any circumstances. You may be able to arrange the service / repair of other components on-site, subject to the following:

- Storage cylinders must be sitting on a firm, flat & level base.
- The electrical terminal block must be cleaned & dried.
- All accessible wiring must be cleaned and dried.
- An electrical insulation resistance test must be conducted to ascertain the integrity of the element. If the test fails, the element must be replaced.
- The Thermostat control MUST be replaced in all cases.
- The PTR valve must be tested to ascertain that it is operational.
- Conduct a second insulation resistance test on the repaired electric water heater.
- Conduct an earthing continuity test on the repaired electric water heater.





### **Gas Boosted Solar Systems**

#### Includes all models:

Rinnai Sunmaster & Rinnai Prestige

#### Action:

- All continuous flow boosters must be scrapped.
- Rework is not permitted under any circumstances.
- The solar controller and pump module must be scrapped. Rework is not permitted under any circumstances.
- If the Solar Collectors have been submerged they must be scrapped.
- Otherwise, clean the collector glass and casing. If the Collectors are not replaced, ensure they are still securely fastened to the roof.
- Storage Cylinders may be able to be serviced / repaired on site the PTR valve must be tested to ascertain that it is operational.
  Storage cylinders must be sitting on a firm, flat and level base.



### **Electric Boosted Solar Systems**

#### Includes all models:

· Rinnai Sunmaster & Rinnai Prestige

#### Action:

- The electrical terminal block must be cleaned & dried.
- · All accessible wiring must be cleaned and dried.
- An electrical insulation resistance test must be conducted to ascertain the integrity of the element. If the test fails, the element must be replaced.
- The Thermostat control MUST be replaced in all cases.
- The PTR valve must be tested to ascertain that it is operational.
- Conduct a second insulation resistance test on the repaired electric water heater.
- Conduct an earth continuity test on the repaired electric water heater.
- Ensure storage cylinders of split systems are sitting on a firm, flat and level base.
- Ensure storage cylinders of close coupled systems are still securely fastened to the roof.

### **Solar Controller & Pump module (Split Systems only):**

• This module must be scrapped. Rework is not permitted under any circumstances.

#### Solar Collectors:

- If Solar Collectors have been submerged, they must be scrapped. Otherwise, clean the collector glass and casing.
- If the Collectors are not replaced, ensure they are still securely fastened to the roof.





### **All Gas Flued Heaters**

### Includes such models as:

- Gas Fires
- Energysaver®
- 2001 & Ultima Space Heaters etc

#### Action:

All models must be scrapped, rework is not permitted under any circumstances.

### All Gas Portable Heaters

### Includes such models as:

- Avenger, Blaze, Capella, Dynamo & Enduro Convector heaters
- Older models such as 229/339/406/506/516 Convectors and
- All Radiant heaters Granada, Graduate, Galaxie, Titan, Glowray, Cosyglow & Econoheat models

#### Action:

All models must be scrapped, rework is not permitted under any circumstances.

### **All Electric Panel Heaters**

### Action:

All models must be scrapped, rework is not permitted under any circumstances.





### **Air Conditioning**

Includes all ducted cooling, fixed and portable products.

### **Air Conditioning:**

- Wall Mounted Systems
- Multi-Split Systems
- Ducted Systems
- Cassette Systems
- Add-On Cooling Systems
- Evaporative Cooling
- Portable Air Conditioning

### Action:

All models must be scrapped, rework is not permitted under any circumstances.



### **Ducted Heating**

### **Heating:**

• Ducted Gas Heating (Internal & External)

#### Action:

All models must be scrapped, rework is not permitted under any circumstances.



### **Gas Clothes Dryers**

### **Gas Clothes Dryers:**

• Includes all Rinnai Dry-Soft® models

#### Action

All models must be scrapped, rework is not permitted under any circumstances.