

The Energysaver remote switching kit is a remote switching relay that allows an external control to switch the unit on and off. Ideal for commercial applications such as schools, community halls, churches etc.

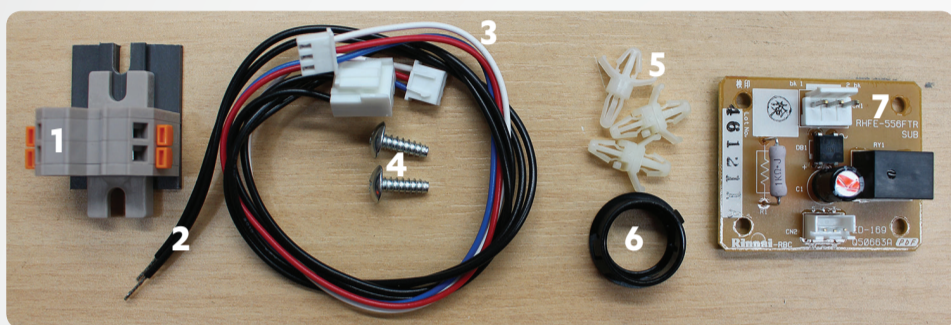


This kit is for AC 24 V use only. Please ensure that the connection to the terminal from outside is AC 24 V input. If it is not AC 24 V the PCB will not work and you risk damaging the sub-PCB.

Before starting ensure the power and gas supplies are disconnected.

Kit suitability and contents

The R1349 kit is suitable for Rinnai's current range of Energysavers (309FT, 559FT, 561FT, 1005FT) and also some older models (556FTR, 557FTR). Only information for our current range is included with this guide. Please adapt the information as necessary if you are fitting the kit to an older model. The steps will be the same, only the attachment positions will differ (refer wiring diagrams inside appliance).



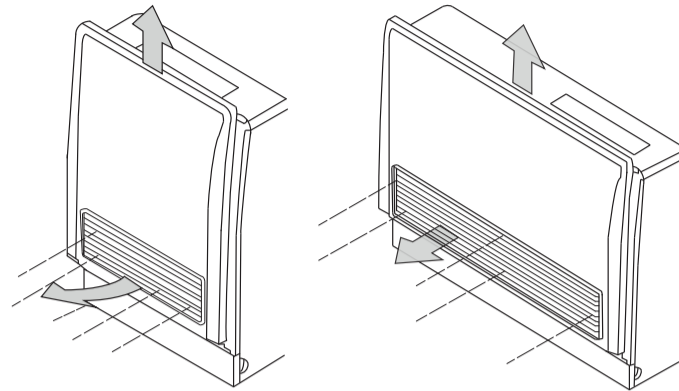
Part description	Qty.
1 Terminal	1
2 Central timer harness (black)	1
3 Sub-PCB lead wire (blue, red, white)	1
4 Screws	2
5 Circuit board spacers	4
6 Bush (not required for installation)	1
7 Sub-PCB	1

Each Energysaver has a specific position to attach the sub-PCB and spare port to attach the sub-PCB lead wire. Refer overleaf for images for each model. You can also refer to the wiring diagrams—folded inside a pouch in each unit.

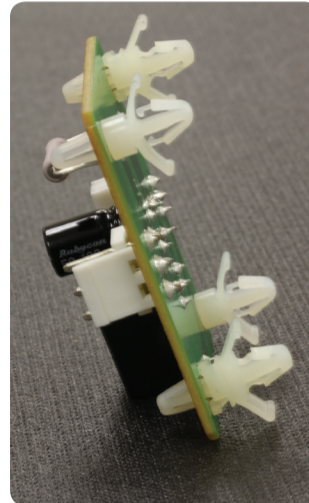
1. Disconnect the power supply from the wall.
2. Remove louvre and front panel.
3. Attach the circuit board spacers to the sub-PCB, then attach to the rear panel. For the 1005FT you will also need to relocate the main PCB (two screws) to allow access to the rear panel.
4. Using the screws provided, attach the terminal to the rear panel.
5. Connect the sub-PCB and main PCB with the sub-PCB lead wire.
6. Connect the central timer harness to the sub-PCB, feeding it through a hole* in the rear panel.
7. Connect the central timer harness to the terminal by pressing the lever down, inserting the end of the harness into the connection point of the terminal, and switching the lever back to its original position.
8. Connect the outside signalling wire as in step 6 and reconnect the power supply.
9. Test the PCB by turning it on at the on/off switch (ensure central timer is also in an 'on' cycle) to check that the heater starts. Turn 24 V signal off to check that the heater stops.
10. Re-attach the louvre and front panel.

* Hole has rounded edges so a bush or protection is not required. Bush provided in the kit does not fit any of the current models.

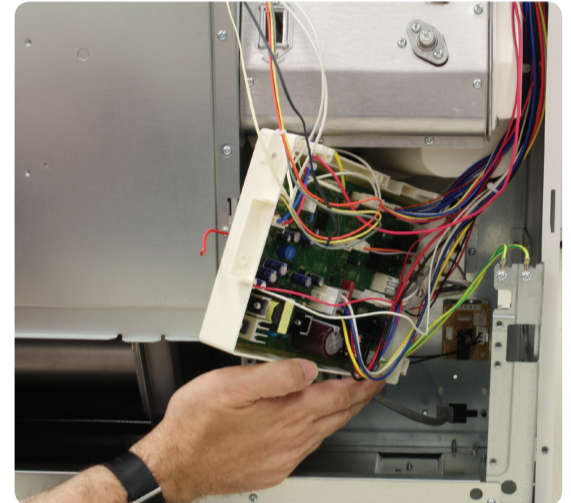
Supporting images



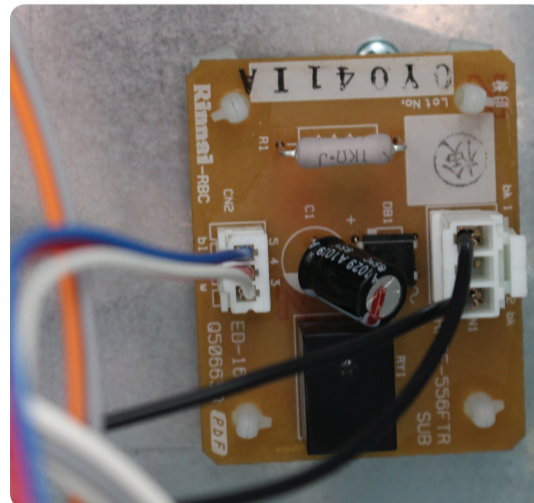
Removing the louvre and front panel—the 1005FT has seven screws.



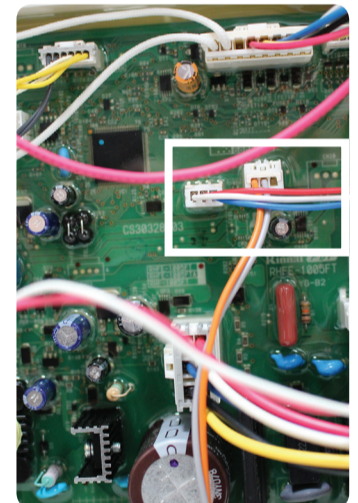
Attaching the circuit board spacers to the sub-PCB.



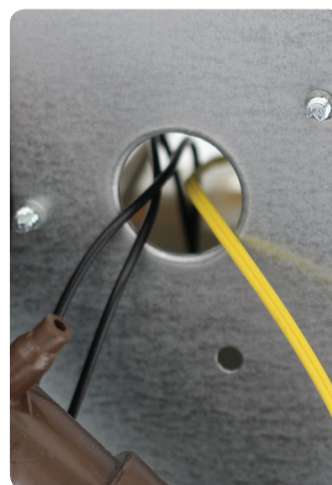
Relocating the main pcb on the 1005FT model to access the rear panel.



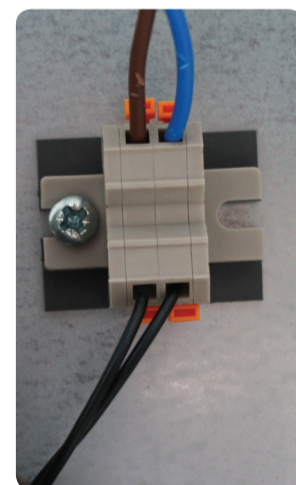
Sub-PCB lead wire and central timer harness connected to the sub-PCB (attached to rear panel).



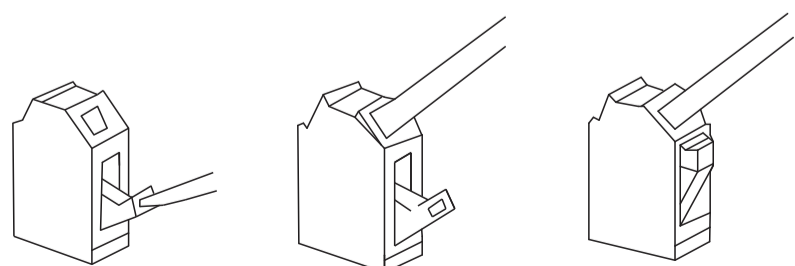
Sub-PCB lead wire attached to spare port on the main PCB.



Central timer harness feeding through hole in rear panel



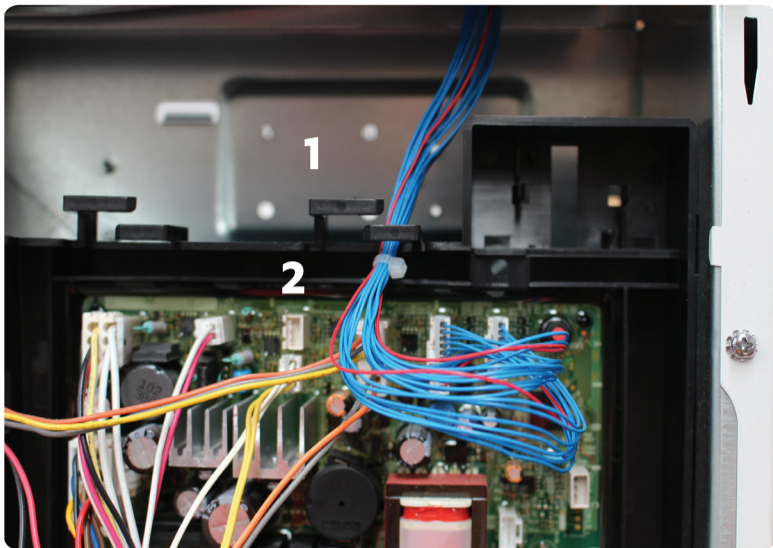
Terminal attached to the rear panel.



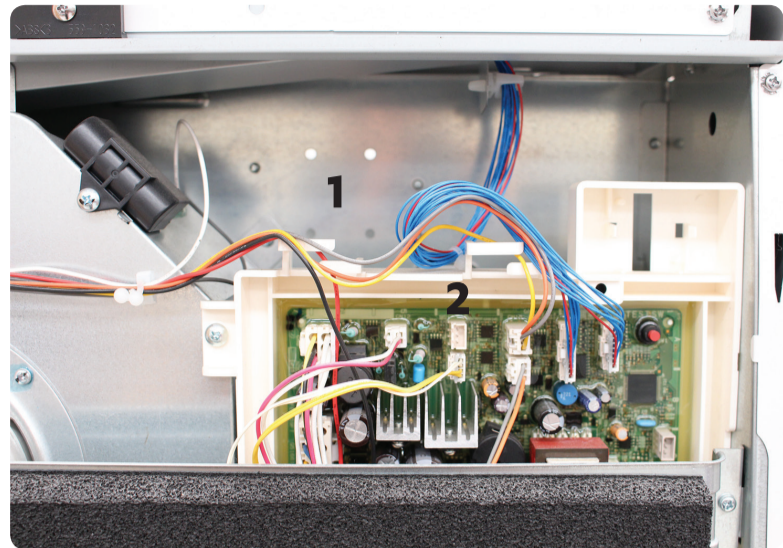
Connecting the central timer harness to the terminal.

- 1 = rear panel position to secure sub-PCB (for the 1005FT you need to temporarily relocate the main-PCB to access the rear panel)
- 2 = port connection (309FT - CN7, 561FT - CN7, 559FT - CN7, 1005FT - CN18)

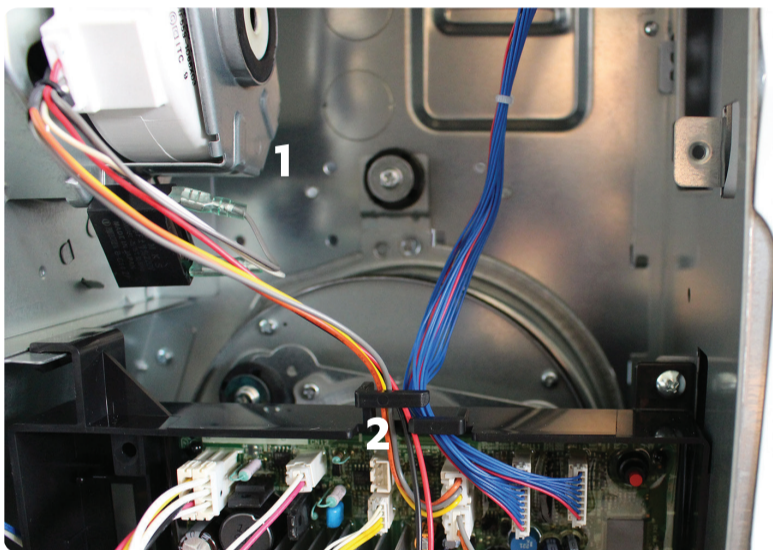
Energysaver 309FT



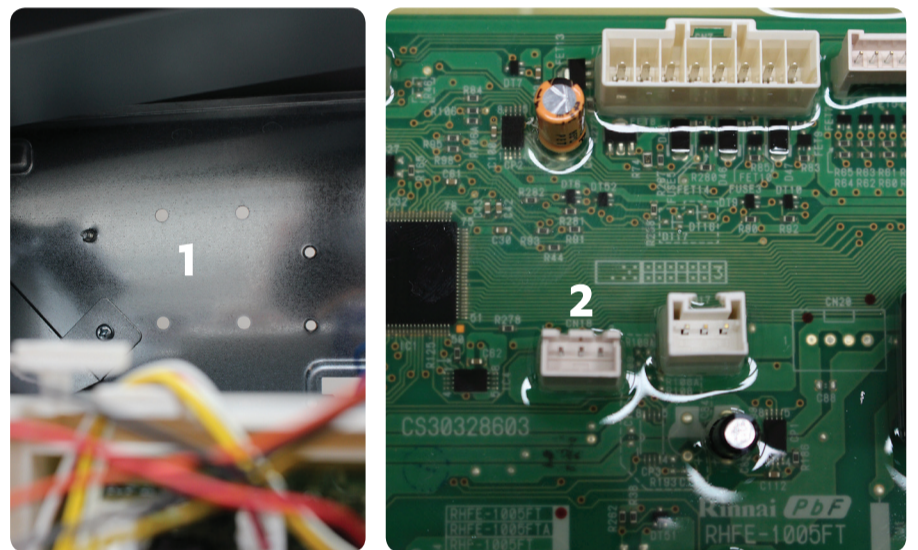
Energysaver 561FT



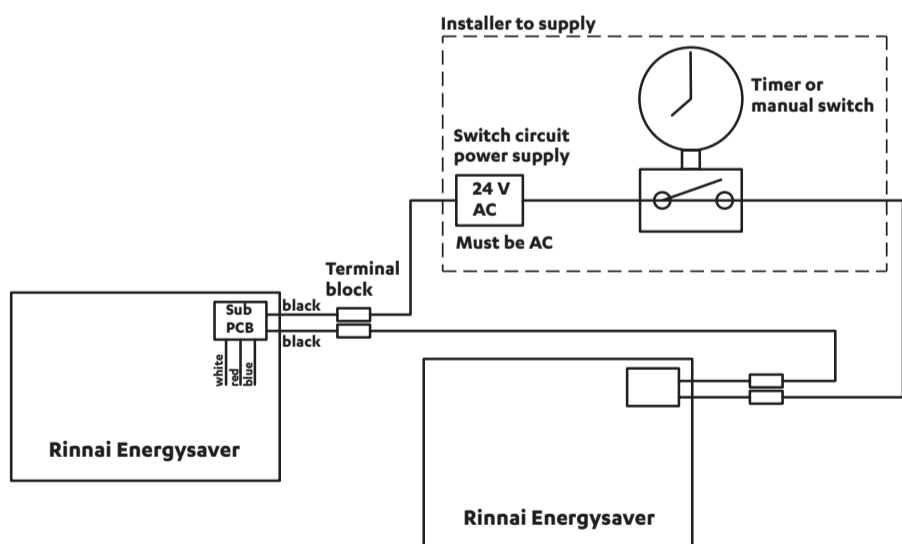
Energysaver 559FT



Energysaver 1005FT



Suggested remote switching Energysaver layout



When a 24 Volt AC supply is applied to the sub-PCBs the appliances will turn on. When the 24 Volt AC power supply is disconnected appliances will turn off.

Recommended electrical cable specification

Multi-core conductor: 1.25 mm², AWG 16 single cable: Ø 1.2 mm, AWG 16.

Recommended cable

Multi-core conductor: 1.25 mm², AWG 16~0.3 mm², AWG 22 single cable: Ø 1.6 mm, AWG 14~Ø0.5mm, AWG 20.

Strip length

8-9 mm.

Cable connection warning

- When a multi-core conductor is used as the connection cable, solder the end of the cable so that the core is prevented from spreading and the cable grip holds securely.
- Only connect one cable per connection opening.
- Lock the cable clamp lever securely after fitting the cable.

