

Boiler Services at Twynam Lodge, Guthega

The following frequently asked questions (**FAQs**) are provided to address some common misunderstandings concerning the operation of the new boiler system, and its management.

1. **Q: Does the system operate all year?** – **NO**, the full time operating period for the boiler continues to be from about the June long weekend until October.
2. **Q: Do we still need the two electric hot water systems?** – **YES**, they provide domestic hot water outside the winter season and act as passive storage tanks for the domestic hot water produced by the boiler system in winter. However, Hot Water System #2 has been disconnected to prevent overloading the Main Control Switch on the Distribution Board until the Distribution Board is replaced after the end of the winter season.
3. **Q: Do the electric hot water systems consume electricity in winter?** – **NO**, presently the associated electric circuit breakers are switched off until the summer period. Ordinarily, it is expected that the temperature of the water from the boiler system will be sufficiently high enough to prevent the thermostats signalling for electrical energy.
4. **Q: Is the new boiler system more fuel efficient?** – **it is expected to be** however, in 2016 the boiler operated for extended periods, either side of winter, as part of a system shake down and we expect that the 2017 fuel consumption will be more indicative.
5. **Q: What sort of fuel does the boiler use?** – **'winter' diesel'** that contains additives to prevent freezing. It is the same diesel fuel supplied for vehicles by service stations, from Goulburn south, from about April until the end of the winter season.
6. **Q: What temperature is the Lodge heating set at?** – the boiler has been programmed to operate at a range of temperatures throughout the day based on common practice for similar systems in the resorts:

Time	Temperature °C
5:30 – 9:00 am	21.5 ⁰
9:00 – 11:30 am	18 ⁰
11:30 – 2:00pm	21 ⁰
2:00 – 4:30pm	18 ⁰
4:30 – 11:00pm	21 ⁰
11:00 – 5:30 am	17 ⁰

7. **Q: Does these temperature settings mean the boiler will be continually heating?** – **NO**, the boiler will only heat when the temperature drops to these thresholds.
8. **Q: Can we change the heating temperature?** – members can only adjust the thermostats of the heaters located in the bedrooms and common areas. Changes to the boiler settings will be considered by the Board and undertaken by the Service Contractor.
9. **Q: What can we do when the building is too hot or cold?** – comfort levels are highly subjective and members should personally or communally adopt strategies to achieve comfort levels in the Lodge, without tampering with the equipment.

10. **Q: What do we do when the boiler fails?** – the **Lodge Captain** will follow the **Operating Procedures** hereunder in the event of a service interruption and, if the failure continues, will ring the Service Contractor. The contact details are posted on the Boiler Room door.

Fred Hacker

Ph(M): 0428 484 448 or Ph(H): 6456 2384

11. **Q: How long will it take for the Service Contractor to respond?** – this will depend on the time of day the Service Contractor is notified. Ordinarily he should attend the same day or first thing the next morning, provided vehicle access is possible.
12. **Q: How long will it take to fix a problem?** – this will depend on the nature of the problem and availability of parts.
13. **Q: What do we do if the contractor advises to expect an extended delay in repairs during the winter season?** – the Lodge Captain or a member should report the event to the Board immediately.
14. **Q: Why have members been denied access to the plant equipment in the boiler room?** – to ensure the equipment warranty, the plant area has been restricted to contract and qualified service personnel for the safety and benefit of all the members.

LODGE TWYNAM, GUTHEGA BOILER SYSTEM
DISTRIBUTION SWITCHBOARD OPERATION SETTINGS

for
Winter Season

The following circuit breaker (**CB**) switches should be in the **ON** position to provide domestic hot water and heating in the Winter Season from the June to the October long weekends.

Boiler Room Sub Board – F3					
Service	Switch	ON/OFF	Switch	ON/OFF	Service
Main Control Switch	CB 3	ON	CB 4	ON	Domestic Hot Water Pump
			CB 10	ON	Heating Circulation Pump ¹
Hot Water System No 1	CB 9	OFF	CB 14	ON	Double Power Point below s/board
			CB 16	ON	Boiler Power Points
Hot Water System No 2	CB 15	OFF	CB 18	ON	Lights Boiler Room

¹ The Heating Circulation Pump circuit includes a 25AMP HEGA Contactor switch above the Distribution Board (labelled 'Heating Pump Control') which should be left on permanently.

EVENT INDICATORS:

1. No lighting in the Boiler Room, when light switch outside the Room is switched ON, more likely indicates that the Main Control Switch has tripped CB3 and less likely CB18.
2. Green Light at front of boiler units extinguished suggests that CB16 has tripped. The absence of noise from the boiler, when the green lights are ON, ordinarily indicates a non-heating phase.
3. No domestic hot water from sink and shower taps suggests:
 - a. that the Domestic Hot Water circulation pump has stopped because CB4 may have tripped or,

- b. that the hot water in the two domestic hot water storage tanks has been exhausted and not replenished because the boiler is not working– refer to **2 above** for boiler operation settings or,
 - c. the plumbing lines have not been cleared of air or cold water at the beginning of the season or after a major plumbing service – run hot water taps to clear lines.
 - d. **Please do NOT attempt to change or test valve and tap settings in the boiler room.**
4. No heating in the building suggests:
- a. the Heating Circulation Pump (CB10) has tripped or,
 - b. the Hega Contactor Switch (beige) above the distribution board may have tripped. The switch on the contactor should be in the ‘up’ position revealing an ‘I’ to the observer (NB: the bluey grey contactor is disconnected and surplus) or,
 - c. The pump has failed and requires attention from the Service Contractor.

SOLUTIONS:

Before ringing Fred Hacker, our Service Contractor, the Lodge Captain may undertake the following steps:

STEP #1: Check the position of the circuit breakers by switching each one of them **OFF**.

STEP #2: With the exception of CB9 & CB15 and starting from **CB3**, firmly switch them back **ON**.

STEP #3: Note operation of services and then, if still necessary, ring the Service Contractor.

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STEP #4: In the event of a continuing lack of domestic hot water switch on the circuit breaker **CB9** for **Hot Water System #1** until Service Contractor attends.

STEP #5 Record and report the event as part of the Lodge Captain’s reporting requirements.

BOILER ROOM SUB BOARD.

F3

MAIN	1	2	DOMESTIC
CONTROL	3	4	HOT
SWITCH	5	6	WATER
		7	PUMP
HOT	8	9	HEATING
WATER	10	11	CIRCULATING
SYSTEM	12	13	PUMP
N° 1	14	15	DOUBLE POWER POINT
	16	17	BELOW SWITCH BOARD
HOT			BOILER
WATER			POWER POINT
SYSTEM			LIGHT BOILER ROOM.
N° 2			AND INFIRIARY

From
F300 (Boiler)
For Lighting
for WATER
From the double
point (Boiler Power Point)
From the OFFICE (Water)
from DEPART.



LODGE TWYNAM, GUTHEGA BOILER SYSTEM
DISTRIBUTION SWITCHBOARD OPERATION SETTINGS

for
Summer Season

Boiler Room Sub Board – F3					
Service	Switch	ON/OFF	Switch	ON/OFF	Service
Main Control Switch	CB 3	ON	CB 4	ON	Domestic Hot Water Pump
			CB 10	OFF	Heating Circulation Pump¹
Hot Water System No 1	CB 9	ON	CB 14	ON	Double Power Point below s/board
			CB 16	OFF	Boiler Power Points
Hot Water System No 2	CB 15	ON	CB 18	ON	Light Boiler Room

The only difference between the winter and summer settings are:

1. CB10 Heating Circulation Pump and CB16 Boiler Power Points are switched OFF,
2. CB9 and CB15 are switched ON to provide domestic hot water and no heating,
3. The Main Switch in the external Electrical Switchboard is switched OFF after the October long weekend and throughout summer when the building is uninhabited.