REU-V1616W / V1620W / V2018W / V2020W

GAS PRESSURE SETTING AND DIAGNOSTICS INFORMATION

NOTE: For additional installation and commissioning information refer to Operation / Installation Manual

WARNING

THIS APPLIANCE MUST BE INSTALLED, SERVICED AND REMOVED BY AN AUTHORISED PERSON

DURING PRESSURE TESTING OF THE CONSUMER PIPING ENSURE GAS COCK SITUATED BEFORE UNIT IS SHUT-OFF.

FAILURE TO DO SO MAY RESULT IN SERIOUS DAMAGE TO THE APPLIANCE AND POSSIBLE INJURY.

APPLIANCE OPERATING PRESSURES (kPa)

Table 1.

	Water Inlet Min.	Gas Inlet Min./ Max.		Forced Low		Forced High	
		Nat.G	Prop.G	Nat.G	Prop.G	Nat.G	Prop.G
REU-V1616W	80	1.13 3.0	2.75 3.0	0.18	0.18	0.88	0.81
REU-V1620W	120	1.13 3.0	2.75 3.0	0.18	0.18	0.88	0.81
REU-V2018W	100	1.13 3.0	2.75 3.0	0.18	0.19	0.92	0.84
REU-V2020W	120	1.13 3.0	2.75 3.0	0.18	0.19	0.92	0.84

COMMISSIONING

With all gas appliances in operation at maximum gas rate, the flowing inlet pressure at the incoming test point on the Infinity should read 1.13 - 3.0 kPa on Natural Gas and 2.75 - 3.0 kPa on Propane Gas. If the pressure is lower, the gas supply is inadequate and the appliance unit will not operate to specification. Check gas meter, regulator and pipework for correct operation/sizing and rectify as required.

GAS PRESSURE SETTING

(Ensure gas pressure check under Commissioning has been completed first !)

The regulator is electronically controlled and factory pre-set. **Under normal circumstances it does not require adjustment during installation. Make adjustments only if the unit is not operating correctly and all other possible causes for incorrect operation have been eliminated.**

1. Turn 'OFF' the gas supply.
2. Turn 'OFF' 240V power supply.
3. Remove the front cover from the appliance.
4. Check gas type switches (Fig.1) are in the correct position (dip switch 1 of SW2 'ON' = NG, 'OFF' = LPG)

Note: 'ON' towards right, 'OFF' towards left.

5. Attach pressure gauge to burner test point, located on the gas control. (Fig. 2).
6. Turn 'ON' the gas supply.
7. Turn 'ON' 240V power supply.
8. If remote controllers are fitted, turn the unit 'ON' at the kitchen controller, select the maximum delivery temperature and open all available hot water taps full including the shower. (**CAUTION:** Ensure building occupants do not have access to hot water outlets during this procedure).
9. Set Infinity to 'Forced Low' combustion by setting No. 3 dip switch of the (SW1) set of dip switches to 'ON'. (Fig. 3).
10. Check the burner test point pressure.
11. Remove rubber access plug and adjust the regulator screw on the modulating valve (Fig. 4) as required in the pressure Table 1. Replace rubber access plug.
12. Set the Infinity to 'Forced High' combustion by setting both No. 3 and No. 4 dip switches of the bottom (SW1) set to 'ON'. (Fig. 5). **Ensure maximum water flow !**
13. Check the burner test point pressure.
14. Adjust the high pressure Potentiometer (POT) on the Printed Circuit Board (PCB) as required to the pressure shown in Table 1.

IMPORTANT: Set dip switches No. 3 and 4 on the bottom (SW1) to 'OFF' to return the appliance to 'Normal' combustion. (Fig. 6).

15. Close hot water tap.
16. Turn 'OFF' the gas supply and 240V power supply.
17. Remove pressure gauge, and replacing sealing screw.
18. Turn 'ON' the gas supply and 240V power supply.
19. Operate unit and check for gas leaks at test point.
20. Replace the front cover of the appliance.

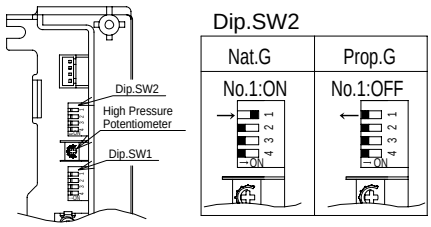


Fig. 1

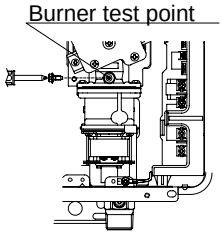


Fig. 2

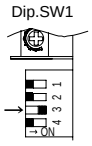


Fig. 3

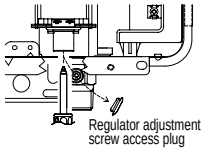


Fig. 4

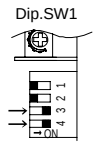


Fig. 5

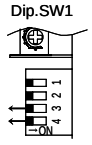
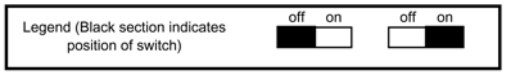
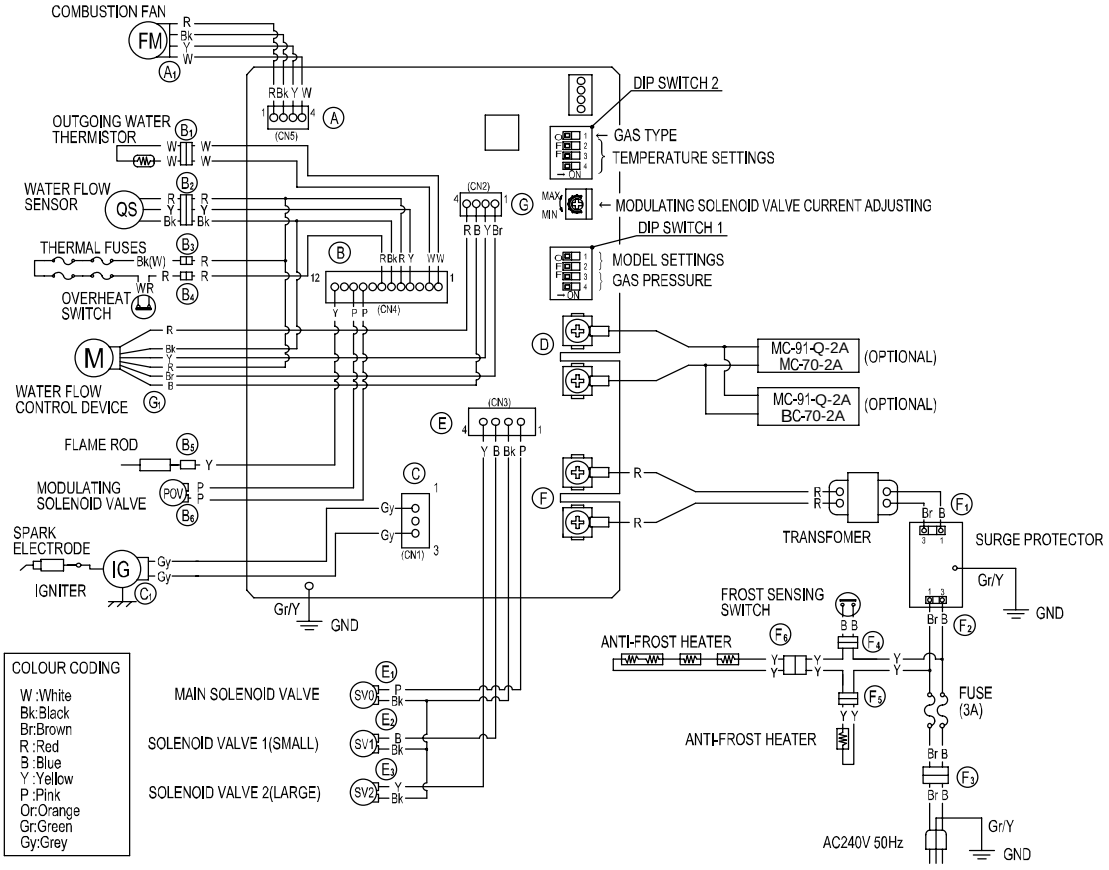


Fig. 6



CIRCUIT DIAGRAM AND DIAGNOSTICS POINTS



FLOW CHART No.	COMPONENT	MEASUREMENT POINT CN	MEASUREMENT POINT WIRE COLOUR	NORMAL VALUE	NOTE
①	SURGE PROTECTOR	F_3	B-Br	AC207~264V	
②⑭	WATER FLOW CONTROL DEVICE	G_1	R(CN2-NO.4)-B	± DC11~13V (ONLY WHEN OPERATING)	OPERATE ELECTRICITY
			R(CN4-NO.5)-Bk	DC11~13V	CONTROL ELECTRICITY
			Bk-Y	BELOW DC1V(LIMITER ON)	FULL OPEN POSITION
				DC4~6V(LIMITER OFF)	
			Bk-Br	BELOW DC1V(LIMITER ON)	FULL CLOSE POSITION
				DC4~6V(LIMITER OFF)	
③	REMOTE CONTROL	D	(TERMINAL)	DC11~13V	
④	WATER FLOW SENSOR	B_2	R-Bk	DC11~13V	ON2.4L/MIN (33Hz) OVER 1980PULSE/MIN OFF1.7L/MIN(23Hz) BELOW 1380PULSE/MIN
			Y-Bk GND	DC4~7V(PULSE 20~320Hz)	
⑤	COMBUSTION FAN	A_1	R-Bk	DC15~46V	
			Y-Bk	DC11~13V	
			W-Bk GND	DC5~10V(20~400Hz)	
⑥	FLAME ROD	B_5	Y-FLAME ROD	OVER DC1μA	FLAME CONDITION
⑦	MODULATING SOLENOID VALVE	B_6	P-P	DC2~15V 65~85 Ω	
⑧	OUTGOING WATER THERMISTOR	B_1	W-W	15°C…11.4~14.0 kΩ 30°C…6.4~7.8 kΩ 45°C…3.6~4.5 kΩ 60°C…2.2~2.7 kΩ 105°C…0.6~0.8 kΩ	
⑨	THERMAL FUSES	B_3 B_4	R-W R-Bk	BELOW 1Ω	
⑩	IGNITER	C_1	Gy-Gy	AC90~110V	
⑪	MAIN SOLENOID VALVE	E_1	P-Bk	DC80~100V 1.7~2.1 kΩ	
⑫	SOLENOID VALVE 1 (SMALL)	E_2	B-Bk	DC80~100V 1.7~2.0 kΩ	
⑬	SOLENOID VALVE 2 (LARGE)	E_3	Y-Bk	DC80~100V 1.7~2.1 kΩ	

TRANSFORMER VOLTAGES AND RESISTANCES

CN	WIRE COLOUR	NORMAL VALUE
F	R-R	AC90~110V 11~13 Ω
F_1	B-Br	31~36 Ω