

GAS PRESSURE SETTING AND DIAGNOSTICS INFORMATION

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



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

TABLE 1

Gas pressure

Model name	Gas Inlet Pressure (Min./Max.) kPa		Forced Low kPa		Forced High kPa	
	Nat.G	Prop.G ULPG	Nat.G	Prop.G ULPG	Nat.G	Prop.G ULPG
REU-KM3237WD	1.13/ 3.0	2.75/ 3.0	0.18	0.27	0.58	0.80
REU-KM3237FFUD	1.13/ 3.0	2.75/ 3.0	0.22	0.30	0.65	0.90

Water pressure

Water Inlet Pressure (Min) kPa
220

COMMISSIONING

With all gas appliances in operation at maximum gas rate, the flowing inlet pressure at the incoming test point on the appliance should read 1.13 - 3.0 kPa on Natural Gas and 2.75 - 3.0 kPa on Propane Gas & ULPG. If the pressure is lower, the gas supply is inadequate and the appliance unit will not operate to specification. Check gas meter, regulator & 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' 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' = Prop.G & ULPG)

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

5. Attach pressure gauge to burner test point, located on the gas manifold. (Fig. 2).
6. Turn 'ON' the gas supply.
7. Turn 'ON' 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 appliance to 'Forced Low' combustion by setting No. 7 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 appliance to 'Forced High' combustion by setting both No. 7 and No. 8 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. 7 and 8 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 power supply.
 17. Remove pressure gauge, and replacing sealing screw.
 18. Turn 'ON' the gas supply and power supply.
 19. Operate unit and check for gas leaks at test point.
 20. Replace the front cover of the appliance.

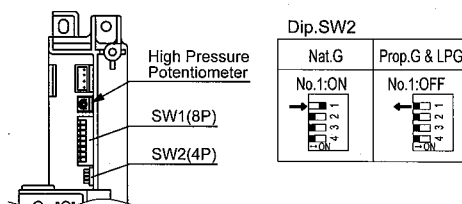


Fig. 1

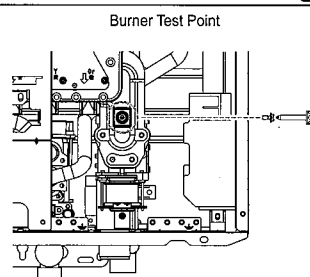


Fig. 2

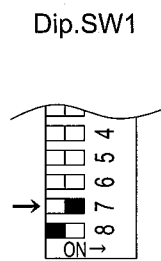


Fig. 3

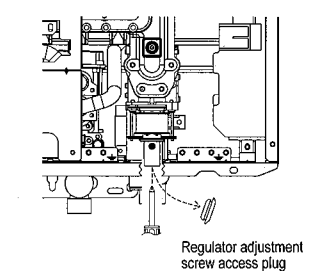


Fig. 4

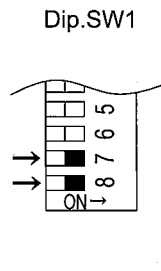


Fig. 5

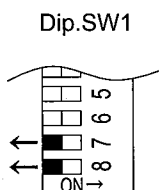
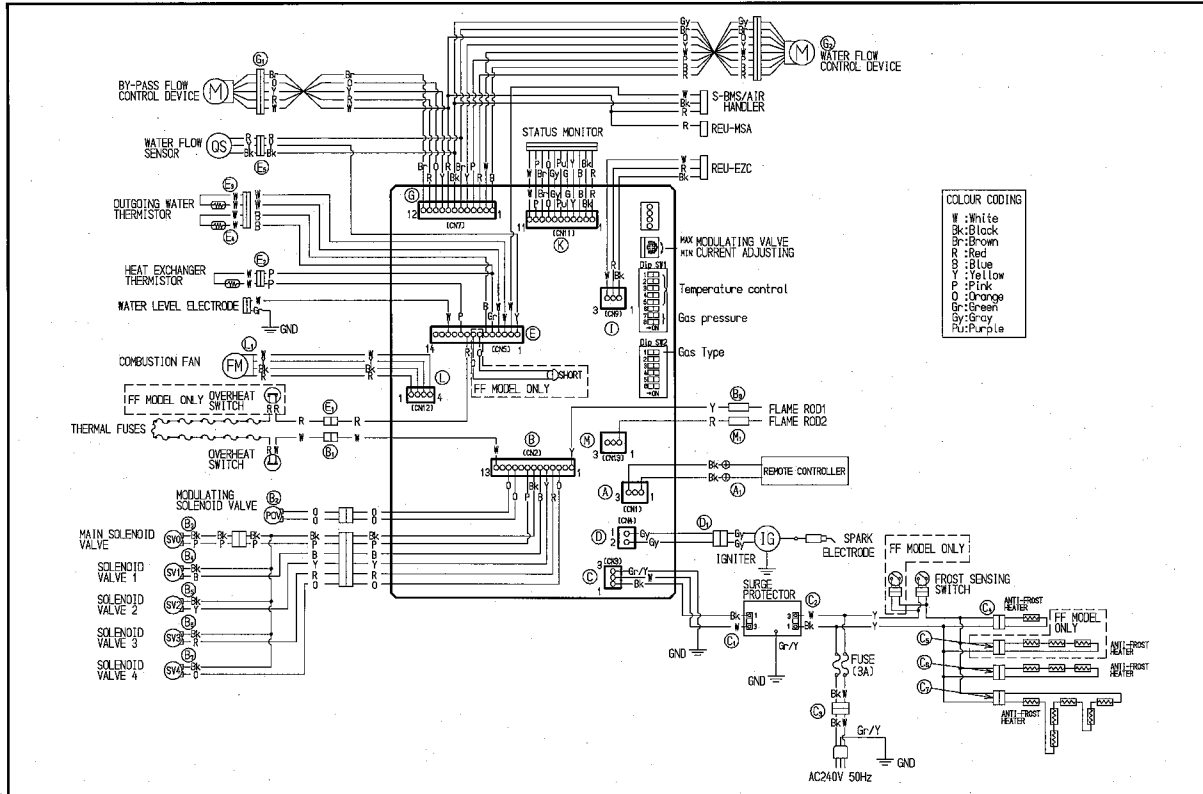


Fig. 6

Legend (Black section indicates position of switch) OFF ON

REU-KM3237WD/KM3237FFUD

CIRCUIT DIAGRAM AND DIAGNOSTICS POINTS



DIAGNOSTICS POINTS

COMPONENT	MEASUREMENT POINT CN	WIRE COLOUR	RANGE OF VALUE	REMARKS
REMOTE CONTROLLER	A ₁	Bk-Bk	DC11-13V	
THERMAL FUSE	B/E ₁	W-R	BELOW 1Ω	
MODULATION VALVE	B ₂	O-O	DC2-15V / 67-82Ω	
MAIN SOLENOID VALVE	B ₃	P-Bk	DC11-13V / 37-43Ω	
SOLENOID VALVE 1	B ₄	B-Bk	DC11-13V / 37-43Ω	
SOLENOID VALVE 2	B ₅	Y-Bk	DC11-13V / 37-43Ω	
SOLENOID VALVE 3	B ₆	R-Bk	DC11-13V / 37-43Ω	
SOLENOID VALVE 4	B ₇	O-Bk	DC11-13V / 37-43Ω	
FLAME ROD 1	B ₈	Y-FR	OVER 1μA (DURING OPERATION)	
FLAME ROD 2	M ₁	R-FR	OVER 1μA (DURING OPERATION)	
SURGE PROTECTOR	C ₁	W-Bk	AC207-264V	
SURGE PROTECTOR	C ₂	W-Bk	AC207-264V	
MAIN POWER CODE	C ₃	W-Bk	AC207-264V	
IGNITOR	D ₁	Gy-Gy	AC207-264V (DURING IGNITION)	
HEAT EXCHANGER TH	E ₂	W-W	15°C: 11.4-14.0kΩ 30°C: 6.4-7.8kΩ	
OUTGOING WATER TH1	E ₃	W-W	45°C: 3.6-4.5kΩ 60°C: 2.2-2.7kΩ	
OUTGOING WATER TH2	E ₄	B-B	100°C: 0.6-0.8kΩ	
WATER FLOW SENSOR	E ₅	R-Bk	DC11-13V	ON: 2.4L/MIN(33Hz) OVER 1980 PULSE/MIN OFF: 1.7L/MIN(28Hz) OVER 1380 PULSE/MIN
		Y-Bk	DC4-7V (PULSE 20-300Hz)	
BY-PASS FLOW CONTROL DEVICE	G ₁	Br-W	DC12V	
		O-W	DC2-6V (DURING OPERATION)	
		Y-W		
		R-W	15-35Ω	
WATER FLOW CONTROL DEVICE	G ₂	R-O		
		P-O		
		B-O	DC11-13V (DURING OPERATION)	
		W-O		
		R-P	30-50Ω	
		B-W		
COMBUSTION FAN	L ₁	Y-Gy	BELOW DC1V (LIMITER ON) DC4-6V (LIMITER OFF)	FULL OPEN POSITION
		Br-Gy	BELOW DC1V (LIMITER ON) DC4-6V (LIMITER OFF)	FULL CLOSE POSITION
		R-Bk	DC15-46V	
		Y-Bk	DC11-13V	
		W-Bk	DC5-10V (PULSE 20-400Hz)	

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