

STYX

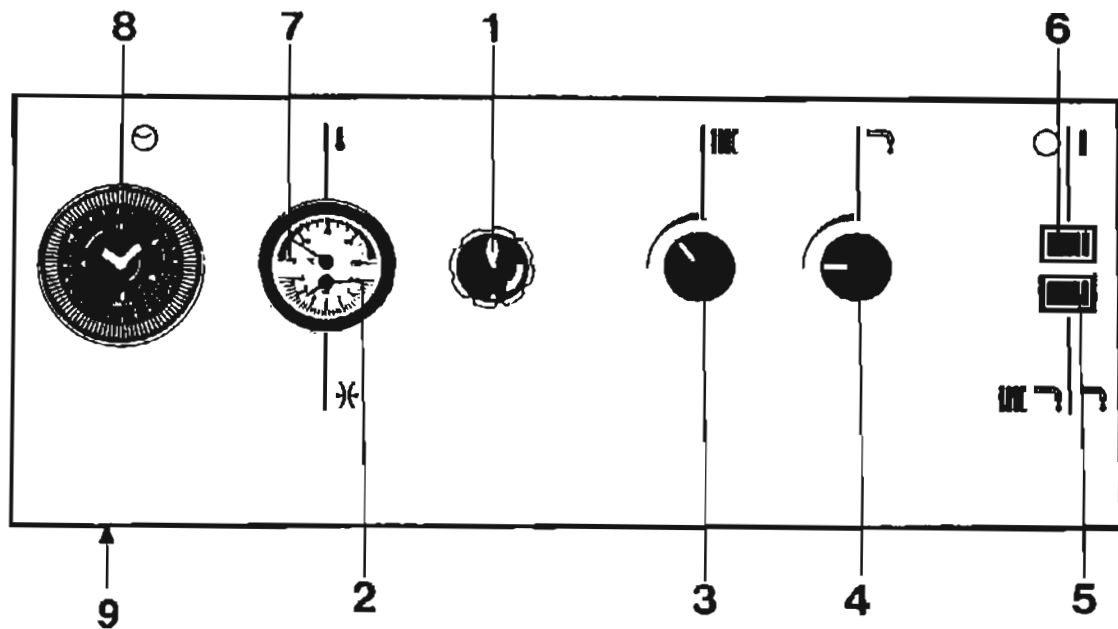
User's Instructions
Installation and servicing instructions

SX 20 M/SX 20 M FF

TECHNICAL DATA & SPECIFICATION		SX 20 M	SX 20 M FF
Rated output to heating max	kW (Btu/h)	22.3 (77,000)	23.25 (80,000)
Rated output to heating min	kW (Btu/h)	9.2 (31,500)	6.98 (24,000)
Rated input	kW (Btu/h)	25.6 (88,000)	26.28 (90,000)
Inlet gas pressure	mbar (w.g.)	20 (8.0)	20 (8.0)
Burner pressure max	mbar (w.g.)	11,2 (4.5)	11,2 (4.5)
Burner pressure min	mbar (w.g.)	1.9 (0.76)	1.9 (0.76)
Heating flow temperature	° C	90	90
Minimum working pressure	bar	0,24	0,24
Maximum pressure	bar	3	3
Expansion vessel capacity ☐	lit	7	7
Pressure in expansion vessel	bar	1	1
Hot water output max	kW (Btu/h)	22.3 (77,000)	23.25 (80,000)
Hot water rate Δt 30°C	lit/min (gal/min)	10.7 (2.4)	11.1 (2.5)
Hot water rate Δt 45°C	lit/min (gal/min)	7.1 (1.6)	7.4 (1.6)
Minimum incoming main flow	lit/min (gal/min)	2.6 (0.6)	26 (0.6)

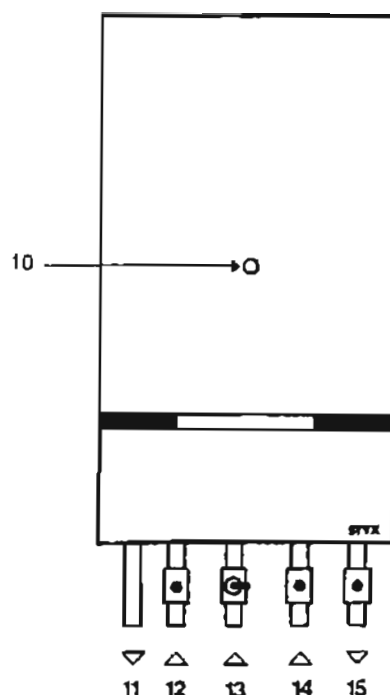
CONNECTIONS			
Gas	ins/BSP	1/2	1/2
Cold water Inlet	mm	15	15
Hot water inlet	mm	15	15
Central heating flow	mm	22	22
Central heating return	mm	22	22
Flue connection	Ø mm	140	--
Electrical connections	V/hz	240/50	240/50
Electrical power connections	W	110	160
Weight	Kg. (lbs.)	43 (94)	51 (110)

☐ In the case of greater water content the installation of additional expansion vessel is required.



HOW TO OPERATE

- 1) GAS VALVE CONTROL KNOB FOR PILOT
- 2) WATER PRESSURE GAUGE
- 3) CENTRAL HEATING TEMPERATURE CONTROL 
- 4) DOMESTIC HOT WATER TEMPERATURE CONTROL 
- 5) SUMMER / WINTER SWITCH:
 -  SYMBOL INDICATES HOT WATER ONLY
 -   SYMBOL INDICATES HOT WATER & CENTRAL HEATING
- 6) ON/OFF SWITCH WITH NEON LIGHT
- 7) CENTRAL HEATING FLOW TEMPERATURE GAUGE
- 8) CENTRAL HEATING TIME CONTROL CLOCK (IF FITTED)
- 9) PIEZO IGNITION (MODEL SX 20 M)
- 10) VIEWING WINDOW FOR PILOT AND MAIN BURNER FLAME
- 11) DOMESTIC HOT WATER PIPE
- 12) COLD WATER ISOLATING VALVE
- 13) GAS SERVICE ISOLATING VALVE
- 14) SERVICE ISOLATING VALVE RETURN (CENTRAL HEATING)
- 15) SERVICE ISOLATING VALVE FLOW (CENTRAL HEATING)



Before commencing to operate please make sure that the cold water isolating valve (12), gas service isolating valve (13) and service isolating valve (central heating) both return and flow (14 and 15) are in fully open position.

(If in doubt consult your MTS engineer or corgi registered installer).

Check the water pressure on pressure gauge (2). The white needle on the water pressure gauge should be at the 1 bar reading. If the pressure is reading under 1 bar, the filling procedure should be at then be carried out.

(If necessary refer to your instruction manual or consult the installer).

Check that the main electrical supply is switched on (6) so that neon light glows. If it does not glow then check the subsidiary switch (e.g. 3 pin plug, spur point, double pole switch etc.).

TO IGNITE THE PILOT

Push in and retain fully depressed the gas control knob (1), then repeatedly press the plezo ignition (9) until the pilot flame develops. Once the pilot flame has developed release pilot control knob gently after 30 seconds.

Should the pilot flame fail to remain alight, wait for 3 minutes and repeat ignition procedure again.

TO IGNITE THE PILOT (MODEL SX 20 MFF)

Press in the gas control knob (1) and keep it depressed. After a few seconds the igniter will light the pilot flame. View through the window (10). Hold gas control knob for 30 seconds then slowly release. The pilot light should then remain alight. If the pilot does not remain alight or goes out for any other reason, wait 3 minutes and repeat the procedure as above.

SETTING OF SUMMER/WINTER SWITCH

If the Summer/Winter switch (5) is switched to summer position, symbol marked water only, the boiler will only light on demand for domestic hot water.

If switched to the winter position, symbol marked hot water & central heating the boiler burner will come alight on demand for both central heating and hot water. (Hot water priority on demand).

SETTING OF THE TEMPERATURE (BOILER THERMOSTAT)

The central heating flow temperature is controlled by the boiler stat (3) and can be set according to your temperature requirements.

TO TURN OFF THE BOILER OPERATION

- A) In order to turn off the central heating only, the summer/winter switch (5) must then be switched to the summer position,  so that it allows the use of hot water on demand.
- B) To turn off the central heating and hot water, for a period of time, switch off the main electricity switch (6) and turn the gas valve control knob (1) to the direction of the arrow until resistance is met. The pilot light will now have extinguished.

CARE AND MAINTENANCE

To clean the outer casing of the boiler, it is recommended to use a damp cloth and a small amount of soap. Do not use any abrasive or dissolving cleaning material, as this could damage the white casing.

It is highly recommended that your MTS STYX receives an annual service to ensure that it continues to work safely and efficiently.

The service must be carried out by a corgi registered member only.

INSTALLATION INSTRUCTIONS

INTRODUCTION

STYX, is a low water content boiler, room sealed fan assisted, providing central heating and instantaneous hot water, (domestic hot water priority).

STYX is designed as a fully pumped, sealed vent unit.

STYX comes pre-assembled with:

- * expansion vessel
- * diverter valve
- * domestic hot water calorifier
- * pressure release valve 3 bar
- * pressure gauge
- * temperature gauge
- * circulator pump

STYX is pre-wired and tested before leaving the factory, so that the installer only has to connect the main supply, radiators and pipe work as required because MTS has taken everything into consideration to make the installation very simple and time saving.

DESIGN

MTS STYX Combi is manufactured and designed to high standards and specifications which will give, upon regular service and maintenance a long lasting reliable service.

The outer casing of the MTS STYX Combi is finished in a white stove enamelled finish with all controls accesable behind the front lowable cover.

GUARANTEE CONDITION

The appliance is guaranteed for 12 mounths from the date of purchase. During this time, subject to the following provisions, all work will be carried out free of charge.

1. The appliance must be correctly installed according to the British Standard Codes of Practice, I.E.E. Regulations and in accordance with the manufacturers instructions, by a corgi registered installer.
2. The guarantee does not cover accidental damage, incorrect installation, maintenance, Inefficent flue system, irregularities in the electric and/or hydraulic plants, wrong gas appliance pressure and misuse or neglect.
3. The guarantee may be rendered invalid if the appliance is tampered with or repaired by any unauthorised persons.
4. The guarantee card is the only recognised guarantee. No other verbal or written form of guarantee are valid. (Guarantee card enclosed).
5. We do not accept any liability if the guarantee card is lost.

LAWS AND REGULATION APPLICABLE TO INSTALLATION

It is important that the installation of the boiler must be carried out by a corgi registered installer only according to the gas safety regulations, National Water Council or any other local authorities. Failure to comply with this law could lead to prosecution. The installation of the boiler must also be in accordance with I.E.E. Regulations.

CODES OF PRACTICE

CP. 331:3

Low pressure installation pipes.

BS. 5376:2

Boilers of rated input not exceeding 60 KW.

BS. 5449:1

Forced circulation hot water systems (smallbore and microbore domestic central heating systems).

BS. 5546

Installation of gas hot water supplies for domestic purposes (2nd Family Gases).

BS. 5440:1

Flues (for gas appliances of a rated input not exceeding 60 KW.)

BS. 5440:2

Air supply (for gas appliances of rated input not exceeding 60 KW).

BOILER LOCATION

MTS STYX can be installed on an internal or external wall, which must adequately be able to support the weight of the boiler and any ancillary equipment.

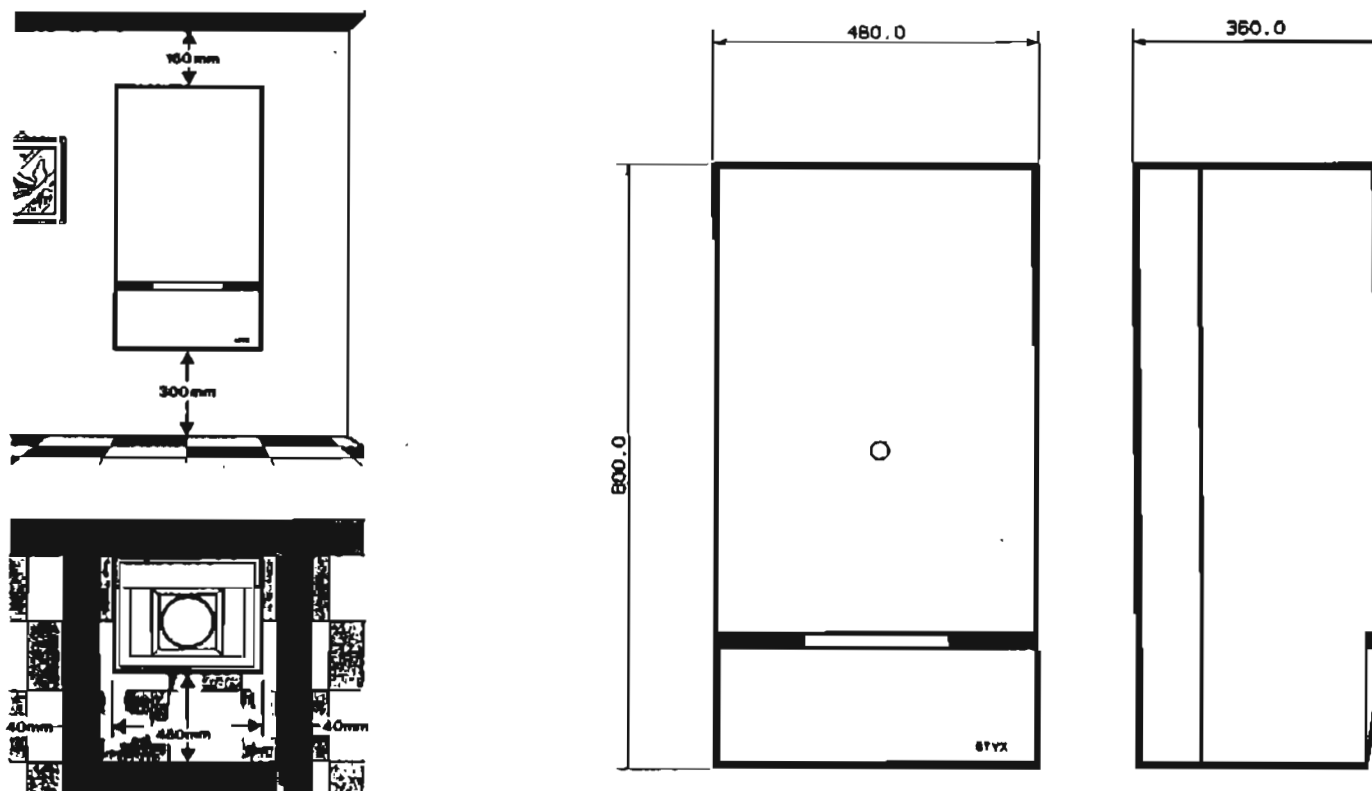
Should the location of the boiler be a timber framed building, then it must be fitted in accordance with the British Gas Publication, (Guide for gas installation in timber frame housing). If in doubt the local gas region of British Gas or local authority should be consulted for advise.

The safe installation of the boiler is very important as the incorrect installation could invalidate the guarantee. The provision for satisfactory flue termination must be made and the location must provide adequate space for servicing and air circulation around the boiler.

MTS STYX can be installed in any room, although particular attention is drawn to the requirements of the I.E.E.Regulation and in Scotland the electrical provisions of the Building. Regulations applicable in Scotland. This applies if the boiler is located in a room containing a bath or shower or any other unusual location and BS 5440:2 and BS 5546 give detailed guidance on this aspect.

IMPORTANT NOTE

It is recommended that a clearance such as those shown in figures 1 & 2 should be maintained between the sides, front and beneath the boiler for servicing and maintenance purposes.



REPLACEMENT OF AN EXISTING BOILER

Before installation of the boiler, it is imperative to eliminate from the circuit, deposits of foreign matter (e.g. lime scale, iron oxide sludge, swarf, solder, grease etc.) which could be carried into the boiler and interfere with its operation. This cleansing should be carried out with a detergent type product, incorporating a decanting vessel of sufficient capacity, fitted at the lowest point of return, to collect the particles of oxide, which come off the internal surfaces during operation.

GAS METER

Before the installation of the STYX the existing gas meter should be checked (preferably by the local gas region) to see that the rate of the existing gas supply meets the needed requirements.

INSTALLATION OF GAS SUPPLY PIPE

It is highly recommended not to use an existing old gas supply pipe. However, should the existing gas supply pipe be adequate it must be checked for any internal rust and deposits etc., as these could be carried into the boiler and interfere with its operation. (If in doubt consult your local gas region).

Installation pipes should be fitted in accordance with CP 331:3.

Pipe work from the meter to the boiler must be of an adequate size.

Do not use pipes of a smaller size than 22 mm. (3/4").

On completion of installation, the gas supply must be tested for soundness of gas purged as described in the above code CP331:3.

ELECTRICITY SUPPLY

External wiring to STYX must be in accordance with I.E.E. Regulations and any local regulations where applicable. STYX Combi is supplied for 240 Volts 50 Hz. Fuse rating 1 Amp.

STYX Combi has to be connected to the mains electricity supply by using the internal terminal box by the facility of complete electric isolation to the boiler (i.e. by use of a fused double pole switch, spur box or fused three pin plug, shuttered socket outlet) serving only the boiler.

INSTALLATION OF BOILER

Boiler must be installed in compliance with gas safety regulations 1972 and in accordance with the Codes of Practice and local regulations be authorities.

STYX Combi is a wallmounted boiler and requires a flat vertical area of the wall. This area in figure 1,2, is shown and does not include the clearance for the service and maintenance of the boiler. In addition minimum clearance is required see figure 1, 2.

The STYX is supplied in the one carton, which contains the boiler some of the installation accessories the rest are supplied separately free of charge.

CONNECTION FOR HEATING AND DOMESTIC HOT WATER PIPES

Complete details are given in BS 5376:2:1976, BS 5449:1:1977 (for smallbore and microbore central heating systems).

The following notes are given for general guidance.

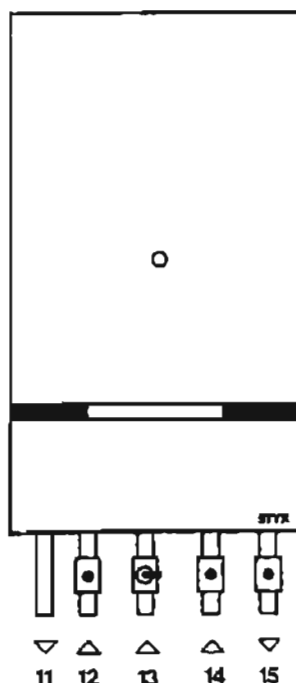


FIG. A

The isolating valves are supplied and must be fitted as shown in figure. A.

11 DOMESTIC HOT WATER PIPE: Must be fitted with a 1/2" compression union.

12 COLD WATER MAIN SUPPLY PIPE: Must be fitted with a 1/2" compression union.

13 GAS MAIN SUPPLY PIPE: Must be fitted in accordance with ... (see page).

14 CENTRAL HEATING SYSTEM RETURN PIPE: Must be fitted with a 22 mm. (3/4") compression union.

15 CENTRAL HEATING SYSTEM FLOW PIPE: Must be fitted with a 22 mm. (3/4") compression union.

A draining tap must be fitted in an accessible position to permit the draining of the whole system. The draining tap must be in accordance with BS 2870:1980.

AIR RELEASE VENT

Air release vents must be fitted at the highest accessible point or where necessary.

FLUE SYSTEM

The flue terminal should be located where the disposal of combustion products cannot cause damage.

The flue terminal must be kept clear from any combustible material. For guidance please refer to BS 5440:1. If the position of the flue terminal is below 2 meters in height from the ground, public access, platform or balcony, the flue terminal must then be protected by flue guard.

POSITION OF FLUE TERMINAL

Minimum clearance (see below) is required from any obstruction, which may cause damage to the operation of the appliance.

POSITION OF FLUE TERMINAL (Figure B)

(Minimum clearance mm.)

A	Directly below an openable window, air vent or any other ventilation opening	300
B	Below gutter, drain/soil pipe	75
C	Below eaves	200
D	Below a balcony	200
E	From vertical drain pipes and soil pipes	75
F	From internal or external corners	300
G	Above adjacent ground or balcony level	300
H	From a surface facing the terminal	600
I	Facing terminals	1200
J	From opening (door/window) in carport into dwelling	1200
K	Vertically from a terminal on the same wall	1500
L	Horizontally from a terminal on the same wall	300
M	Adjacent to opening	300
N	Below carport	200

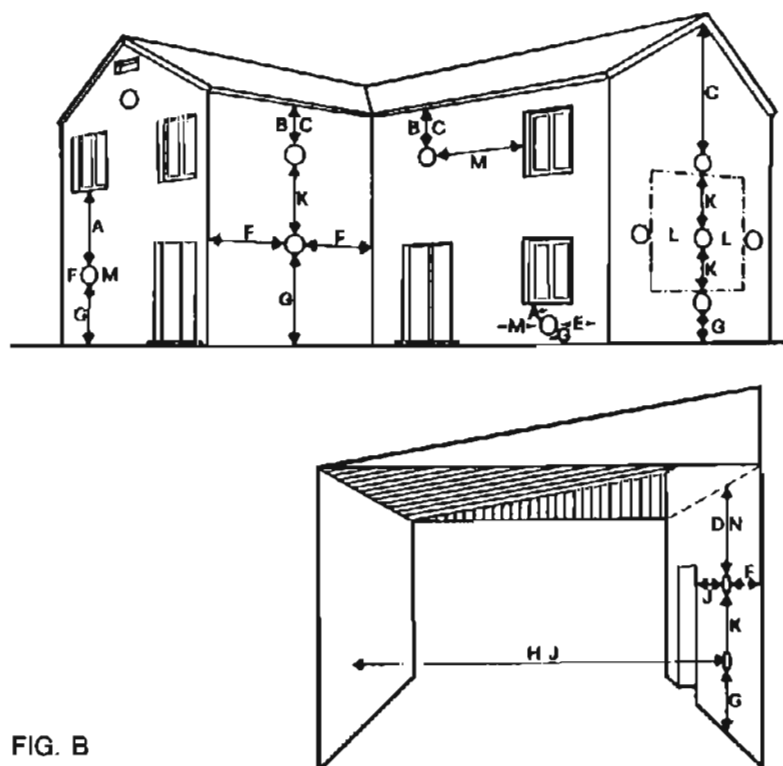


FIG. B

PERMANENT DIRECT AIR SUPPLY

Detailed recommendations for air supply are given in BS 5440:2:1976. The following notes and table are intended for general guidance only.

A permanent air vent is required in the room or internal space in which the boiler is located. Should the air vent be to an adjacent room, this room in turn must have a permanent air vent, direct to outside air.

MTS STYX SX 20M FF do not require any ventilation. A compartment may be constructed to enclose the M FF series boiler, details of which are in BS 5372:2. The circulation of air in such a cupboard is very important, guidance for which is supplied in BS 5440:2.

Generally speaking the cupboard containing the boiler will require air vents for cooling purposes.

FILLING AND MAKE UP

STYX Combi is designed as a sealed system, so the filling point necessary to comply with is BS 5376:2 Appendix A. National Water Council regulations state clearly that no permanent connection may be made between the heating system and incoming mains water supply. So therefore we have shown a typical way of a filling point shown in figure 3.

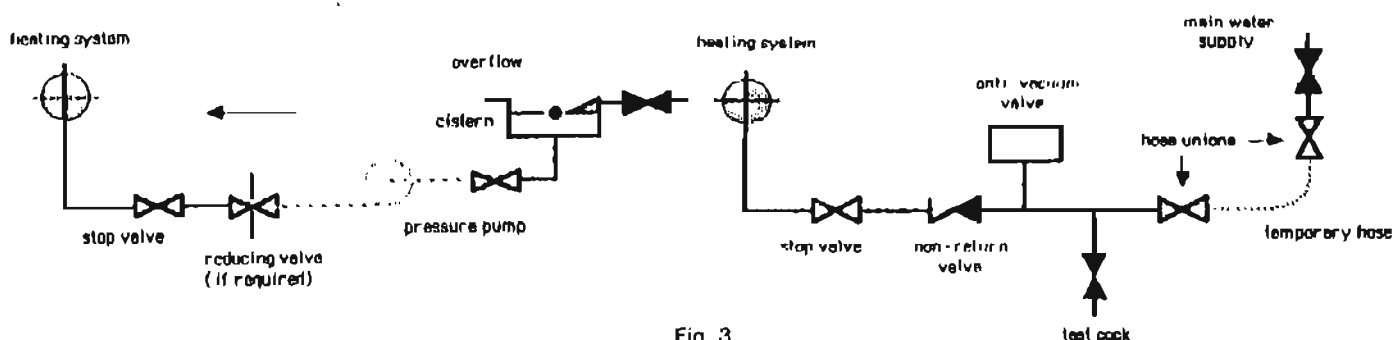


Fig. 3

Complies with BS 5376:2:1976 appendix A, method A.2.

Note: Cistern to be supplied through a temporary connection from the service pipe or cold water distributing pipe.

Complies with BS 5376:2:1976 appendix A, method A.1.

Note: this method may only be used if acceptable to the Local Water Authorities Undertaking.

WATER CIRCULATION SYSTEM

STYX Combi is suitable for sealed and open vented central heating systems. The domestic hot water calorifier incorporated within the boiler requires a main water supply connection. Central heating systems should be installed with the relevant recommendations given in BS 5376:2. (For smallbore and microbore central heating systems BS 5449:1 and CP 342 should be consulted for guidance).

Installation of the domestic hot water should be carried out in accordance with the relevant recommendations of BS 5546.

Draining taps must be installed on all of the pipe work (for both heating and hot water). The nominal size of draining taps must be in accordance with BS 2879.

INSTALLATION OF BY-PASS

The installation of a by-pass is essential if all of the radiators are to be fitted with thermostatic radiator valves. The suggested method of installation is shown in the diagram below, in figure 4.

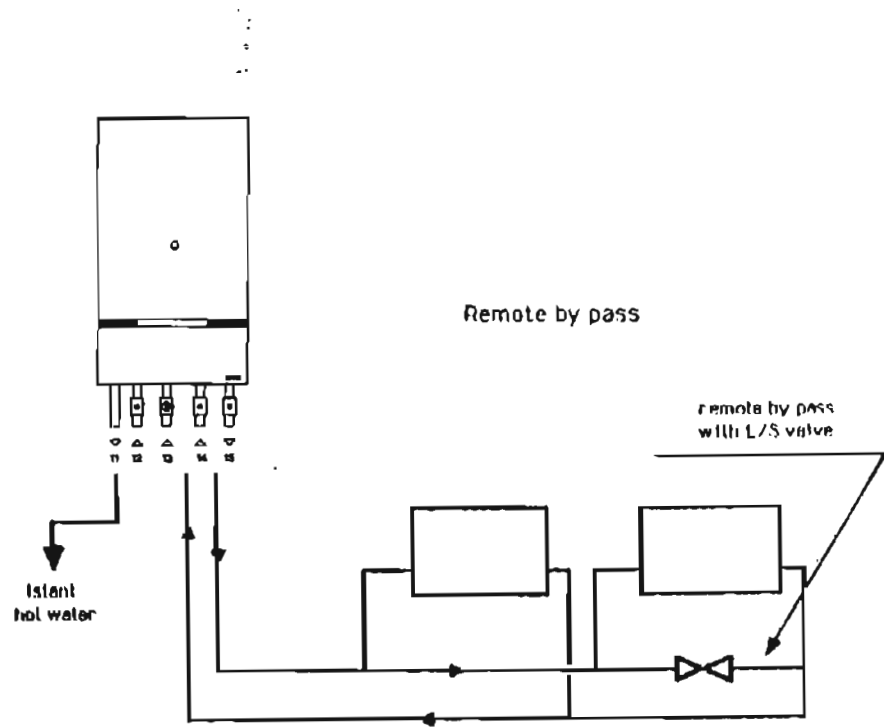


Fig. 4

DELIVERY

The appliance will arrive on site.

THE LARGE CARTONS CONTAINING:

- 1 - boiler fully assembled
- 2 - installation instructions and user instruction
- 3 - white cardboard template
- 4 - guarantee card

VALVES PACK CARTON CONTAINING:

- N. 2 - 22 mm. compression ball-a-fix valve (heating)
- N. 1 - 15 mm. compression ball-a-fix valve (with drain screw for domestic cold water inlet)
- N. 1 - 1/2" BSP Union gas cock

POLYTHENE BAG CONTAINING:

- N. 2 - 15 mm. flanged copper tails complete with 1/2" brass nuts and washers;
- N. 2 - 22 mm. flanged copper tails complete with 3/4" brass nuts and washers; screws and dowels.

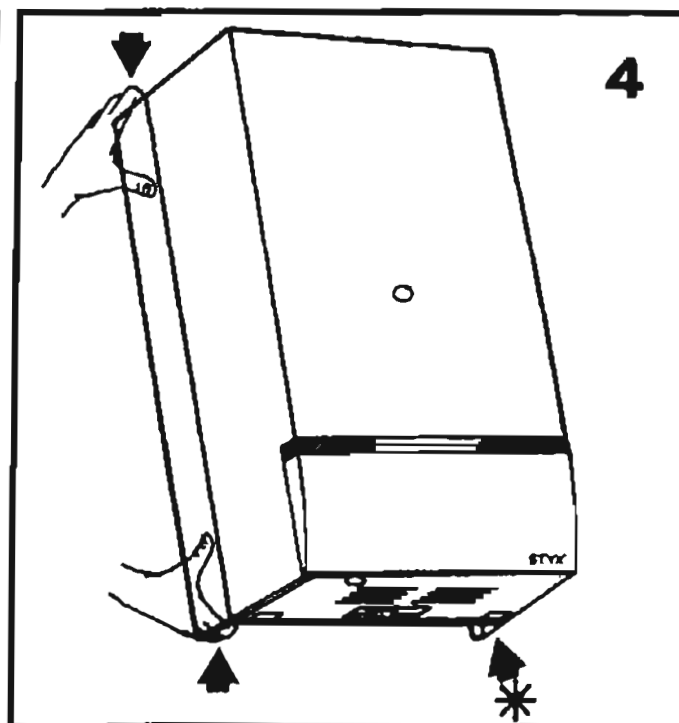
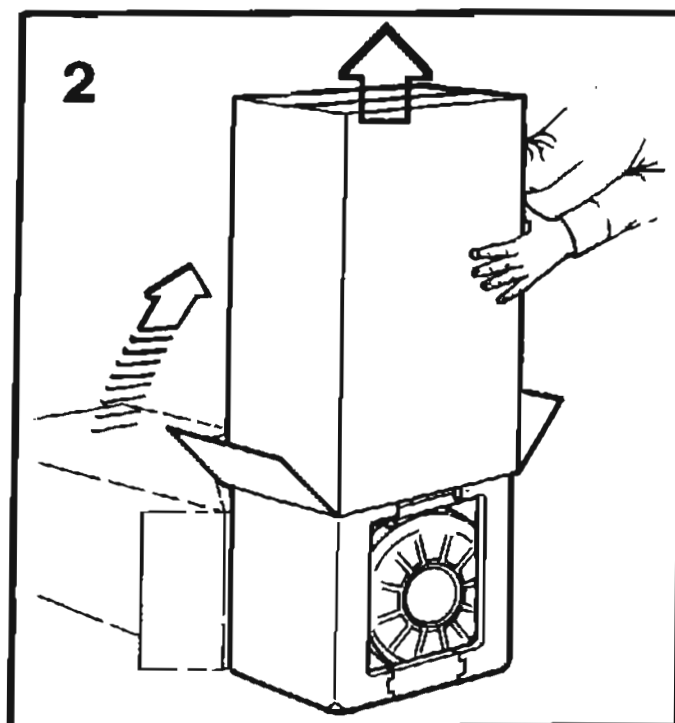
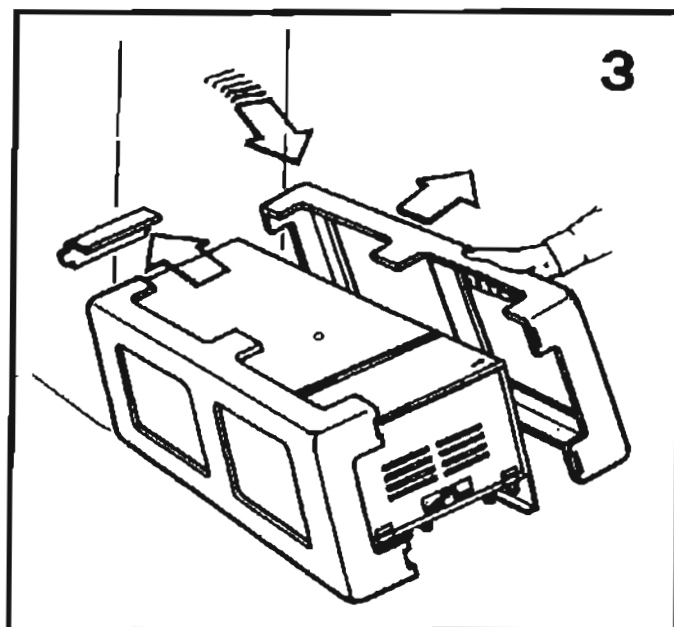
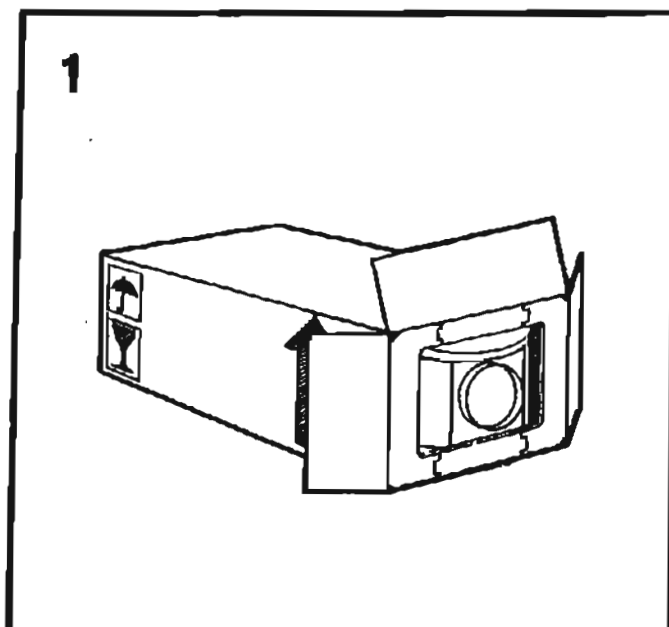
BOX CONTAINING

Standard flue assembly (only Models SX 20 MFF)

- Air intake duct
- Flue exhaust duct with terminal
- Rubber connection sleeve
- Elbow
- Terminal cover plate
- Header gasket

UNPACKING

- 1 - Rest the carton on the floor (keeping the flaps open)
- 2 - Turn the carton over, with the boiler inside and then remove the carton
- 3 - Rest the boiler on the floor and remove the polystyrene guards



REASSAMBLE BOILER AS PER SECTION

Fitting valves pack

Remove plastic caps from boiler connection and fit flanged copper tail and valves as per fig. 5 using washers provided.

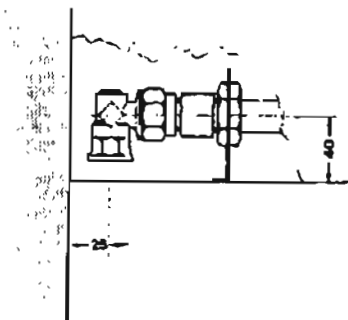
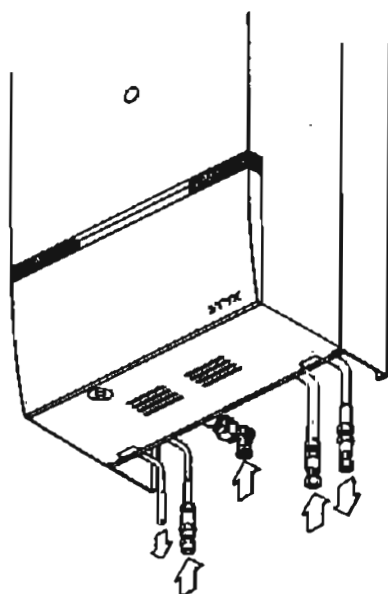
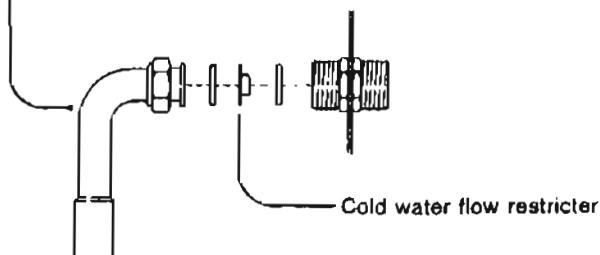
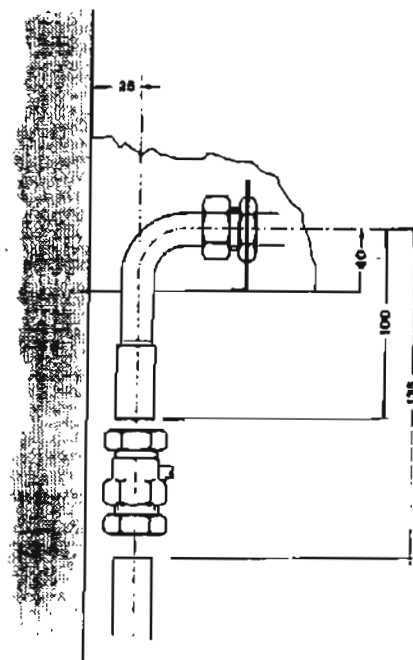


Fig. 6



GAS CONNECTION

A minimum gas pressure of 20 mbar (8 in w.g.) must be available at the boiler inlet at full flow rate. Fit gas service cock to the boiler via the union nut and connect the gas pipe. Do not overtighten, also use a counter force to avoid straining internal connections.

CENTRAL HEATING CONNECTION

Before any central heating connections are made to the boiler all system valves should be opened and the system thoroughly flushed through with cold water.

- Connect the central heating return pipe to the Isolating cock.
- Connect the central heating flow pipe to the Isolating cock.

DOMESTIC HOT WATER

The domestic hot water circuit does not need a safety valve but it is essential to ensure that the pressure of the cold water supply does not exceed 10 bar. If in doubt it is advisable to install a pressure reducing valve. The minimum pressure needed to operate the domestic hot water system is 0.5 bar with a flow of approx 3 Lts. per min. The regulator screw on the cold water outlet of the diverter valve may be adjusted to prevent excess volume flow.

Flush out all foreign matter from the supply pipe before connecting to the appliance.

- Connect the 15 mm. cold water pipe to the stop cock to the appliance inlet marked DCW.
- Connect the 15 mm. hot water pipe with a suitable connection.

SAFETY VALVE DISCHARGE

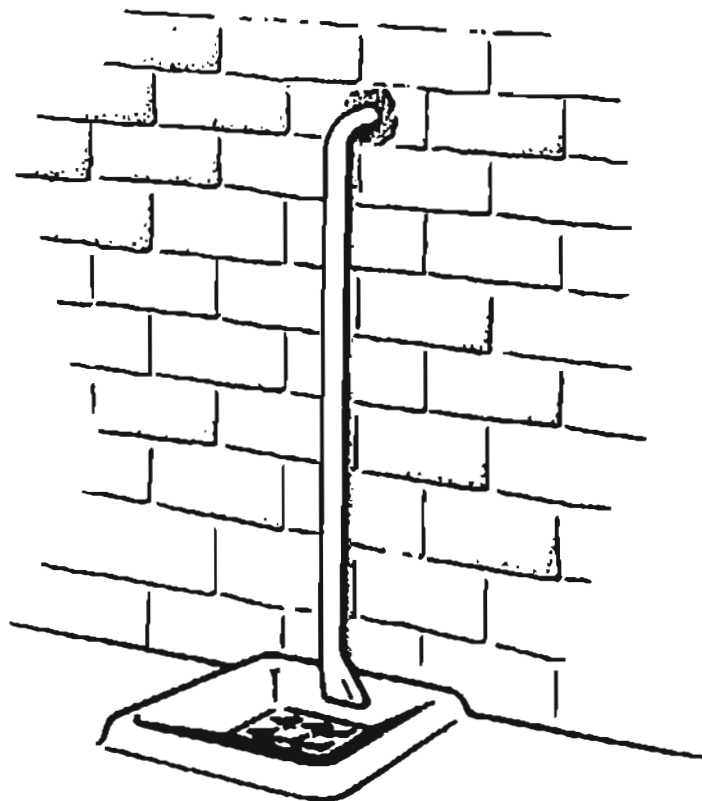
The safety valve is located between gas and central heating return connections.

It has a threaded outlet RC 1/2" (1/2" BSP Int) to permit a discharge pipe to be connected.

When connecting ensure the discharge pipe does not restrict access to or operation of the central heating valves.

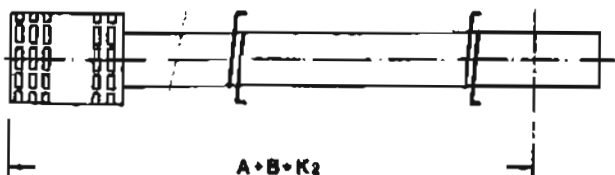
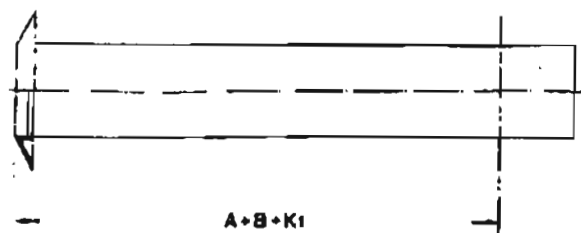
The discharge should terminate facing downwards on the exterior of the building in a position where discharging (possibly boiling water & steam) will not create danger or nuisance, but in an easily visible position, and not cause damage to electrical components and wiring.

The discharge must not be over an entrance or a window or any other type of public access.

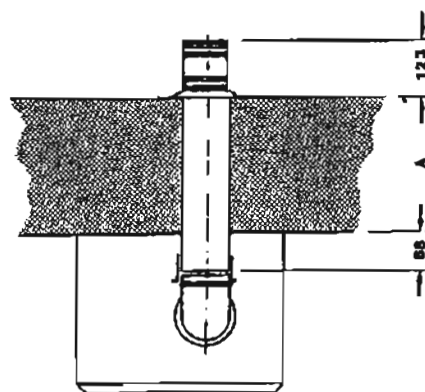
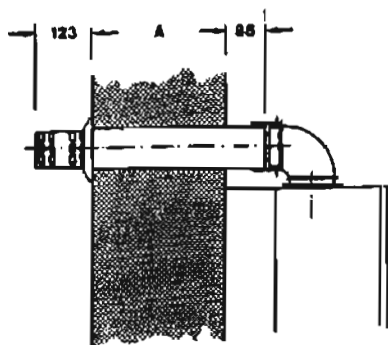


PRESSURE RELIEF VALVE DISCHARGE

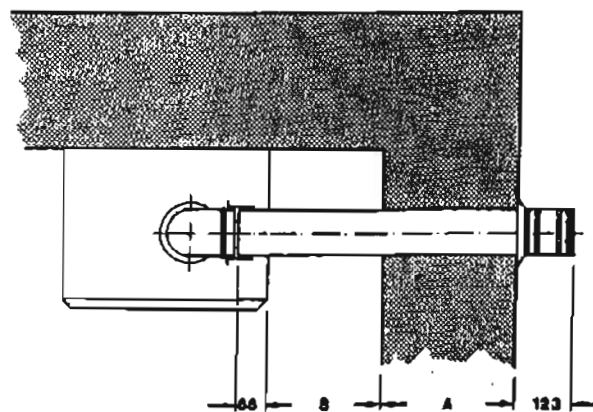
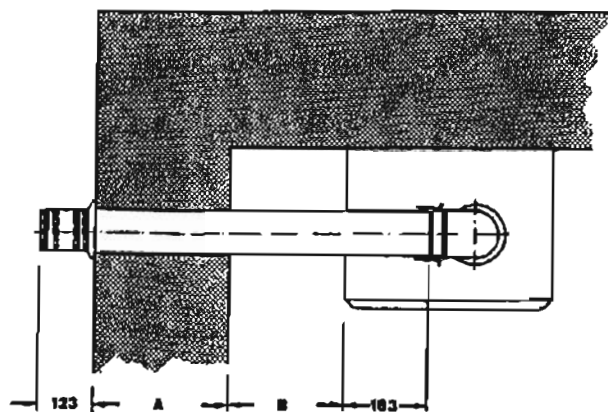
FITTING OF THE FLUE PIPE



	K1	K2
1.....	105	245
2.....	200	340
3.....	85	225



1



KIT
STANDARD

KIT STANDARD
+
N° 1 KIT OPTIONAL

KIT STANDARD
+
N° 2 KIT OPTIONAL

2..... $(A + B) < 660$ $660 < (A + B) < 1630$ $1630 < (A + B) < 2600$

3..... $(A + B) < 775$ $775 < (A + B) < 1700$ $1700 < (A + B) < 2670$

TO COMMISSION THE APPLIANCE

Turn off the gas service isolating valve.

Switch off the electric supply.

After checking all the connections to the boiler, radiators and gas supply connections for soundness, open all the water isolating valves (both heating and domestic). Unscrew the cap on the automatic air release valve one full turn. Leave the cap open permanently. Now the filling procedure can be carried out. Fill the system until the pressure gauge registers 2 bar on pressure gauge.

Now carry out the venting procedure.

PLEASE NOTE:

Do not attempt to vent the central heating expansion vessel or the domestic expansion vessel. This is not an air vent as it is pre-set at the factory to accept the expansion of water.

It is very important to purge the air from the circulating pump by removing the "large screw" from the face of the pump (fig. 6) and insert a screwdriver into the pump to rotate the armature spindle to check it is free from jamming, which may have been caused from the scale of water (which in turn may have occurred after the testing at the factory). Replace the "large screw" tight, but gently.

Re-adjust the pressure if necessary until all the air is purged out the system.

Now switch on the electrical supply. Position the Summer/Winter switch (5) to winter only. If the programmer is fitted switch to 24 hour position, by selector switches. Leave the system to work in a cold state for about 20 minutes approx. During this 20 minute period, open the hot water delivery tap, run for a minute or so, then close it. Repeat this procedure with the hot water tap two to three times.

Vent the system again as necessary. After the 20 minute period, inspect the registered pressure on the water pressure gauge (2). Re-adjust the pressure if necessary too the working pressure of 1 bar maximum, while in cold state.

Now the gas supply can be turned on from the gas service isolating valve, then follow the users instructions booklet on how to operate Combi?

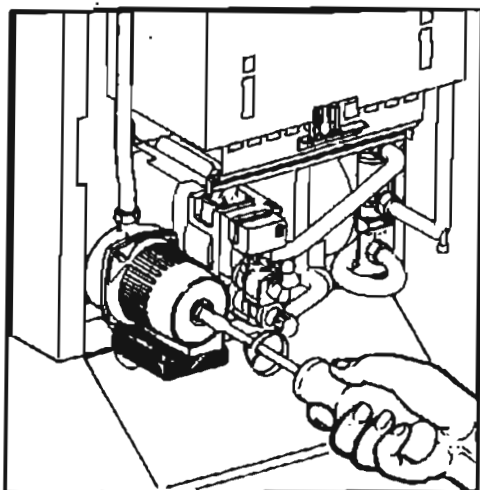
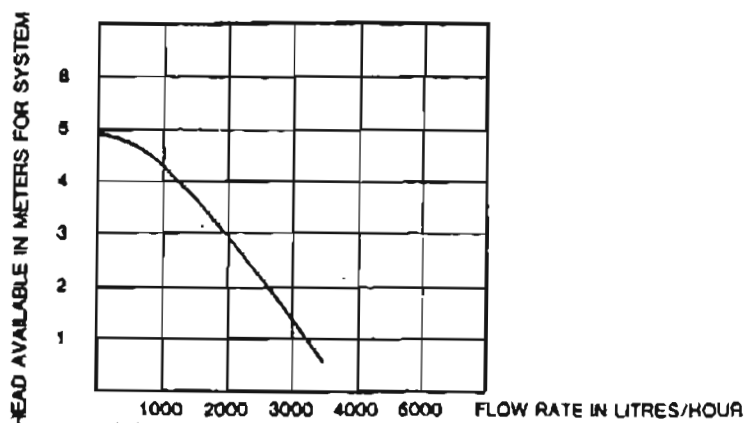


Fig. 6



IMPORTANT NOTE TO INSTALLER

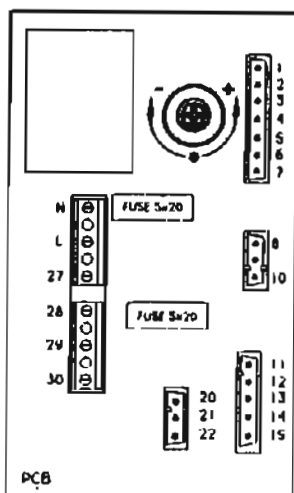
This is the most important part of the installation. When the installation is completed, the central heating has been switched on and the temperature has reached 80 to 90°C, the system must be thoroughly flushed through straight away.

This procedure should be repeated twice more.

(We highly recommend the use of a central heating flushing detergent which dissolves all foreign matter).

We also recommend an inhibitor should be used to treat the water.

The above operation could save the invalidation of your MTS STYX Combi guarantee and also it will prevent problems in the future.



RANGE RATING CHART FOR CENTRAL HEATING ONLY.

Burner Setting Pressure (hPa)	meter (m w.g.)	1.6 (0.75)*	4.0 (1.8)	5.8 (2.7)	7.6 (3.5)	8.6 (3.9)	11.2 (4.8)**
Output	kW (Btu/h)	7.6 (23 000)	11.7 (40 000)	14.6 (50 000)	17.6 (60 000)	20.6 (70 000)	22.3 (80 000)
Input	kW (Btu/h)	8.3 (28 000)	13.6 (47 000)	17.6 (60 000)	20.1 (68 500)	22.3 (80 000)	26.3 (90 000)

* Burner pressure min

** Burner pressure max

SERVICING

It is most important to have an efficient and trouble free operation. MTS STYX Combi must receive a regular annual service by a Member of Corgi (identified by*)

WARNING.

SWITCH OFF THE MAIN ELECTRIC & GAS
SUPPLY BEFORE COMMENCING SERVICING.

The following procedure should be carried out at each annual service. The cleaning procedure should be carried out with a suitable servicing brush kit.

- Before commencing servicing note any faults of the boiler operation, if any.
- Clean the main multi burner and injectors; brush away the scale which has been deposited on the top of the burner during the operation and make sure that there is no dirt at the inlet of the venturi tubes.
- Clean the pilot and burner injectors (applicable to models with pilot).
- Clean the main heat exchanger, brushing away the scale from top to bottom to remove the deposit accumulated between the fins. Care must be taken to avoid the fins from becoming damaged.
- Clean and check the condition of the thermocouple (applicable to models with pilot).
- Clean and check the condition of the electrodes and set the gap (.... mm.) between the burner and electrodes (applicable on E series models).
- Check the condition of insulation in the combustion chamber.
- Check that flue duct and terminals are clear from any obstructions or deposits.
- Clean the fan gently being careful as not to damage the fan blades.
- Check that ventilation area is free from any obstructions where applicable.

WHEN YOU USE OTHER TIME CLOCKS (see figure 5)

TIME CLOCK

MTS STYX Combi has the Timemaster programmer option. These programmers are available in manual or digital forms.

Figure A shows Timemaster digital.

Figure B shows Timemaster manual.



Fig. A

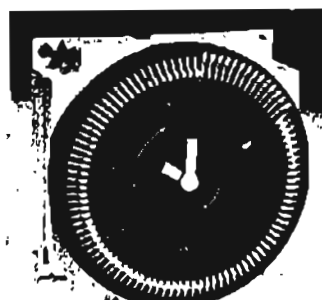


Fig. B

Installation of the timemaster.

A - Remove the black plastic dummy programmer (see figure 1)

B - Mount the time clock to the bracket by four nuts and screws (see figure 2).

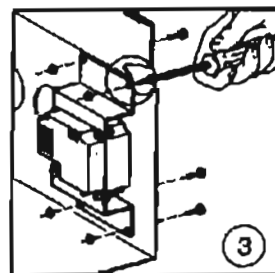
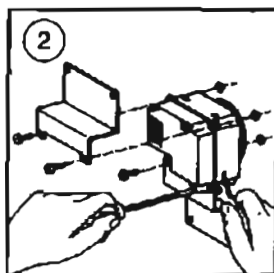
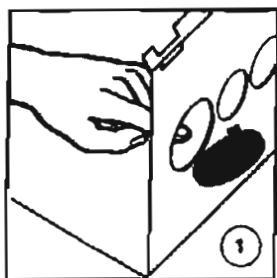
C - Insert the time clock into the hole and fix the bracket by four nuts and screws (see figure 3).

Electrical connections (see figure 4).

When you use Timemaster digital or manual.

Electrical connections (See figure 5).

When you use other time clocks.



ELECTRICAL CONNECTIONS FOR STYX COMBI

When you use Timemaster digital or manual (see figure 4).

FIGURE NO. 4

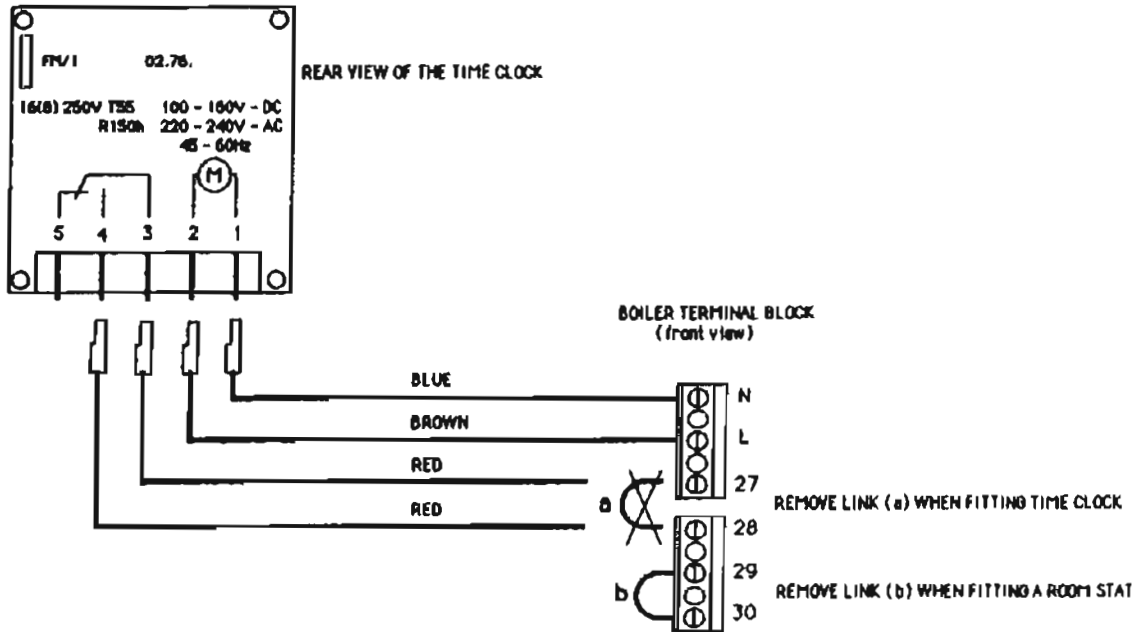
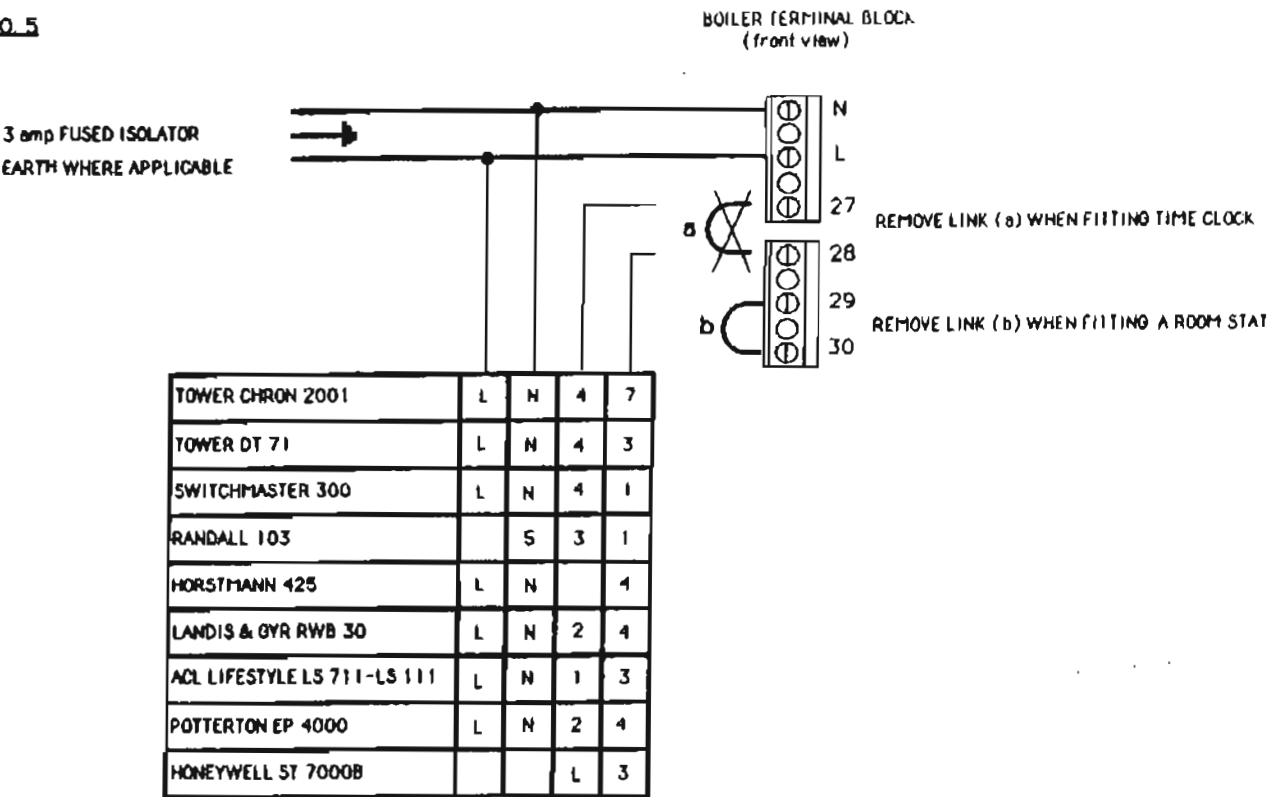


FIGURE NO. 5



COMBINED CLOCK, ROOM STAT

HONEYWELL CM 5000			A	8
THERMO FLASH			O	O
POTTERTON PET 1		N	L	1

ALL INTERNAL LINKS TO BE REMOVED

Servicing instructions

Setting gas pressures

Setting the minimum gas pressure

- 1 Ensure electricity is switched off at main isolator;
- 2 Remove the boiler casing;
- 3 Disconnect either of the two connectors from the gas modulator (fig. 2);
- 4 Remove the protective hood from the calibration system on the gas modulator;
- 5 Open the exit pressure outlet and connect a manometer (fig.1);
- 6 Switch on electricity at main isolator;
- 7 Turn the selector on "d.h.w. - central heating operation" and start the appliance at its maximum heating power setting domestic hot water temperature to maximum;
- 8 Rotate adjustment control to adjust the minimum gas pressure to the prescribed value
Rotate the control clockwise to increase the pressure (fig. 4).

Setting the maximum gas pressure

- 9 Re-connect the wire to the gas modulator (fig. 5);
- 10 Rotate adjustment control to adjust to the maximum pressure prescribed value. Rotating the control clockwise increases the pressure. During this operation, be sure not to move the minimum pressure control (fig. 6);
- 11 Make sure that both minimum and maximum gas pressures are correctly set by disconnecting and re-connecting one of the wires to the gas modulator;
- 12 Install the protective hood over the calibration system on the gas modulator and close the exit pressure outlet on the gas valve (fig. 7).

