STANLEY

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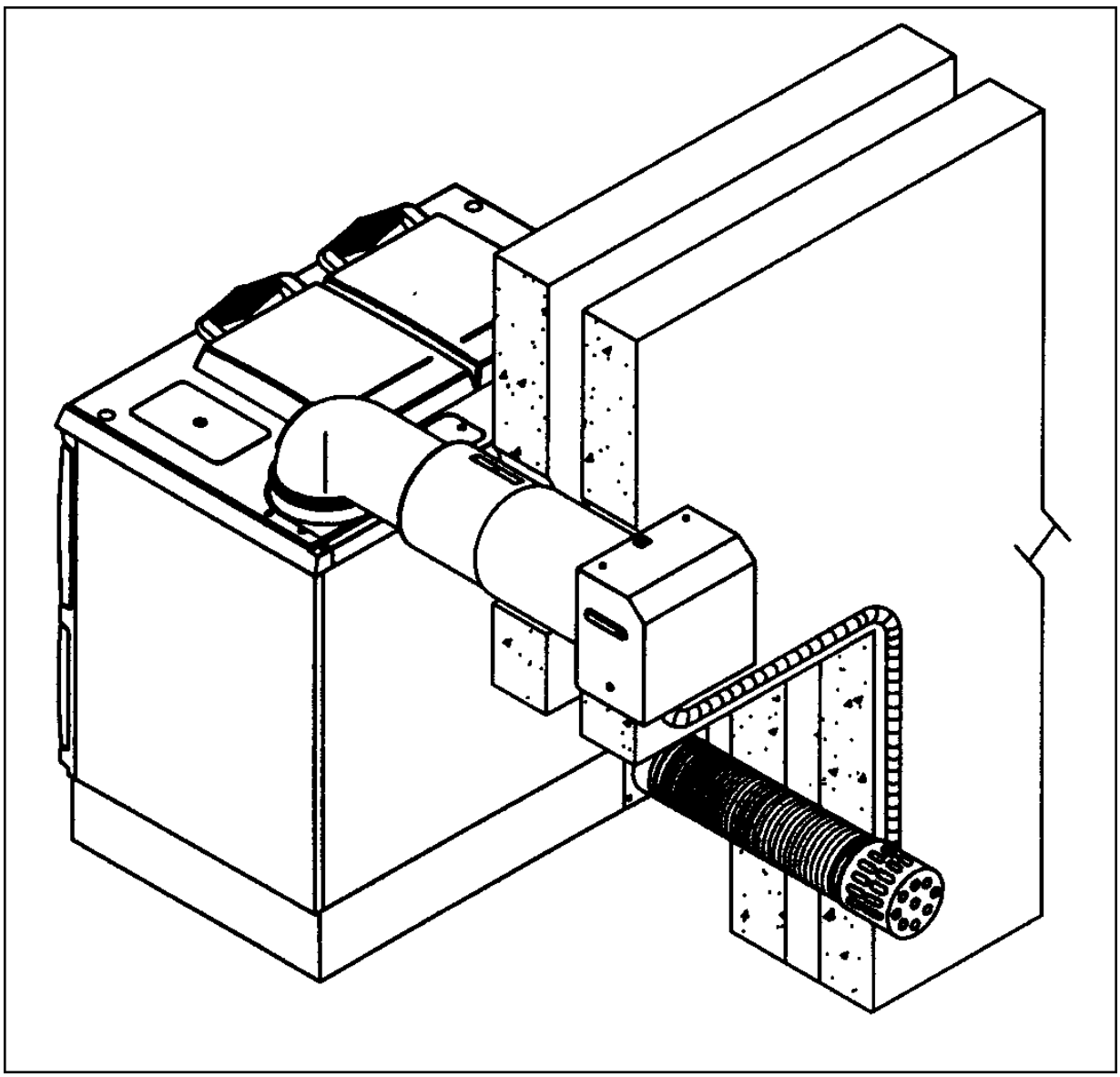
FT10 FAN FLUE FOR BRANDON DRY/DHW & DONARD OIL & GAS COOKERS



INSTALLATION & COMMISSIONING INSTRUCTIONS

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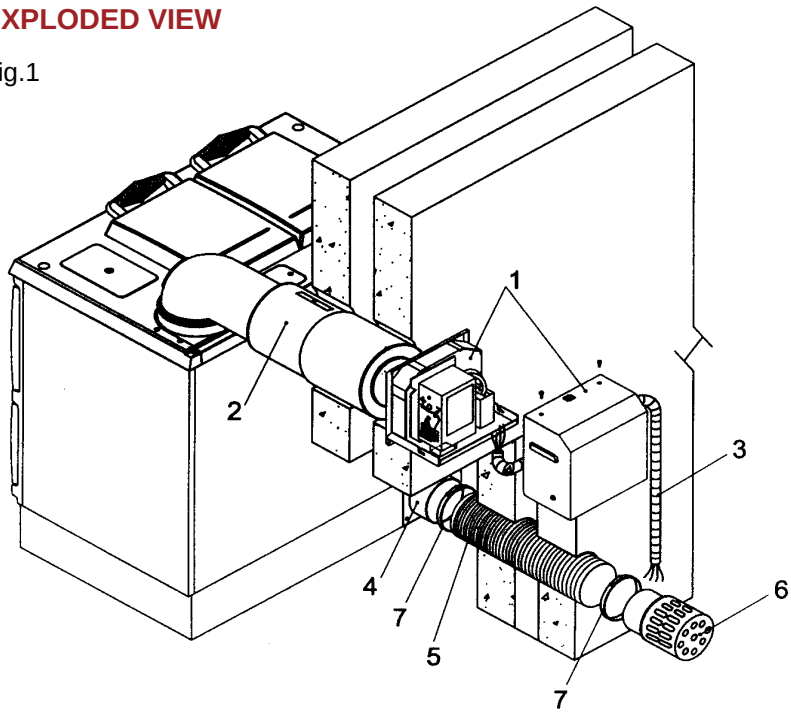
EXPLODED VIEW

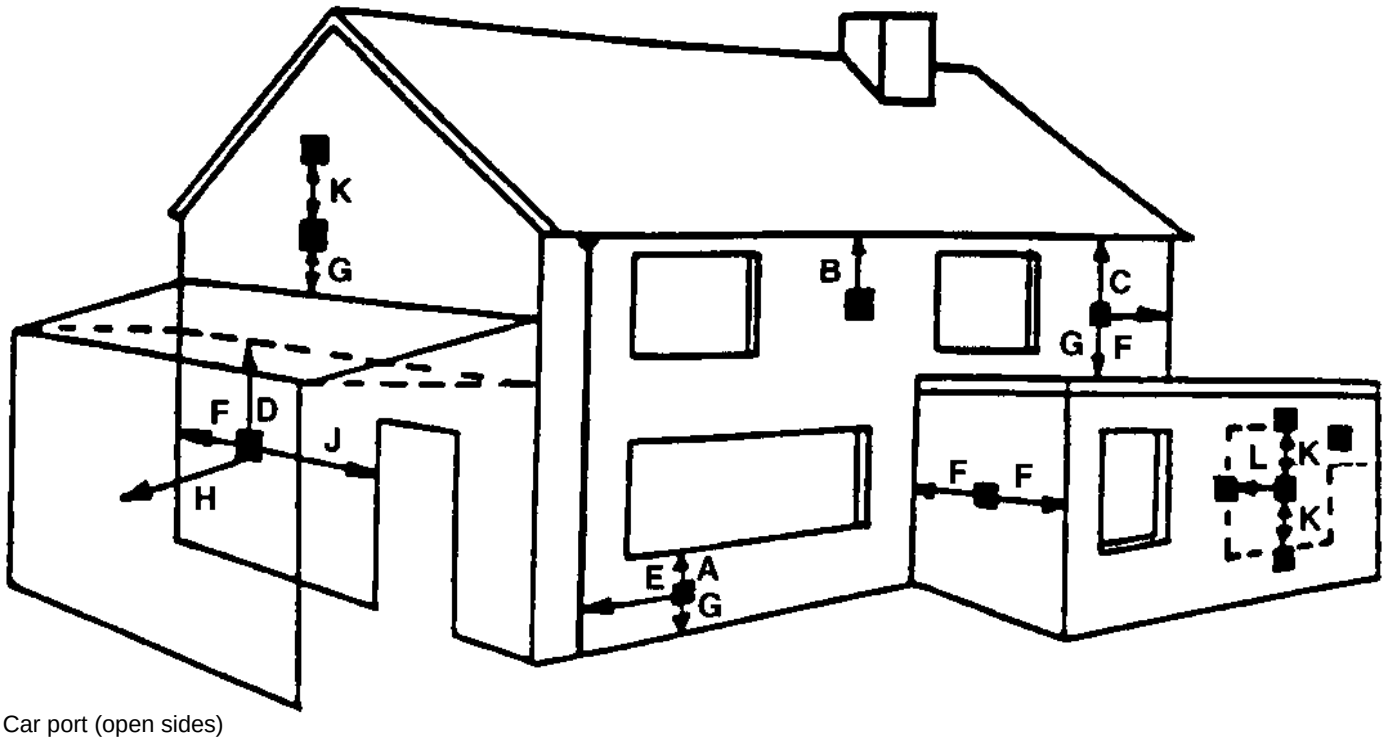
Fig.1



CONTENTS OF KIT:

1. FT10 Fan flue terminal Complete with Cover.
2. Twin wall adjustable section of flue.
3. Burner Connection Cable.
4. Primary air inlet spigot.
5. Air Inlet Duct.
6. Air Inlet terminal.
7. Jubilee Clips.
8. Self tapping screws.
9. Installation Manual.

POSITION OF FT 10 POWER FLUE FOR GAS FIRED COOKERS

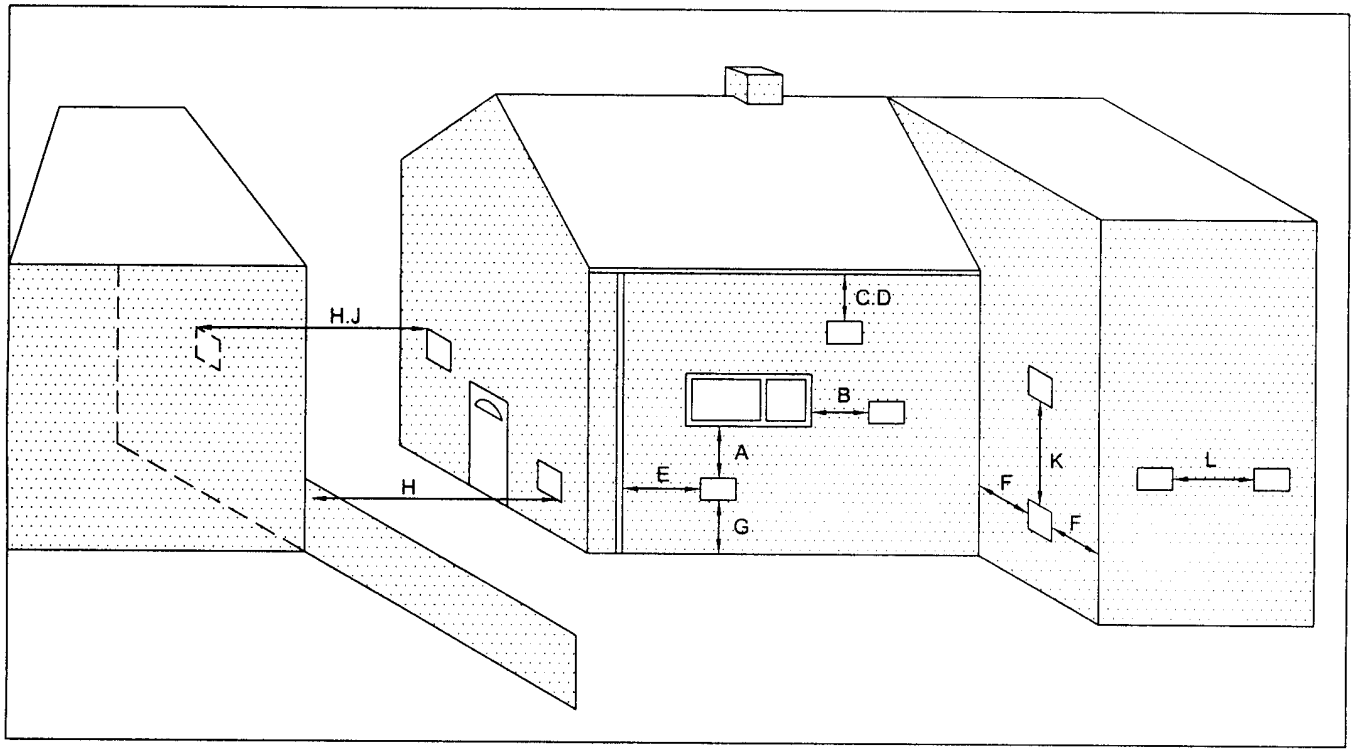


Car port (open sides)

GAS FIRED COOKERS - MINIMUM DISTANCES TO TERMINALS ARE AS FOLLOWS:		
A.	Directly below an opening, air brick, window etc.	300
B.	Below a gutter, eaves or balcony with protection.	75
C.	Below a gutter or a balcony without protection.	200
D.	Below balconies or car port roof.	200
E.	From vertical drain and sanitary pipe work.	75
F.	From an internal or external corner.	300
G.	Above ground or balcony level.	300
H.	From a surface or boundary facing the terminal.	600
I.	From a terminal facing a terminal.	1200
J.	Horizontally to an opening, air brick, window etc.	1200
K.	Vertically from a terminal on the same wall.	1500
L.	Horizontally from a terminal on the same wall.	300

Refer to Part J of the Building Regulations, England & Wales, Irish Building Regulations. B.S. 5440 Part 2 and Part F of the Building Standards (Scotland) Regulations.

POSITION OF FT 10 POWER FLUE FOR OIL FIRED COOKERS



OIL FIRED COOKERS		
A	Directly below an opening, air brick, window etc..	600
B	Horizontally to an opening, air brick, window etc..	600
C	Below a gutter, eaves or balcony with protection	75
D	Below a gutter or a balcony without protection	600
E	From vertical sanitary pipework	300
F	From an internal or external corner	300
G	Above ground or balcony level	300
H	From a surface or boundary facing the terminal	600
J	From a terminal facing the terminal	1200
K	Vertically from a terminal on the same wall	1500
L	Horizontally from a terminal on the same wall	750

Refer to part of the Building Regulations England and Wales, Irish Building Regulations. B.S. 5410 Part 1, and Part F of the Building Standards (Scotland) Regulations.

FT 10 DRY POWER FLUE KIT ASSEMBLY AND INSTALLATION WITH BRANDON DRY & DHW COOKERS

SEE EXPLODED VIEW (FIG 8) WHEN ITEM NUMBERS ARE REFERRED TO:

INSTALLATION

STEP 1.

(a) Remove the air inlet plate on the bottom right hand corner on the front of the cooker.

(b) Remove the blanking plate on the bottom right hand corner on the rear of the cooker.

(c) Fix the blanking plate to the front of the cooker. The bottom left hand corner on the front of the cooker is to remain open at all times. (See Fig. 2 & 3).

Fig.2

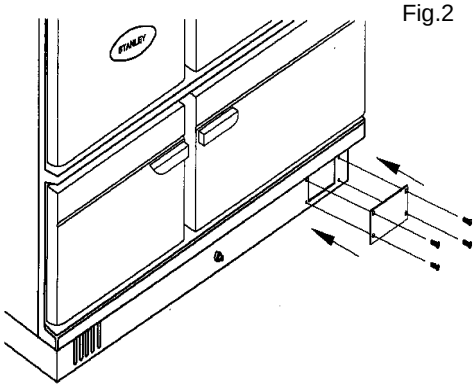
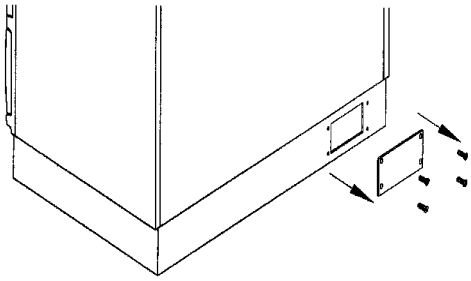


Fig.3

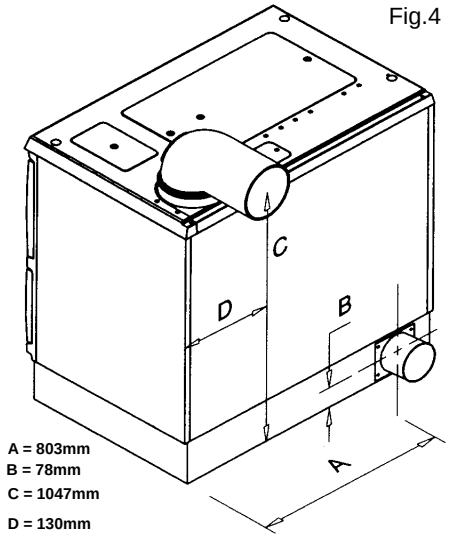


STEP 2.

(a) Fit the primary air spigot (item 4) to the back of the cooker.

(b) Make two openings through the wall, one a 150mm (6") and one 250mm (10") diameter, where the cooker is to be located. The 150mm (6") opening is for the primary air inlet duct. The 250mm (10") is for the telescopic section of flue connector. See (Fig.4) for fixing centres.

Fig.4



A = 803mm
B = 78mm
C = 1047mm
D = 130mm

STEP 3.

(a) Position cooker against wall allowing for the minimum clearance. (See cooker clearances in instruction manual).

(b) Cut the air inlet duct (item 5) to the required length, allowing for the connection to the cooker, the cooker wall clearance and air inlet terminal. (item 6)

(c) Push on Air inlet duct (item 5) over the primary air spigot (item 4) and secure using one of the jubilee clips provided. (item 7)

STEP 4.

(a) Fit cast iron bend to the cooker.

(b) Connect the telescopic section of flue connector to the cast iron bend by passing it through the wall.

(c) Compress the connector until it is the correct length for the installation.

Fig.5

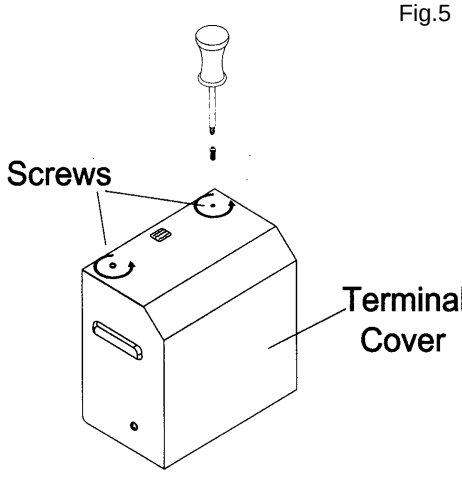
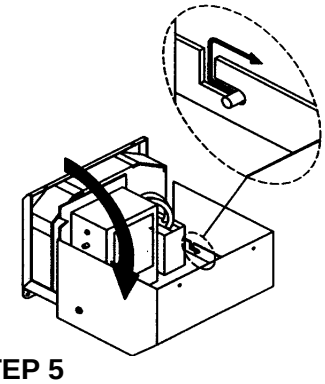


Fig.6

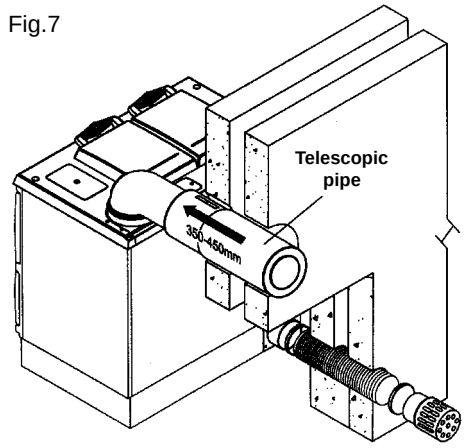


STEP 5

(a) Remove the fan cover by unscrewing the two corner screws as shown in fig.5. This will allow the cover to swing down from the top as shown in Fig. 6.

(b) With the cover hinged down as shown in Fig.6 push towards the wall until the cover pins are at the end of the main frame slots and lift off.

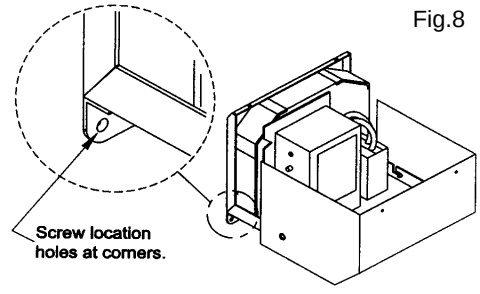
Fig.7



(c) Connect the fan to the adjustable flue section and fix to the wall as per Fig.8.

Note: Seal around the joints where the fan interfaces with the horizontal flue section.

Fig.8



STEP 7.

(a) Connect the air inlet terminal (item 6) to the flexible duct (item 5) and tighten using the remaining jubilee clip (item 7).

FT10 FAN FLUE KIT ASSEMBLY AND INSTALLATION WITH DONARD OIL & GAS COOKER

SEE EXPLODED VIEW (FIG 1.) WHEN ITEM NUMBERS ARE REFERRED TO:

STEP 1.

(a) Remove the cover plate from the Air inlet back panel by removing the fixing screws (fig. 9).

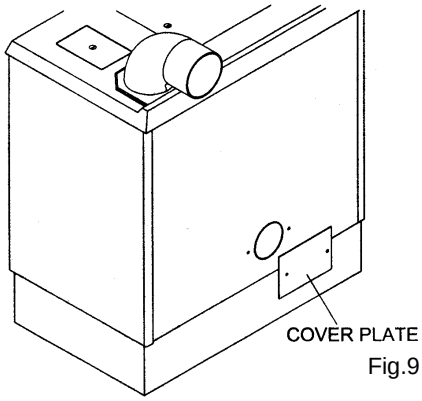


Fig.9

(b) Fix the cover plate over the air vents on the lower right hand side of the cooker, using the original fixing screws. (fig.10).

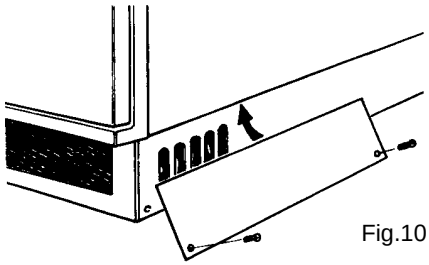


Fig.10

(c) Remove insulation from inside of primary air inlet opening ensuring that the orifice is completely clear (fig.11).

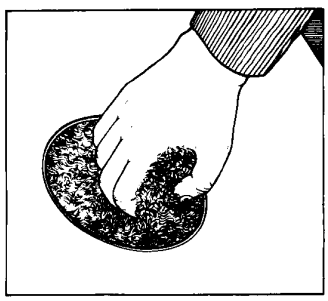


Fig.11

STEP 2.

(a) Fit the primary air spigot (item 4.) over the opening with the self tapping screws provided. (item 9.).

(b) Cut the air inlet duct (item 5.) to the required length, allowing for the connection to the cooker, the cooker wall clearance and air inlet terminal. (item 6.).

(c) Push on Air inlet duct (item 5.) over the primary air spigot (item 4) and secure using one of the jubilee clips. (item 7.)

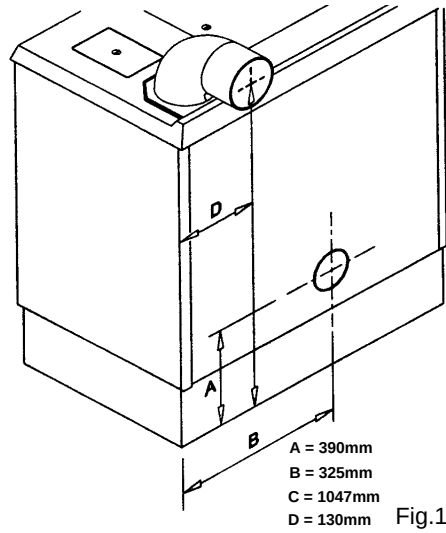


Fig.12

STEP 3.

(a) Make two openings through the wall, one a 150mm (6") and one 250mm (10") diameter, where the cooker is to be located. The 150mm (6") opening is for the primary air inlet duct. The 250mm (10") is for the telescopic section of flue connector. See (fig.12) for fixing centres.

STEP 4.

(a) Position cooker against wall allowing for the minimum clearance. (See cooker clearances in instruction manual).

STEP 5.

(a) Fit cast iron bend to the cooker.

(b) Connect the telescopic section of flue connector to the cast iron bend by passing it through the wall.

(c) Compress the connector until it is the correct length for the installation.

(a) Remove the fan cover by unscrewing the two corner screws as shown in Fig.5. This will allow the cover to swing down from the top as shown in Fig. 6.

(b) With the cover hinged down as shown in Fig.6 push towards the wall until the cover pins are at the end of the main frame slots and lift off.

STEP 6.

(a) Connect the air inlet terminal (item 6.) to the flexible duct (item 5.) and secure using remaining jubilee clip (item 7).

(b) Screw the 4 terminal guard fixing brackets to the wall and bolt terminal wire guard (item 3.) to the brackets.

STEP 7.

(a) Remove the cooker bottom grill panel (item 14. and fig 5.) by un-screwing four screws. (see A, Fig.13).

(b) Dis-assemble the bottom grill panel (item14.) from casting by removing two screws (see B) taking care not to chip the enamelling (see figs. 13 & 14).

(c) Re-assemble in reverse order using the panel supplied. (see fig. 14).

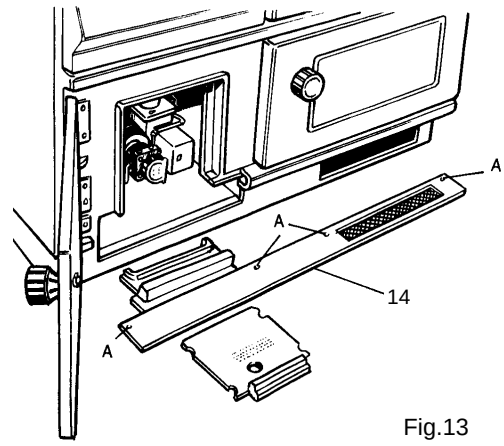


Fig.13

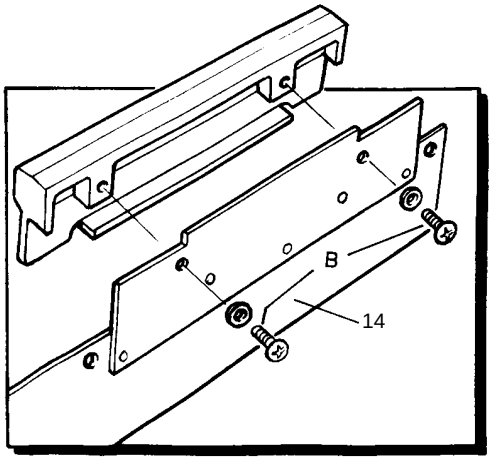


Fig.14

ELECTRICAL CONNECTION

All electrical connections should be carried out by qualified electricians.

STEP 1.
Isolate the mains supply to the cooker.

STEP 2.
Feed the wiring loom through the air inlet terminal (item 6) until it can reach both the burner control box and the fan flue terminals.

STEP 3.
Connect the wires in the loom to the fan flue in the following order.
Terminal 1- Brown
2 - Blue
3 - Red
4 - White
The earth wire is to be connected to the crimp connector.

STEP 4.
(a) Connect the other end of the wiring loom to the cooker as follows:
On Donard Cookers connect the brown wire to the fuse terminal ensuring it is connected in with existing brown wire on the cooker side of the fuse.
On Brandon Dry & DHW Cookers connect the brown wire on to terminal 32 in the control box.
along with the two existing brown wires that are there.
(b) Connect the blue wire to the neutral and the yellow/green wire to the earth.

STEP 5.
Remove the wire from terminal 12 (Landis & gyr) and join it to the red wire in the fan flue loom using a strip connector. Now connect the white wire to terminal 12.

STEP 6.
Replace the control box, ensuring that no wires are trapped. Reinstate the electrical supply and test.

COMMISSIONING

Note: The FT10 Fan Flue comes set up for use with Brandon Dry & DHW Cookers. If it is intended for use on a Donard Cooker the exhaust plate must be removed. Unscrew the two screws beside the exhaust and slide the plate out. This adjustment is to allow for a larger volume of flue gases.

STEP1.
(a) Start the appliance and allow it to run for 5 minutes.

STEP 2.
(a) Measure the flue pressure at the cleaning door fitted to the bend using a cleaning door with a 3/8" hole drilled in the centre.

STEP 3.
(a) Measure the CO_2 level at the test point and compare to the required level in table 2.

TABLE 2

	CO2 (%)	FLUE DRAUGHT " wg	GAS RATE L/MIN
Brandon Dry & DHW Natural Gas	8.0	.04	24 - 25
Brandon Dry & DHW LPG	10.2	.04	-
Donard	8.0	.04	37 - 40

STEP 4.
(a) The speed controller on the fan flue (See Fig.15) and the air adjuster can be adjusted to vary the level of CO_2 & draught

NOTE:
- An increase in fan speed causes an increase in draught and a reduction in CO_2 level.
- Closing the burner air shutter will cause an increase in draught and an increase in CO_2 level.

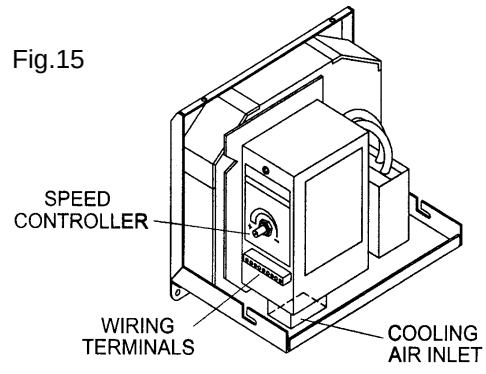
STEP 5.
(a) Make the necessary adjustments to the burner air adjuster and the fan speed controller.

STEP 6.
(a) Repeat Step 4 and Step 5 until the correct draught and the correct CO_2 level are obtained.

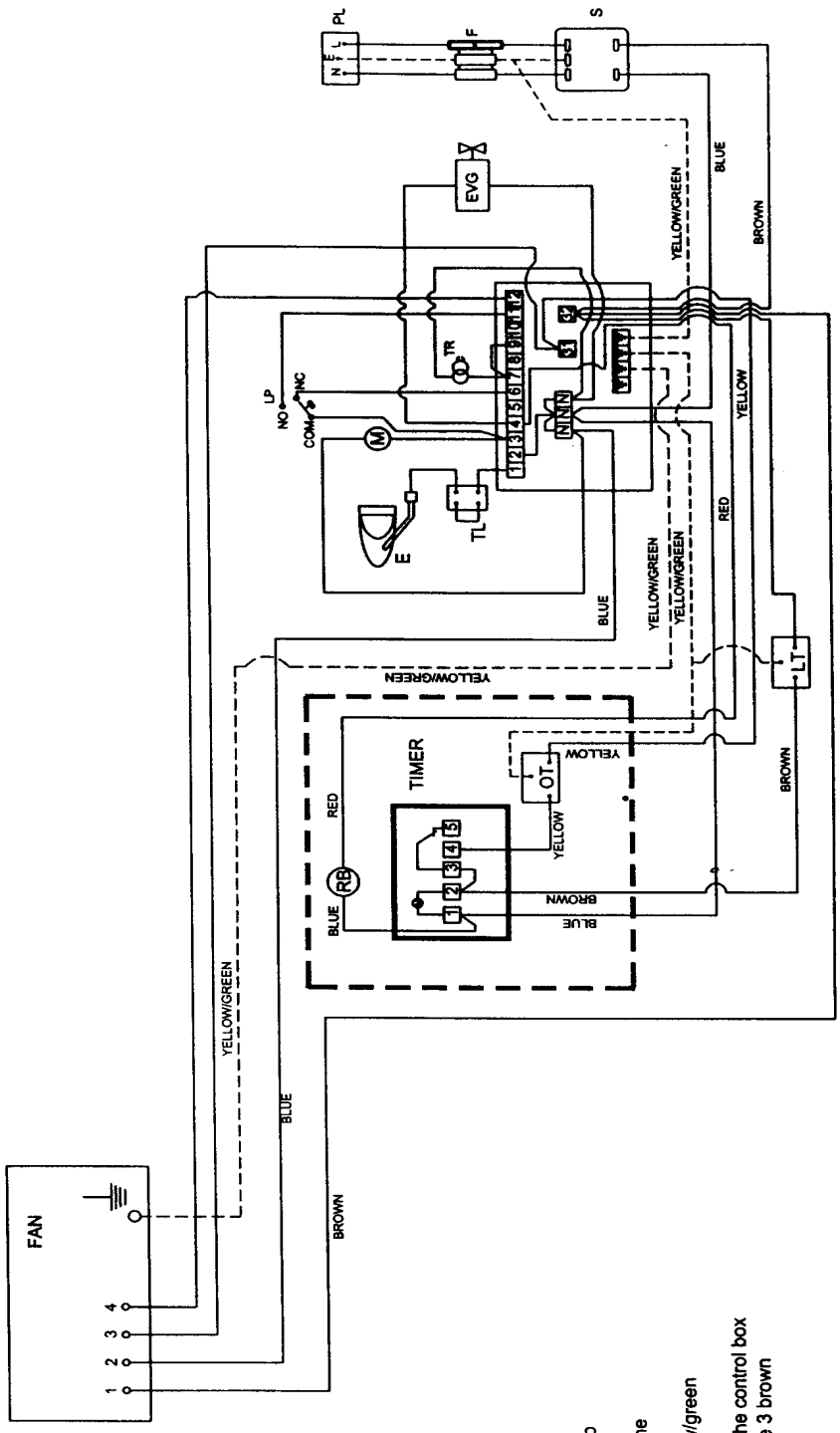
NOTE: It is essential that the draught be correctly set as it can effect the input rate of the appliance.

IMPORTANT: Air inlets to the appliance and FT10 must **NOT** be obstructed.

Fig.15



BRANDON DRY GAS FT 10 POWER FLUE WIRING DIAGRAM



PL - 13 AMP PLUG TOP
F - FUSE BLOCK COMPLETE WITH 3 AMP FUSE
EVG - SOLENOID VALVE
TR - TRANSFORMER
M - BURNER MOTOR
E - IONISATION PROBE
TL - PROBE CIRCUIT TEST LINK

OT - OVEN THERMOSTAT
LT - HIGH LIMIT THERMOSTAT
RB - RUNNING LAMP
S - SUPPRESSER

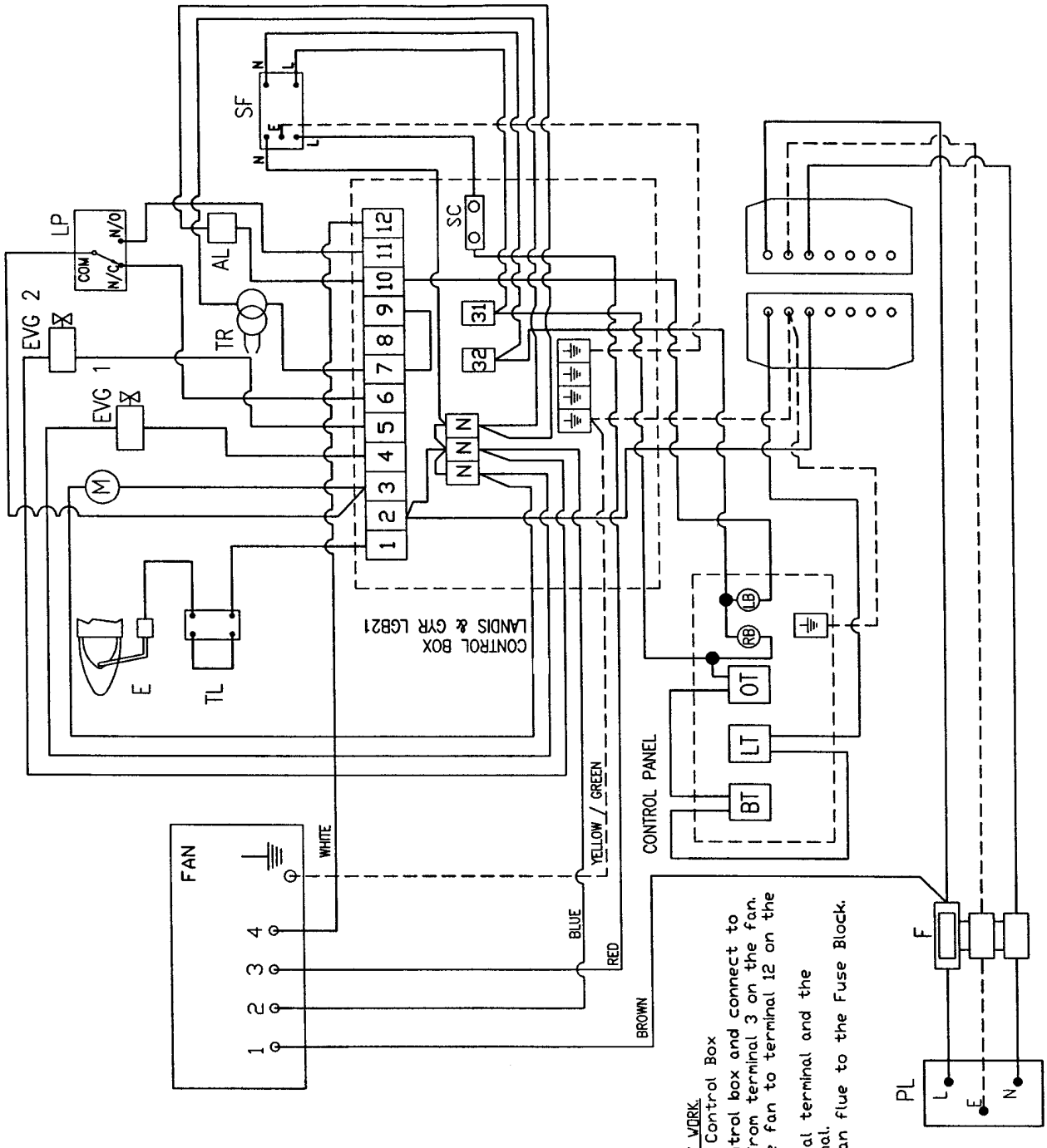
GAS CONNECTION

1. ISOLATE FROM MAINS BEFORE CARRYING OUT ANY WORK.
2. Remove the control box by undoing the 2 screws on the control box housing bracket, and then undo the clips on each side of the control box.

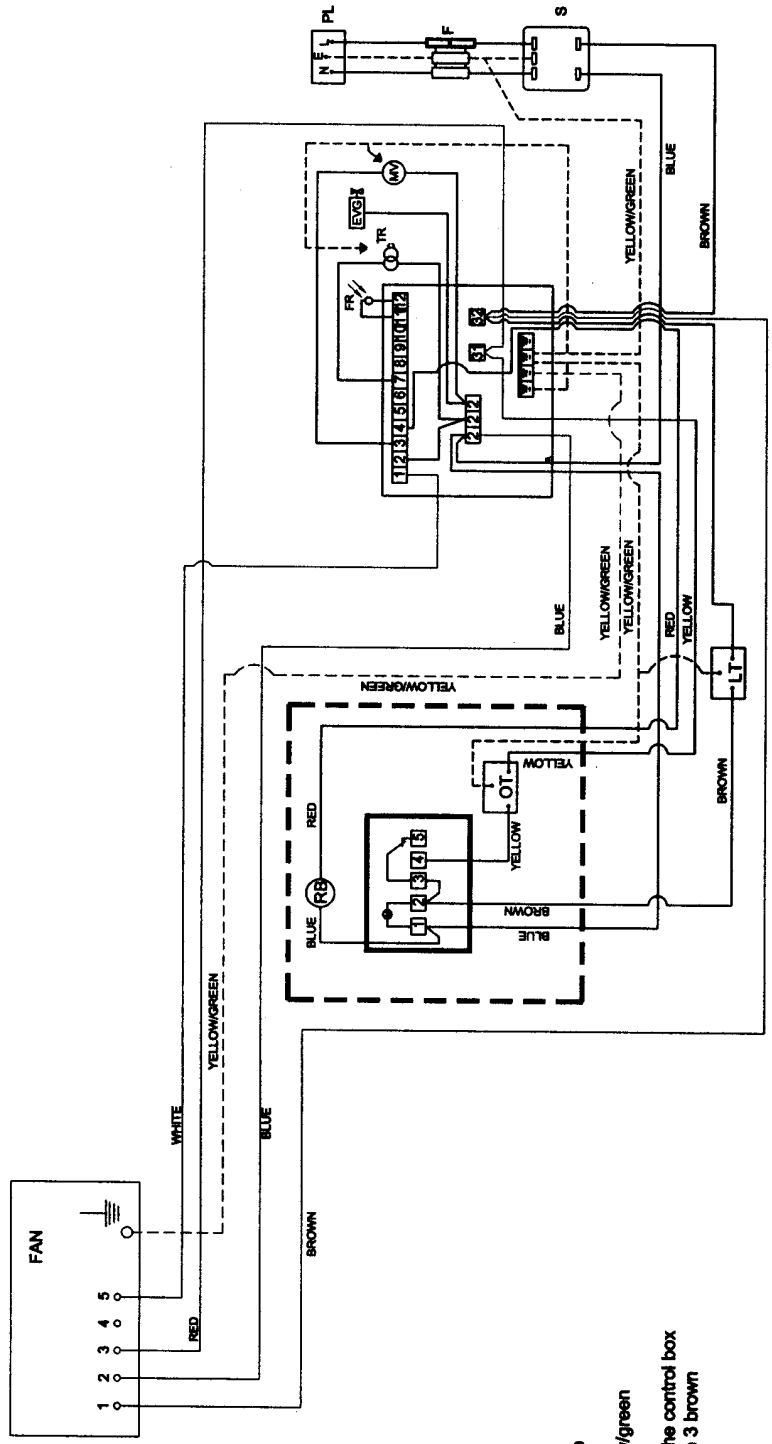
CONTROL BOX CONNECTION

4. Remove wire from terminal 12 of control box and connect to terminal 31 along with wire from terminal 3 on the fan.
5. Connect wire from terminal 4 on the fan to terminal 12 on the control box.
6. Connect the blue wire to the neutral terminal and the yellow/green to the earth terminal.
7. Connect the brown wire from the fan flue to terminal 32 in the control box along with the 2 existing brown wires. There should now be 3 brown wires connected to terminal No. 32.

DONARD 60K GAS FT 10 POWER FLUE WIRING DIAGRAM



BRANDON DRY & DHW OIL FT 10 POWER FLUE WIRING DIAGRAM



PL - 13 AMP PLUG TOP
F - FUSE BLOCK COMPLETE WITH 3 AMP FUSE
EVG - SOLENOID VALVE
TR - TRANSFORMER
MV - BURNER MOTOR
FR - PHOTOCELL

OT - OVEN THERMOSTAT
LT - HIGH LIMIT THERMOSTAT
RB - RUNNING LAMP
S - SUPPRESSER

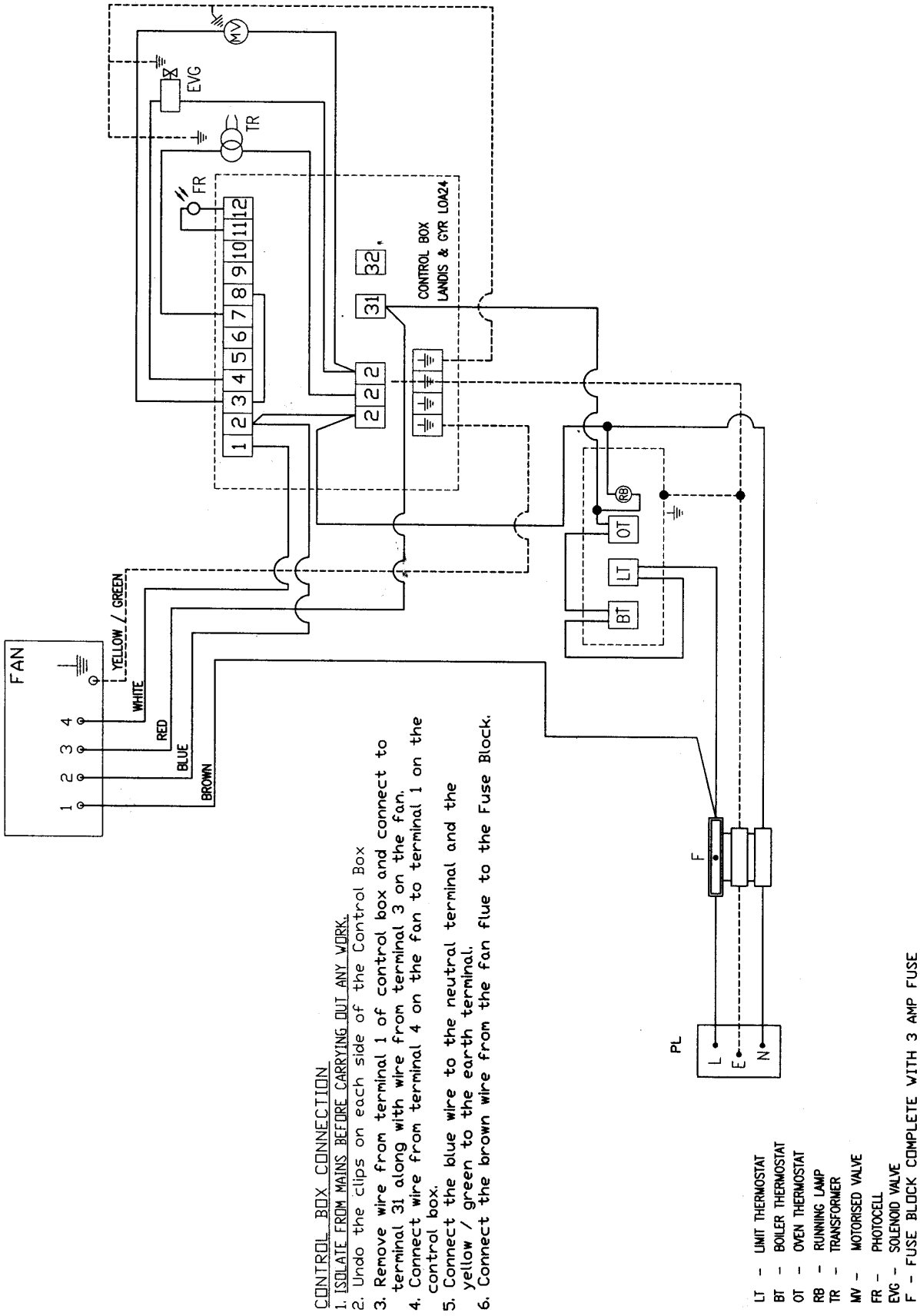
OIL CONNECTION

1. ISOLATE FROM MAINS BEFORE CARRYING OUT ANY WORK.
2. Remove the control box by undoing the 2 screws on the control box housing bracket, and then undo the clips on each side of the control box.

CONTROL BOX CONNECTION

4. Remove wire from terminal 1 of control box and connect to terminal 31 along with wire from terminal 3 on the fan.
5. Connect wire from terminal 5 on the fan to terminal 1 on the control box.
6. Connect the blue wire to the neutral terminal and the yellow/green to the earth terminal.
7. Connect the brown wire from the fan flue to terminal 32 in the control box along with the 2 existing brown wires. There should now be 3 brown wires connected to terminal No. 32.

DONARD 60K OIL FT 10 POWER FLUE WIRING DIAGRAM



CONTROL BOX CONNECTION

1. ISOLATE FROM MAINS BEFORE CARRYING OUT ANY WORK.
2. Undo the clips on each side of the Control Box
3. Remove wire from terminal 1 of control box and connect to terminal 31 along with wire from terminal 3 on the fan.
4. Connect wire from terminal 4 on the fan to terminal 1 on the control box.
5. Connect the blue wire to the neutral terminal and the yellow / green to the earth terminal.
6. Connect the brown wire from the fan flue to the Fuse Block.

LT - LIMIT THERMOSTAT
BT - BOILER THERMOSTAT
OT - OVEN THERMOSTAT
RB - RUNNING LAMP
TR - TRANSFORMER
MV - MOTORISED VALVE
FR - PHOTOCELL
EVG - SOLENOID VALVE
F - FUSE BLOCK COMPLETE WITH 3 AMP FUSE
PL - 13 AMP PLUG TOP

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