

## SEALED COMBUSTION DOWNFLOW GAS FURNACE

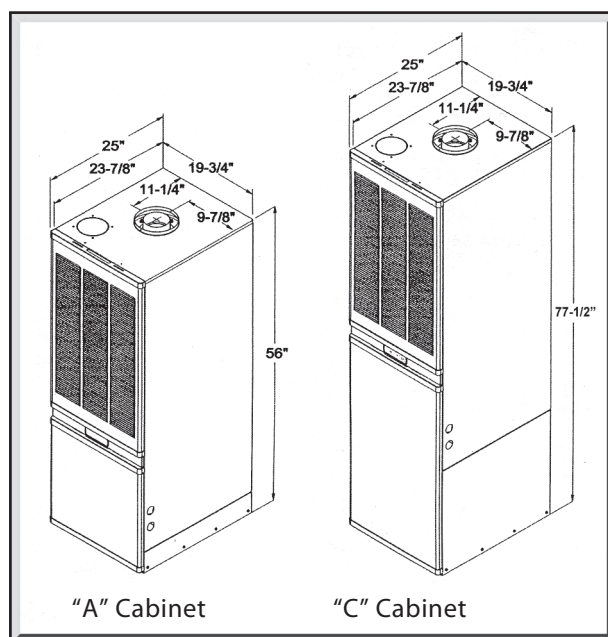
**SIZES:** 60, 70, 77, 90  
**MODELS :** G18D SERIES

CAUTION: READ ALL SAFETY GUIDES  
BEFORE INSTALLING THIS GUIDE

These downflow furnaces are specially designed for installation in manufactured, (mobile home) or modular housing. Four heat capacities and three blower choices handle heating and cooling (up to 5 tons) in any climate. All blowers are multi-speed to fine tune airflow to the home ensuring quiet operation, high operating efficiency and comfort.

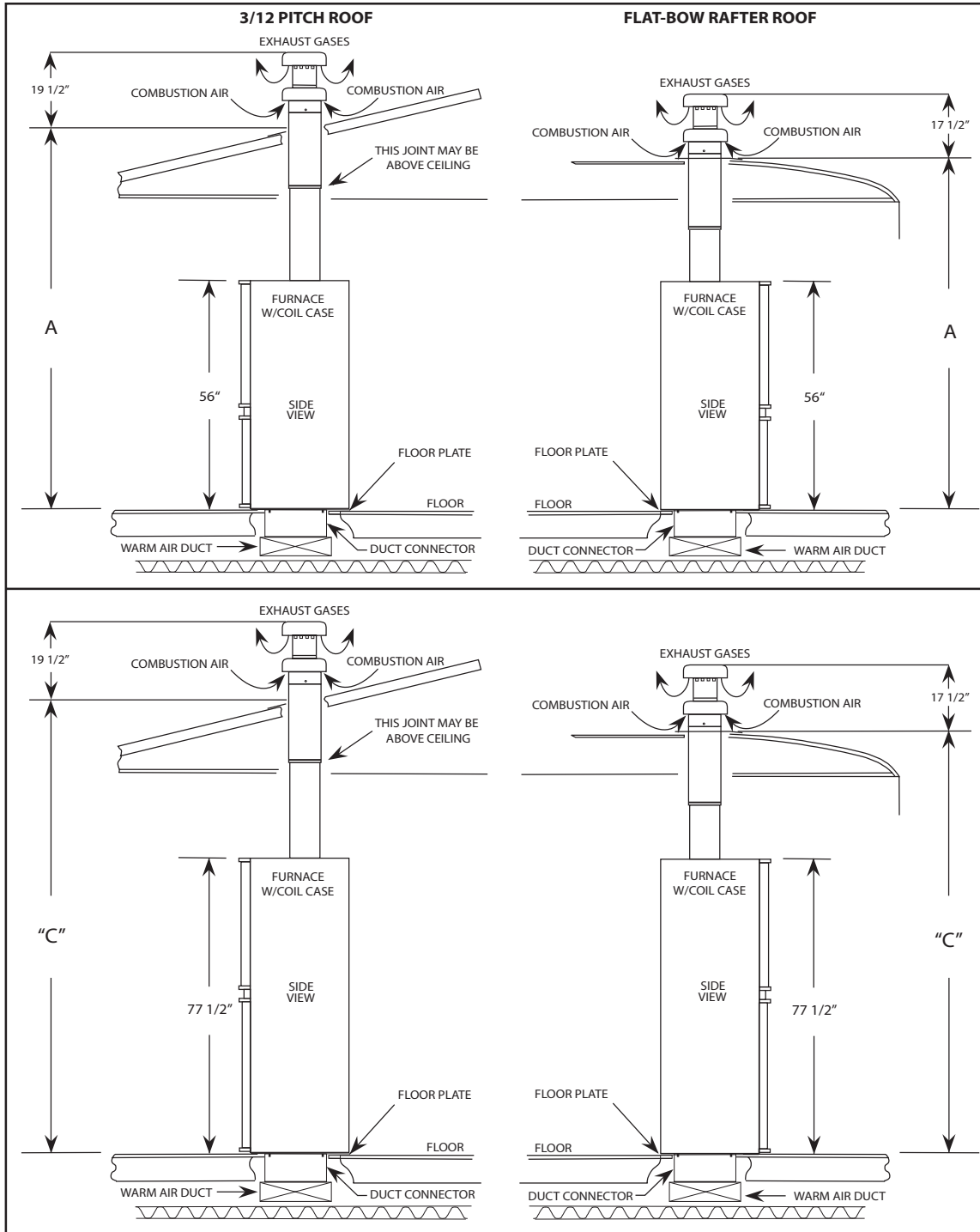
### FEATURES

- HEATING ONLY or HEATING & A/C UNITS
- ELECTRONIC IGNITION
- SEALED COMBUSTION VENTING
- ALUMINIZED STEEL HEAT EXCHANGER
- ZERO CLEARANCE TO CONSTRUCTION
- BUILT-IN 'A' COIL CABINET – 25-1/2"H (C cab.)
- SHORTER A/C FURNACE-ONLY 77-1/2"H
- HOGS HAIR WASHABLE AIR FILTERS
- CONTOURED WHITE DOOR PANELS



### 80 AFUE - AUTOMATIC HOT SURFACE IGNITION

Model No.	G18D060AH2AA	G18D070AH2AA	G18D077AH2AA	G18D090AH2AA	G18D060CA3AA	G18D070CA3AA	G18D077CA3AA	G18D090CA3AA	G18D060CA5AA	G18D070CA5AA	G18D077CA5AA	G18D090CA5AA
Input, BTUH	60,000	70,000	77,000	90,000	60,000	70,000	77,000	90,000	60,000	70,000	77,000	90,000
Output, BTUH	48,000	56,000	61,600	72,000	48,000	56,000	61,600	72,000	48,000	56,000	61,600	72,000
AFUE, %	80	80	80	80	80	80	80	80	80	80	80	80
With A-Coil Cabinet	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES
Ignition Type	Auto-Elect	Auto-Elect	Auto-Elect	Auto-elect	Auto-Elect	Auto-Elect	Auto-Elect	Auto-elect	Auto-Elect	Auto-Elect	Auto-Elect	Auto-elect
Air Temperature Rise, Range - F	40-70	40-70	40-70	45-75	40-70	40-70	40-70	45-75	40-70	40-70	40-70	45-75
Designed Max Outlet Air Temp-F	170	170	170	175	170	170	170	175	170	170	170	175
Natural Gas Orifice Size	27	22	19	17	27	22	19	17	27	22	19	17
Propane (LP) Gas Orifice Size	44	42	41	37	44	42	41	37	44	42	41	37
Blower-Heat or Heat/Cool	10 X 8, 1/4 HP, 2 SPD				10 X 8, 1/3 HP, 3 SPD				10 X 8, 3/4 HP, 4 SPD			
Max. External SP (Duct), In. W.C.	0.3											
Fuel	Natural Gas (Factory Equipped) - LP Orifice Furnished											
High Altitude	For elevations above 2,000 feet, reduce input 4% for each 1,000 ft.						elevation above sea level					
Furnace Flue Pipe	Must Use RJS Roof Jack for Sloped Roof or RJF Roof						Jack for Flat Roof					
Gas Connection	1/2" FPT											
Electric Service	115 VAC, 60 Hz, 1 PH											
Fuse or Circuit Breaker	15 Amp											
Thermostat Circuit	24 VAC, 60 Hz, 40VA											
Filters	2 - 16" X 20" X 1"											



THE SEALED COMBUSTION VENT SYSTEM CONSISTS OF: ROOF JACK BODY AND ROOF JACK CROWN			FURNACE SERIES G18D-A, 56" H	FURNACE SERIES G18D-C, 77 1/2" H
PART NO. ROOF JACK BODY	TELESCOPING RANGE	FOR: FLAT OR SLOPED ROOF	"A" ADJUSTABLE HEIGHT	"C" ADJUSTABLE HEIGHT
90-RJF1729-AL	17" - 29"	FLAT	73" - 85"	94 1/2" - 106 1/2"
90-RJF2551-AL	25" - 51"	FLAT	81" - 107"	102 1/2" - 128 1/2"
90-RJS1729-AL	17" - 29"	3/12	73" - 85"	94 1/2" - 106 1/2"
90-RJS2551-AL	25" - 51"	3/12	81" - 107"	102 1/2" - 128 1/2"
90-RJS3868-AL	38" - 68"	3/12	94" - 124"	115 1/2" - 145 1/2"
90-RJS6399-AL	63" - 99"	3/12	119" - 155"	140 1/2" - 176 1/2"
PART NO. ROOF JACK CROWN		MUST USE WITH:		
90-RJCRWN-AL		ROOF JACK BODY		

**CLEARANCES**

Top .....	6 in.
Sides .....	0 in.
Back .....	0 in.
Alcove-front of furnace .....	18 in.
Closet-front of furnace .....	6 in.
Duct .....	0 in.
Vent/Roof Jack .....	0 in.

\* If the return air opening is below the top of the furnace, clearance to the side or rear shall be 6".

\*\* See Return Air for clearances less than 6".

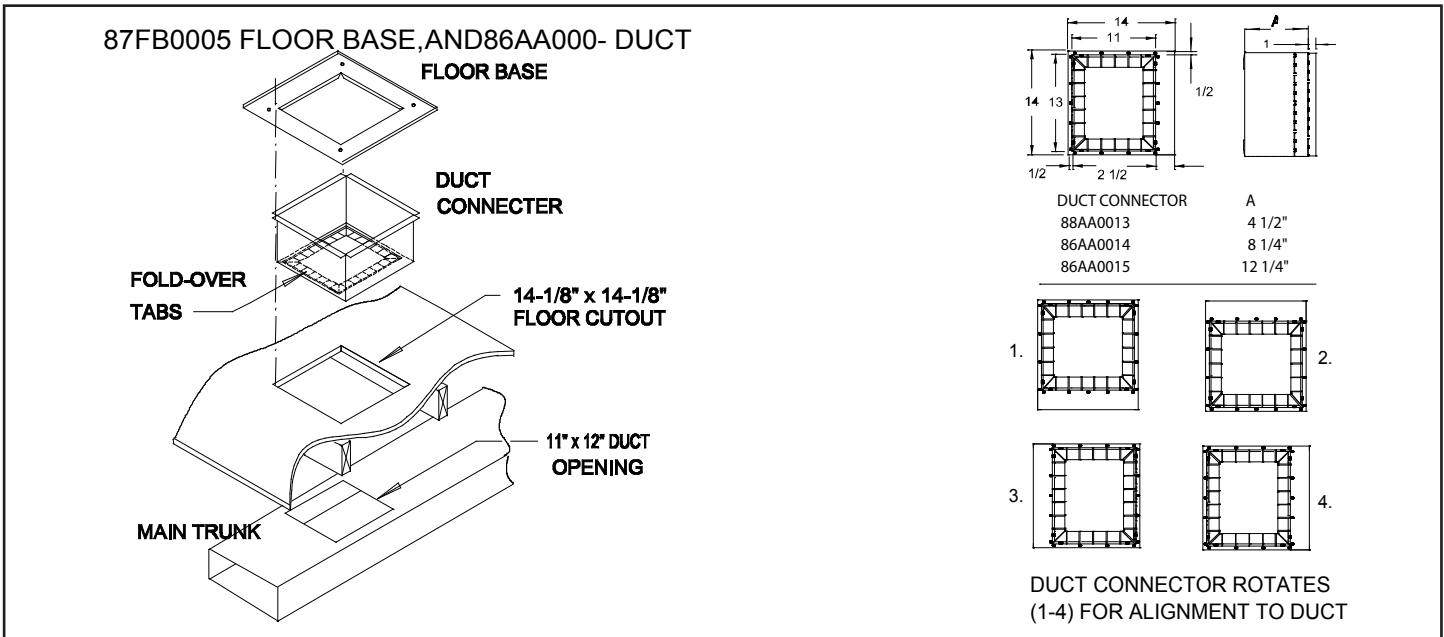
**PRODUCT CODE**

G	18	D	060	A	H	2	A	A
G= Gas	18= 80% AFUE	D= Downflow U= Upflow	060,070 ,077, 090 = Heating Input	Cabinet Hight A= 56" C= 77.5"	Furnace Configuration H= Heating Only A=Heating and A/C Ready	Indoor Blower Air Flow (Ton) 2= 2 SPD 1/4 HP Motor 3= 3 SPD 1/3 HP Motor 4= 4 SPD 3/4 HP Motor 5= 5 SPD 3/4 HP Motor	Type Of Blower Motor A=PCS Motor	Revision Letter

**G18D BLOWER PERFORMANCE CHART**

		ESP INCHES WC DUCT				
CONFIGURATION	SPD TAP	0.1	0.2	0.3	0.4	0.5
<b>H2/10 OR AH2AA BLOWER - 10 X 8 WHEEL 1/4 HP 2 SPD MOTOR</b>						
CFM-NO-COIL	LO	940	885	835	780	725
	HI	1225	1165	1110	1030	970
CFM-WITH-COIL	LO	865	825	775	730	670
	HI	1105	1050	1010	930	870
<b>A3/12 OR BA3AA BLOWER - 10 X 8 WHEEL 1/3 HP 3 SPD MOTOR (Accessory PN 87-1008-312A1)</b>						
CFM-NO-COIL	LO	980	950	910	875	825
	MED	1220	1170	1120	1065	1015
	HI	1460	1400	1340	1270	1195
CFM-WITH-COIL	LO	945	905	865	815	775
	MED	1130	1085	1030	970	905
	HI	1300	1240	1180	1105	1085
<b>A4/16 OR CA4AA BLOWER - 10 X 8 WHEEL 3/4 HP 4 SPD MOTOR (Accessory PN 87-1008-316A1)</b>						
CFM-NO-COIL	LO	995	960	915	875	825
	MED	1205	1165	1130	1090	1045
	MED-HI	1470	1425	1385	1345	1310
	HI	1810	1765	1720	1680	1635
CFM-WITH-COIL	LO	950	905	885	835	790
	MED	1145	1115	1080	1035	1000
	MED-HI	1375	1345	1315	1280	1245
	HI	1700	1660	1620	1575	1540

**COMBUSTIBLE FLOOR BASE AND DUCT CONNECTOR-(REQUIRED)**



**ACCESSORIES**

PART NO.	DESCRIPTION	NOTES
90-RJF1729-AL	Body, Roof Jack, Gas-FLAT	Height 94 1/2 X 106 1/2
90-RJF2551-AL	Body, Roof Jack, Gas-FLAT	Height 102 1/2 X 128 1/2
90-RJS1729-AL	Body, Roof Jack, Gas-SLOPE 3/12	Height 94 1/2 X 106 1/2
90-RJS2551-AL	Body, Roof Jack, Gas-SLOPE 3/12	Height 102 1/2 X 128 1/2
90-RJS3868-AL	Body, Roof Jack, Gas-SLOPE 3/12	Height 115 1/2 X 145 1/2
90-RJS6399-AL	Body, Roof Jack, Gas-SLOPE 3/12	Height 140 1/2 X 176 1/2
90-RJCRWN-AL	Crown, Roof Jack, Gas	Use w/Gas Roof Jack Body
90-TRN-RNG	Ceiling Trim Ring, Roof Jack	Trim out to inside RJ - Pipe
RJTRC	Kit, Transit - Roof Jack - Cap & Label	For transport-Remove on site
90-OUTXT16-AL	Roof Jack Outdoor Extension - Gas 16"	Extend pipes / crown - 16 in.
90-INXST10-AL	Roof Jack Indoor Extension - Gas 10"	Extend pipes / crown - 10 in.
90-RJS56	5-6/ 12 Slope, Roof Saddle Adapter	Add to RJS 3/12 Roof Jack
90-DCU0-01	86AA0013 Duct Conn + 87FB0005 Flr Base	Floor to Duck 1 in. - 4 in.
90-DCU0-02	86AA0014 Duct Conn + 87FB0005 Flr Base	Floor to Duck 6 in. - 8 in. STD
90-DCU0-03	86AA0015 Duct Conn + 87FB0005 Flr Base	Floor to Duck 8 in. - 12 in.
90-CABEXT4	White, Top, Cabinet Extender Plate	Fill alcove 76" top opening

**WIRING DIAGRAM, G18D**

BLOWER SPEED CHART  
(CHARTÉ DE VITESSE  
DE LA SOUFFLERIE)

COOL (HIGH) (CLIM) (CHAU)	HEAT (LOW) (CLIM) (CHAU)
060 (BLK) (NOIR)	060 (RED) (ROUGE)
070 (BLK) (NOIR)	070 (RED) (ROUGE)
077 (BLK) (NOIR)	077 (RED) (ROUGE)
090 (BLK) (NOIR)	090 (RED) (ROUGE)

WIRE COLOR KEY  
(CODE DE COULEUR  
DU FILAGE)

BLK (NOIR)	BLACK (NOIR)
BLU (BLEU)	BLUE (BLEU)
BRN (BRUN)	BROWN (BRUN)
GRN (VERT)	GREEN (VERT)
ORN (ORANGE)	ORANGE (ORANGE)
RED (ROUGE)	RED (ROUGE)
WHI (BLANC)	WHITE (BLANC)
YEL (JAUNE)	YELLOW (JAUNE)
GRY (GRIS)	GRAY (GRIS)

CAUTION -  
OUVREZ LES DISJONCTEURS AVANT  
DE PROCÉDER AVEC LE SERVICE  
SERVICING THIS UNIT

NOTES:

- ALL FIELD WIRING PER: (A) NATIONAL ELEC. CODE (NEC) AND/OR/ (B) CANADIAN ELEC. CODE (CEC) AND/OR/ (C) LOCAL CITY CODES. THE FURNACE MUST BE REPLACED, IT MUST BE REPLACED WITH WIRING MATERIAL HAVING A TEMPERATURE RATING OF AT LEAST 221°F (105°C).
- CONNECTORS SUITABLE FOR COPPER CONDUCTORS ONLY.
- ALL REPLACEMENT COMPONENTS MUST BE PROPERLY GROUNDED.
- PROVIDE DISCONNECTS FOR ALL POWER SUPPLIES.
- MOTORS ARE INHERENTLY PROTECTED.
- SSI IS IN SERIES WITH LSI AND L52.

NOTES:

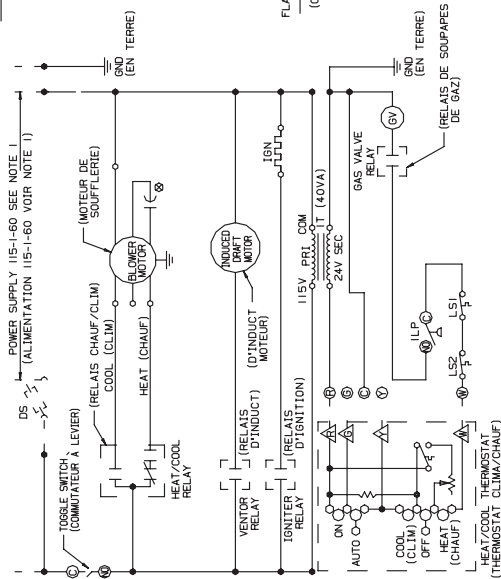
- TOUT FILAGE EN CHANTIER SELON: (A) CODE ELEC. NATIONAL (NEC) ET/OU/ (B) CODE ELEC. CANADIEN (CEC) ET/OU/ (C) CODES LOCAUX ET MUNICIPAUX. LE FOURNEAU DOIT ÊTRE REMPLACÉ AVEC UN MATÉRIAU POUVANT RÉSISTER À DES TEMPÉRATURES D'AU MOINS 221°F (105°C).
- SEULEMENT DES MARETTES POUR FIL DE CUivre.
- TOUTE COMPOSANTE DE REMPLACEMENT DOIT ÊTRE BIEN MISE EN TERRE.
- FOURNISSEZ LES DISJONCTEURS POUR LEUR CONCEPTION.
- LES MOTEURS SONT PROTÉGÉS DE PAR LEUR CONCEPTION.
- SSI DE SÉRIE AVEC LSI ET L52.

FLASH CODES

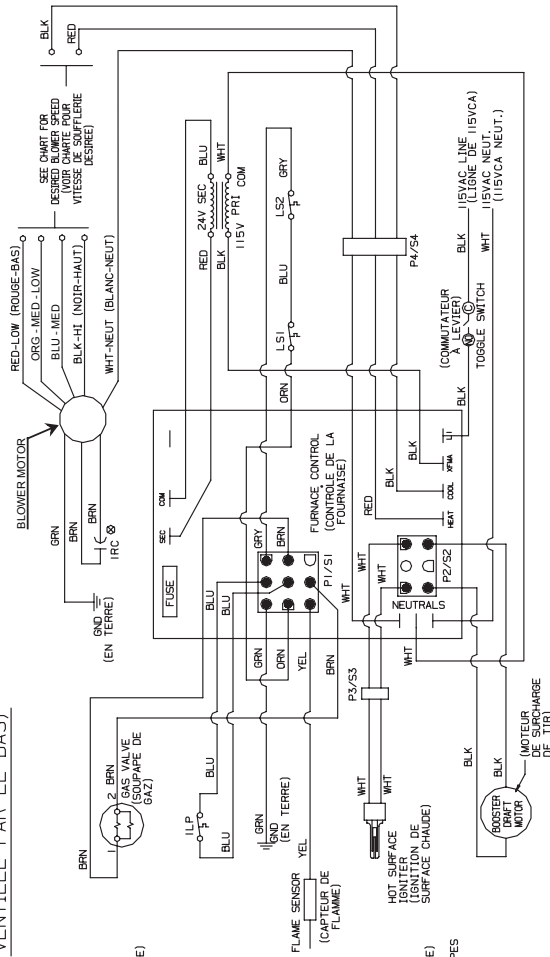
- STEADY ON  
NORMAL OPERATION  
1 FLASH - IGNITION FAILURE  
2 FLASHES - COMBUSTION AIR SWITCH STUCK CLOSED  
3 FLASHES - COMBUSTION AIR SWITCH FAILED TO CLOSE  
4 FLASHES - LIMIT SWITCH OPEN  
5 FLASHES - GAS VALVE ENERGIZED WITH NO CALL FOR HEAT  
6 FLASHES - REVERSED POLARITY

80% DOWNFLOW FURNACE  
(FOURNAISE 80%  
VENTILÉE PAR LE BAS)

LADDER DIAGRAM  
(DIAGRAMME ÉLÉMENTAIRE)



CONNECTION DIAGRAM  
(DIAGRAMME DE RACCORDEMENT)



LEGÈNDE

- DS DISCONNECT SWITCH
- GV GAS VALVE
- IGN HOT SURFACE IGNITER
- P1/S2 9 PIN PLUS & SOCKET ON FURNACE CONTROL BOARD
- P2/S3 2 PIN PLUS & SOCKET AT HOT SURFACE IGNITER
- P4/S4 9 PIN PLUS & SOCKET
- LS1/2 AUXILIARY LIMIT SWITCH ON BLOWER INLET
- ILP PRESSURE SWITCH
- IRC RUN CAPACITOR
- TT TRANSFORMER, 40VA
- ⊗ IDENTIFIED RUN CAPACITOR
- △ 24V CONNECTION ROOM THERMOSTAT
- FIELD CONNECTION
- FACTORY WIRING AND DEVICES
- FIELD WIRING AND DEVICES
- RELAY CONTACTS ON IGNITION CONTROL BOARD

LEGÈNDE

- DS COMUTEUR DE DISJONCTION
- GV SOUPAPE DE GAZ
- IGN IGNITION DE SURFACE CHAUDE
- P1/S2 PRISE & RECEPTACLE À 9 PÔLES SUR LA PLAQUETTE DE CONTRÔLE D'IGNITION
- P2/S3 PRISE ET RECEPTACLE À 2 PÔLES D'IGNITION DE SURFACE CHAUDE
- P4/S4 PRISE ET RECEPTACLE À 9 PÔLES
- LS1/2 COMUTEUR AUXILIAIRE DE PRESSION SUR BOÎTIER DE SOUFFLERIE
- ILP COMUTEUR DE PRESSION
- IRC CAPACITEUR DE FONCTIONNEMENT IDENTIFIÉ
- TT TRANSFORMEUR, 40VA
- ⊗ CAPACITEUR DE FONCTIONNEMENT IDENTIFIÉ
- △ RACCORDEMENT DU THERMOSTAT DE PIÈCE
- RACCORDEMENT DE CHANTIER
- FILAGE DE L'USINE ET APPAREILS
- CONTACTS DES RELAIS SUR LA PLAQUETTE DE CONTRÔLE D'IGNITION

HEAT ONLY MODELS  
UTEAC & TI BOARD WIRING DIAGRAM

**WIRING DIAGRAM, G18D**

BLOWER SPEED CHART  
(CHARTE DE VITESSE  
DE LA SOUFFLERIE)

INPUT (ENTRÉE)	COOL HIGH (CLIM) (CHAU)	HEAT (CHAUF)
060	(NOIR)	(ROUGE)
070	(BLU)	(ROUGE)
077	(NOIR)	(ROUGE)
080	(BLU)	(ROUGE)

WIRE COLOR KEY  
(CODE DE COULEUR  
DU FILAGE)

BLK (NOIR)	BLK (NOIR)
BLU (BLEU)	BLU (BLEU)
(ROUGE)	(ROUGE)
YEL (JAUNE)	YEL (JAUNE)
(BLANC)	(BLANC)
BRN (BRUN)	BRN (BRUN)
(VERT)	(VERT)
PURP (POURPRE)	PURP (POURPRE)
(ORANGE)	(ORANGE)

CAUTION -  
OPEN ALL DISCONNECTS BEFORE  
SERVICING THIS UNIT

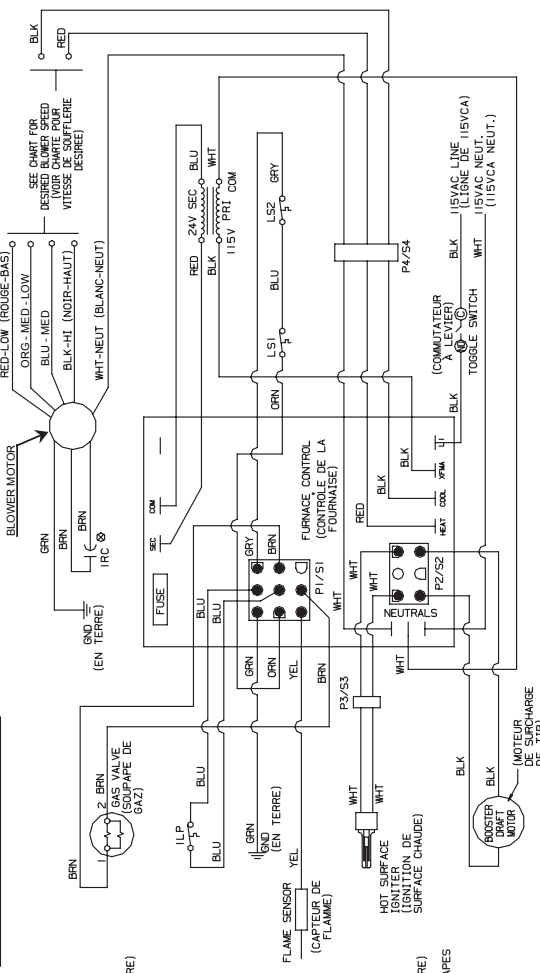
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**FLASH CODES**

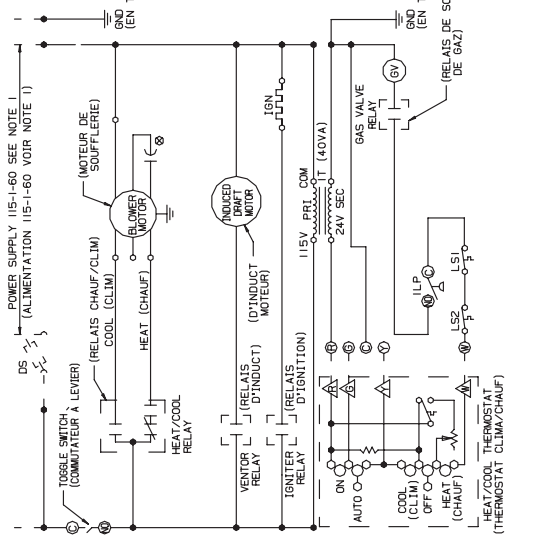
- STEADY ON - NORMAL OPERATION
- 1 FLASH - IGNITION FAILURE
- 2 FLASHES - COMBUSTION AIR SWITCH STUCK CLOSED
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80% DOWNFLOW FURNACE  
(FOURNAISE 80%  
VENTILÉE PAR LE BAS)

CONNECTION DIAGRAM  
(DIAGRAMME DE RACCORDEMENT)



LADDER DIAGRAM  
(DIAGRAMME ÉLÉMENTAIRE)



**NOTES:**

- ALL FIELD WIRING PER: (A) NATIONAL ELEC. CODE (NEC) AND/OR/ (B) CANADIAN ELEC. CODE (CEC) AND/OR/ (C) LOCAL OR CITY CODES.
- IF ANY OF THE ORIGINAL WIRE AS SUPPLIED WITH THE FURNACE MUST BE REPLACED, THE REPLACEMENT MATERIAL MUST BE IDENTIFIED BY THE MANUFACTURER'S PART NUMBER.
- CONNECTORS SUITABLE FOR COPPER CONDUCTORS ONLY.
- ALL REPLACEMENT COMPONENTS MUST BE PROPERLY GROUNDING.
- PROVIDE DISCONNECTS FOR ALL POWER SUPPLIES.
- MOTORS ARE INHERENTLY PROTECTED.
- SSI IS IN SERIES WITH LSI AND LSI2.

**NOTES:**

- TOUT FILAGE EN CHANTIER SELON: (A) CODE ÉLEC. NATIONAL (NEC) ET/OU/ (B) CODE ÉLEC. CANADIEN (CEC) ET/OU/ (C) CODES LOCAUX ET MUNICIPAUX.
- SI LE FILAGE DOIT ÊTRE REMPLACÉ, IL DOIT ÊTRE IDENTIFIÉ PAR LE NUMÉRO DE LA PIÈCE FOURNIE PAR LE FABRICANT.
- SEULEMENT DES MÂTTRES POUR FILS DE COPPER.
- TOUTE COMPOSANTE DE REMPLACEMENT DOIT ÊTRE BIEN MISSE EN TERRE.
- LES MOTEURS SONT PROTÉGÉS PAR LEUR CONCEPTION.
- SSI EST EN SÉRIE AVEC LSI1 ET LSI2.

**LEGEND**

- DS DISCONNECT SWITCH
- GV GAS VALVE
- IGN HOT SURFACE IGNITER
- P1/S1 9 PIN PLUG & SOCKET ON FURNACE CONTROL BOARD
- P2/S2 6 PIN PLUG & SOCKET ON FURNACE CONTROL BOARD
- P3/S3 2 PIN PLUG & SOCKET AT HOT SURFACE IGNITER
- P4/S4 9 PIN PLUG & SOCKET AT AUXILIARY LIMIT SWITCH ON BLOWER INLET
- ILP PRESSURE SWITCH
- IRC RUN CAPACITOR
- IT TRANSFORMER, 40VA
- ⊗ IDENTIFIED RUN CAPACITOR
- △ 24V CONNECTION ROOM THERMOSTAT
- FIELD CONNECTION
- FACTORY WIRING AND DEVICES
- RELAY CONTACTS ON IGNITION CONTROL BOARD

**LÉGENDE**

- DS COMMUTEUR DE DISJONCTION
- GV SOUPAPE DE GAZ
- IGN IGNITION DE SURFACE CHAUDE
- P1/S1 PRISE & RECEPTACLE A 9 PITS SUR LA PLAQUETTE DE CONTRÔLE D'IGNITION
- P2/S2 PRISE ET RECEPTACLE A 6 PITS SUR LA PLAQUETTE DE CONTRÔLE D'IGNITION
- P3/S3 PRISE ET RECEPTACLE A 2 PITS D'IGNITION DE SURFACE CHAUDE
- P4/S4 PRISE ET RECEPTACLE A 9 PITS COMMUTEUR AUXILIAIRE DE PRESSION SUR BOITIER DE SOUFFLERIE
- ILP COMMUTEUR DE PRESSION
- IRC CAPACITEUR DE FONCTIONNEMENT IDENTIFIÉ
- IT TRANSFORMEUR, 40VA
- ⊗ RACCORDEMENT DU THERMOSTAT DE PIÈCE
- △ RACCORDEMENT DE CHANTIER
- FILAGE DE L'USINE ET APPAREILS
- CONTACTS DES RELAIS SUR LA PLAQUETTE DE CONTRÔLE D'IGNITION

A/C READY MODELS  
UTEAC & TI BOARD WIRING DIAGRAM



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