GAS FURNACE CHECKLIST



Distri	butor Name			
Distri	butor Address			
Cus	tomer Name			
Custo	mer Address			
City_		State	Zi	c Code
MOD	PEL#	SERIAL#	SER	ES
Dea	ler Name		Dealer I	Phone
DA	TE OF ORIGINAL I	NSTALLATIC	N	
NEV	W CONSTRUCTION		DI ACEMEN	T (mode one)
111	W CONSTRUCTION	OK KI	A LA CLIVILA	(mark one)
TYI	PE OF FUEL: NATUR	RALGAS C	R PROPANE_	(mark one)
			_	
FUI	RNACE LOCATION	(mark one for each categ	TURNACE P	OSITION:
		ATION	VI CDACE	POSITION
	BASEMENT		VL SPACE	UPFLOW
	UTILITY ROOM		LOSET	DOWNFLOW
	ATTIC	GA	ARAGE	HORIZONTAL RIGHT
				HORIZONTAL LEFT
~ .	C DIDING			
GA	S PIPING:			
SEDI	MENT TRAP INSTALLED A	AT UNIT? Y	es N	o (mark one)
EXTI	ERNAL SHUT OFF INSTAL	LED AT UNIT? Y	res No	(mark one)
VERI	FY SUPPLY PIPE SIZE	<u>d</u>	iameter	

FIRING RATE: (CLOCKED METER FOR NAT. GAS)

Remove burner box cover on 90% units. Reinstall after adjusting manifold pressure

Firing rate= heat content (btu/cu. ft.) X size of the dial (cu. ft/rev) X # of rev. per 60 sec (rev/sec) X 3600 (sec/hr)

360/11/	
Example- (1050 btu/cu. ft.) X (1.0 cu. ft./rev.) X (2 revs./60sec) X (3600 sec/hr)= 63,000 btu/hr	
PR use the chart in the installation instructions	
HIGH HEATbtu/hr MED HEATbtu/hr LOW HEATbtu/l	ır
OCAL GAS HEAT CONTENT(btu/cu. ft.)	
PECIFIC GRAVITY/CU. FT. (contact your local gas utility-not required for propane)	

*Supply pressure should be checked with all other gas appliances running	
IANIFOLD PRESSURE: High fire" W.C. Low fire" W.C.	
GAS PIPE SIZE AND LENGTH FROM GAS METER TO APPLIANCEFT	
COTAL (COMBINED) GAS INPUT OF ALL GAS APPLIANCES AT SITEBTU	
EAVING AIR TEMPERATURE(F) high(F) med(F) low	
RETURN AIR TEMPERATURE(F) high(F) med(F) low	
TEMPERATURE RISE(F) high heat	
(F) med heat	
(F) low heat	

**Temperature rise is equal to the supply air temp minus the return air temp @ steady state operation

The supply temp. should be measured away from the line of sight of the Heat Exchanger

+90 % VENTING SYSTEM

PVC: Long ra	ndius ells? YN	(mark one)		
Pipe Dia	# of Elbows	Total Leng	gthft.	
Termination Type:	Concentric	2 pipe (std)	(mark one)	
Termination Location:	Roof	Sidewall**		
** Ht. Above Grade		# of Combustion A	ir Disks Installed	
MID-EFFICIEN	CY VENTIN	G SYSTEM		
METAL: B vent	Chimney	Liner (r	mark one)	
Vent DiaTotal	Htft. Ve	nt Conn. Dia	Conn. lenght	ft.
# of Elbows	Connector Type	e: Single Wa	ll B Vent	(mark one)
Connector Rise. Above F	urnaceft.	Vent Cap Above Pe	eak: Y N	_ (mark one)
If No, Dist. From Peak		Water Htr. Input_	btu/hr	
# of Elbows on W H Ven	t W H Co	onn. Dia	Conn length	
Type of Water Htr Vent 0	Conn: Single	Wall	B Vent (mark	one)
ACC	ESSORIES (fill in or circle as neo	cessary)	
Digital Thermostat/U.I.	Model #			
Humidifier	Model #			
Air Cleaner	Model#		_	
Zoning System Comfo Zone P	rt Zone Comfort erfect Zone Per	Zone II Two Zone Flus VVT	ne Three Zone Infinity /Evol	ution
Zoning System (Others b	rand name)			_
Air Conditioning	Indoor Coil Mod.	#	Serial #	
Heat Pump	Outdoor Unit. Mo	od. #	Serial#	
Indoor TXV Yes No	OR Ind	oor Piston Yes	No Piston #	(mark one)
Outdoor TXV Yes N	o OR Out	door Piston Yes	No Piston #	(mark one)
Heat Recovery Ventilator	or Energy Recover	ry Ventilator Mode	el#	_
Twinning Kit Installed?	Y N	Kit #		
Interface Kit Installed?	Y N	Kit #		

OPERATIONAL CHECKS

SUPPLY VOLTAGE	VAC	LOW VOLTAGE	VAC
TRANSFORMER VA		CIRCUIT BREAKER	or FUSE SIZEAMP
CIRCUIT WIRE SIZE	AWG	Copper or Aluminum	wire
BLOWER AMP DRAW	(PSC only)	HI MED-HI _	MED LOW
INDUCER AMP DRAW	(PSC only)	НІ LO	W
DOES AMP DRAW EXO (not for ECM induce		ATING? BLOWER	YNINDUCER YN(mark one for each motor)
PRESSURE SWITCH: Pa	art number		
**The following checks r Verify that the drain tra	•	•	lic gauge
PRESSURE SWITCH:	Makes @	"W.C. high fi	re
	Breaks @	"W.C. high fi	re
	Makes @	"W.C. med fire	2
	Breaks @	"W.C. med fire	
	Makes @	"W.C. low fire	2
	Breaks @	"W.C. low fir	e
DOES A FAULT OCCUI	R BETWEEN TH	E TRANSITION	
FROM LOW TO HIGH F	TRE Y	N(mark one) OR N	-
OR HIGH TO LOW FIRI	E? Y	(mark one)	
Fault code #			
CIRCUIT BOARD P/N_		DATE CODE	E FROM BOARD
FLAME SENSOR CURR	ENT	uA D.C.	
IS THIS A 2000 CFM UN	NIT? Y1	N (mark one)	
RETURN AIR CONNEC	TIONS: (circle or	ne)	
Bottom Only Sid	e Only	Side & Bottom	Wrap-Around(mark one)
FILTER TYPE:		SIZE	THICKNESS
COOLING SPEED SELE	ECTED	CFM	

CONSTANT	FAN SPEE	D SELEC	TED_		C	FM	(usin	g dip sv	v. or ro	tary kn	ob)
DUCT SYST	TEM STATIO	C PRESSU	URE:								
Low Fire	" W	V.C. Med	d Fire_		" W	.C.	Hig	h Fire_			' W.C.
Low Cooling	5	_" W.C.	High	Cooling_			W.C.				
**Verify uni	t CFM in the	Product 1	Data S	heets or T	roublesh	oot	ing gu	iide			
RECORD D Note: For Int HK42FZ026 Software Ve	finity/Evolut	ion systen	ns, ma	ke all setti	ing chang	ges :	at the	user int	terface.	-	eed units)
SW1-1	SW1-	SW1-		SW1-4	SWI	- 1	_	1	<u> </u>	V1-7	SW1-8
<u> </u>	2	3				_		SW1-6			
ON	ON	ON OFF		ON	ON OF			ON OFF	_	ON	ON
OFF	OFF	OFF		OFF	Or	Г		OFF)FF	OFF
AC-1	AC- 2	AC- 3	1					CF-1	C	F-2	CF-3
ON	ON	ON						ON	- (ON	ON
OFF	OFF	OFF						OFF	(FF	OFF
SW4-1 ON OFF	SW4- 2 ON OFF	SW4- 3 ON OFF									
HK42FZ	012 or HK4	2FZ003 C	Contro	l:							
SW3-1	SW3- 2	SW3-	3	SW3-4	SW3	-5		SW3-6	SV	V3-7	SW3-8
ON	ON	ON		ON	ON	_		ON	_	ON	ON
OFF	OFF	OFF		OFF	OF	ľ		OFF	1)FF	OFF
SW2-1	SW2- 2	SW2-	3					SW1-1	SV	V1-2	SW1-3
ON	ON	ON						ON	(ON	ON
OFF	OFF	OFF						OFF		FF	OFF
PER REMO'		YES		NO							
SW-1	SW- 2	SW- 3		W-4	SW-5		SW	-6	SW-7	\prod	
FLT	LO	HI		EM. EAT	MZ		LI	·	BPH		

OFF

OFF

OFF

OFF

OFF

OFF

OFF

					A/C F	ROTA	RY K	NOE	SET	TINC	j				
0	1	2		3		4		5		6		7	8	9	
			BLO	WER	OFF	DEL	AY R	OTA	RY K	NOB	SET	ΓING			
0	1	2		3		4		5		6		7	8	9	

HK42FZ017 Control:

LH	T	OF	F D	LY
ON		ON		ON
OFF		OFF		OFF

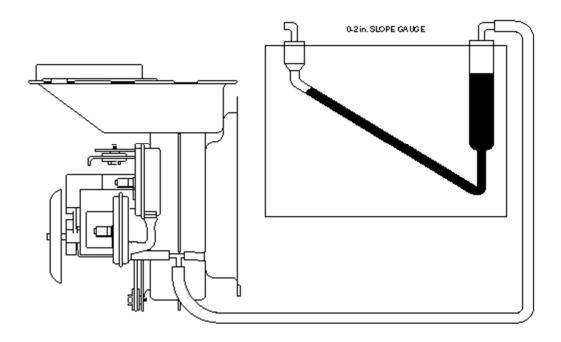
HK42FZ015, HK42FZ010 or HK42FZ005 Control:

SW-1 HIGH HEAT ONLY	SW- 2 LOW HEAT (ADAPTIVE ALGORITHM)	BL	3 and SW4 R OFF DELAY	
ON	ON	ON	ON	
OFF	OFF	OFF	OFF	

BLOWER OFF DELAY SETTING (Other Fixed Speed Controls)	sec.
ACTUAL TIME FOR BLOWER TO SHUT OFF (All Controls)	sec.
RECORD ANY FAULT CODES HERE	

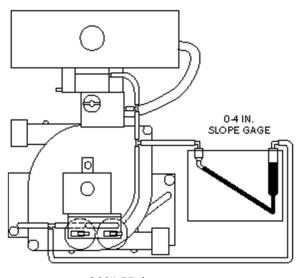
^{**} IF ANY SYSTEM CHANGES ARE PERFORMED, REPEAT SYSTEM CHECK , RECHECKING TEMPERATURE RISE AND PERFORM THE OPERATIONAL CHECKS

Pressure Check Diagram



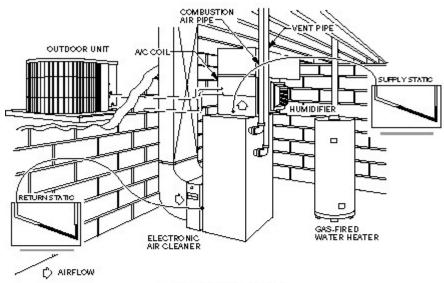
80% Units

Pressure Check Diagram



90% Units

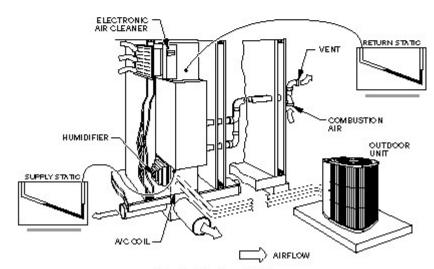
Static Pressure Reading Location Diagrams



Basement — Upflow Application

Upflow Total Static Pressure Reading Locations

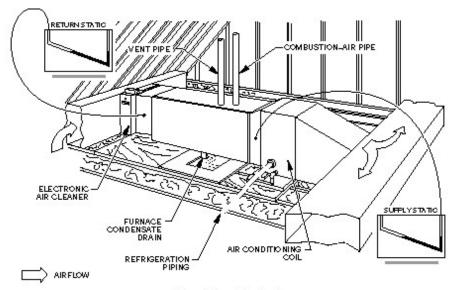
A95090



Closet — Downflow Application

Downflow Total Static Pressure Reading Locations

A95091



Attic — Horizontal Application

A95092

Horizontal Right and Left Airflow Total Static Pressure Reading Locations

Tools Needed:

- 1) 1) Pitot Tube Incline Manameter/Magnahelic

Example 1

886	Supply ESP before coil	0.55 in. we	
	Total ESP	0.95 in. we	

Example 2

Return ESP before filter	0.15 in. we
Filter Static Drop @ 2000 CFM	025 in. we
Supply ESP after coil	0.30 in. we
Coil Static Drop Wet	025 in. we
Total ESP	0.95 in. we