BLOCK 88.01 LOT 5 ADDRESS (SITE) 58 BROWER DR. PERMIT NO. 1573-92

RECEIVED
JUL 21 1992
DIV. OF INSPECTIONS

CONSTRUCTION PERMIT APPLICATION

Application Completes Sections I, II, III (optional), IV, VI and VII

I. IDENTIFICATION

1. Proposed Work-site at: 58 BROWER DR.
2. Name of Owner in Fee: Robert CANNAROZZO Tel. [redacted]
   Address 58 BROWER DR. (street) BRICK (municipality) [redacted] (zip code)
3. Ownership in Fee: Public _____ Private ✓
4. Principal Contractor: Self [redacted]
   Address 58 BROWER DR.
   License No. OR, if new home, Builder Reg. No. _____ Exp. Date
   Federal Emp. No. _____ Social Security [redacted]
5. Architect or Engineer _____ Tel. ( ) _____
   Address _____
6. Responsible Person In Charge of Work Robert CANNAROZZO Tel. [redacted]

V. FEE SUMMARY (for office use only)

		Update	Update
1. Building	$		
2. Electrical			
3. Plumbing		25-	
4. Fire Protection		33	
5. Other			
6. Subtotal	$	58	
7. Less 20% for State Plan Review			
8. Subtotal	$		
9. DCA Training Fee			
10. Subtotal	$		
11. Cert. of Occupancy		20	
12. Other			
13. TOTAL	$	78	

VI. BUILDING/SITE CHARACTERISTICS

	(office use only)
1. Number of Stories	
2. Height of Structure ft.	
3. Area—Largest Floor sq. ft.	
4. Building Area—All Floors sq. ft.	
5. Volume of Structure cu. ft.	
6. Construction Classification	
7. Total Land Area Disturbed sq. ft.	
8. Flood Hazard Zone	
9. Base Flood Elevation ft.	
10. Wetlands yes sq. ft. / no	
11. Fire Grading	
12. Max. Live Load	
13. Max. Occupancy Load	

II. PROPOSED WORK

Propane to natural gas

	Est. Cost
1. ☒ Minor Work (single trade)	
2. ☐ Small Job ($5,000 and no prior approvals)	
3. ☐ New Building	
4. ☐ Addition	
5. ☐ Alteration	
6. ☒ Fire Protection	
7. ☒ Plumbing	
8. ☐ Electrical	
9. ☐ Asbestos Abatement	
10. ☐ Demolition	
TOTAL COSTS	$150.00

OPTIONAL (for office use only)

Plans Rec'd By	Date Rec'd	Rejection Date	Approval Date	Re-viewer	Resubmission Dates Approval	Resubmission Dates Rejection	Re-viewer
WP	7/21/92		7/27/92 JK 7-21-92 JK		7/27/92 DK		

III. DO YOU WANT: (optional) 1. ☐ Partial Releases 2. ☐ Prototype Processing

IV. DOES OR WILL YOUR BUILDING CONTAIN ANY OF THE FOLLOWING?

1. ☐ Elevators/Escalators/Lifts/Dumbwaiters/Moving Walks
2. ☐ High Pressure Boilers
3. ☐ Pressure Vessels
4. ☐ Refrigeration Systems
5. ☐ Cross-Connections/Backflow Preventers
6. ☐ Hazardous Uses/Places of Assembly
7. ☐ Sprinklers
8. ☐ Smoke Control Systems in Open Wells
9. ☐ Underground Storage Tanks

VII. DESCRIPTION OF BUILDING USE

A. RESIDENTIAL
1. ☐ Hotels (R-1)
2. ☐ Multi-Family (R-2)
3. ☐ Two-Family (R-3) BOCA
4. ☐ Two-Family (R-4) CABO
5. ☐ One-Family (R-3) BOCA
6. ☐ One-Family (R-4) CABO

No of dwelling units:
Before Construction _____
After Construction _____
Net gain or loss _____

B. NON-RESIDENTIAL
1. State Specific Use:
2. Use Group:
3. Change in Use Group, Indicate Former:

U.C.C. Form F-100A

LDS BR 10405586

CERTIFICATION IN LIEU OF OATH

I. OWNER SECTION (to be completed if the applicant is the owner in fee)

I hereby certify that I am the owner in fee of the property listed on Page 1.

Mark the following applicable boxes:

A. ( ) I further certify that a new home (private residence) will be constructed on this property for my own use and occupancy. This dwelling is to be occupied by myself and is not to be used for any purpose other than single family residential use. I attest that all construction, plumbing, or electrical work will be done, in whole or in part, by me or by subcontractors under my supervision, in accordance with all applicable laws; and, I further acknowledge that said new home is not covered under the New Home Warranty and Builders Registration Act (N.J.S.A. 46:3B-1 et seq.) and that such fact shall be disclosed to any person purchasing this property within ten years of the date of issuance of a certificate of occupancy.

I UNDERSTAND THAT IN MARKING BOX A, I ACKNOWLEDGE THAT I AM ASSUMING RESPONSIBILITY FOR THE WORK DONE ON SAID PROPERTY, THE CONDITION OF THE PROPERTY PRIOR TO, DURING, AND AFTER ANY WORK PERFORMED, AND FOR THE PERFORMANCE OF THE SUBCONTRACTORS I HIRE, EMPLOY, OR OTHERWISE CONTRACT OR WITH WHOM I MAKE AGREEMENTS TO PERFORM WORK. I AM VOLUNTARILY AND KNOWINGLY ASSUMING THIS RESPONSIBILITY.

B. ( ) I further certify the following as required by the New Jersey Uniform Construction Code, N.J.A.C. 5:23-2.15(e)1.vii:

I personally prepared the plans submitted for: 1) the new home referred to in A.; or, 2) an addition, alteration, renovation, or repair to an existing single family residence owned and occupied by myself and located on the property listed on Page 1; or, 3) a new structure that will be physically separate from, but that will be deemed part of, an existing single family residence that is owned and occupied by myself and located on the property listed on Page 1.

C. (X) I further certify that I will perform or supervise the following work:
C.1. ( ) Building C.2. ( ) Fire Protection
I further certify that I will perform the following work:
C.3. ( ) Electrical C.4. (X) Plumbing

D. ( ) I agree to advise all contractors on this project that they are required to be registered with the New Jersey Division of Taxation and to comply with all New Jersey tax laws.

I further certify the following as required by the Uniform Construction Code, N.J.A.C. 5:23-2.15(a)5: All required State, county, and local prior approvals have been given, including such certification as the construction official may require.

I understand that if any of the above statements are willfully false, I am subject to punishment.

Signature _____ Date 7-21-92

II. AGENT SECTION

(to be completed if the applicant is not the owner in fee)

I hereby certify the following as required by the New Jersey Uniform Construction Code, N.J.A.C. 5:32-2.15(d): the proposed work is authorized by the owner in fee; and I have been authorized by the owner in fee to make this application as his agent.

I further certify the following as required by the Uniform Construction Code, N.J.A.C. 5:23-2.15(a)5: All required State, county, and local prior approvals have been given, including such certification as the construction official may require.

I agree to advise all contractors on this project that they are required to be registered with the New Jersey Division of Taxation and to comply with all New Jersey tax laws.

I understand that if any of the above statements are willfully false, I am subject to punishment.

(X) Check if contractor.

Agent Name _____

Address _____

_____

Telephone (____) _____

Signature _____ Date _____

OFFICE DATE RECEIVED: _____

VIII. PRIOR APPROVALS CHECKLIST (office use only)	LOCAL APPROVAL		COUNTY APPROVAL		REGIONAL APPROVAL		STATE APPROVAL		COMMENTS
	Prelimin. Initial	Final Date	Prelimin. Initial	Final Date	Prelimin. Initial	Final Date	Prelimin. Initial	Final Date	
☐ Planning Board							X	X	
☐ Zoning Board			X	X	X	X	X	X	
☐ Sewer Authority							X	X	
☐ Water Authority							X	X	
☐ Fire Department					X	X	X	X	
☐ Police Department			X	X	X	X	X	X	
☐ Health Department					X	X			
☐ Soil Conservation							X	X	
☐ N.J. Dept. of Community Affairs	X	X	X	X	X	X			
☐ N.J. Department of Transportation	X	X	X	X	X	X			
☐ N.J. Dept. of Environmental Protect.	X	X	X	X	X	X			
☐ Utility Dig No.			X	X	X	X	X	X	
☐ Other									
☐									
☐									

IX. SUBCODES AND SPECIAL REGULATIONS APPLICABLE (office use only—optional)

	Name of Code & Edition		Name of Code & Edition		
Building		Energy		Other	
Electrical		Barrier Free			
Plumbing		Flood Hazard			
Fire Protection		As Built Elevation Cert.			
Mechanical		Other			

X. CERTIFICATES ISSUED (office use only)

			DATE EXPIRED
☐ Temporary Certificate of Occupancy	No. _____	_____	_____
☐ Temporary Certificate of Occupancy	No. _____	_____	_____
☐ Continued Certificate of Occupancy	No. _____	_____	
☐ Certificate of Occupancy	No. _____	_____	
☐ Certificate of Approval	No. _____	_____	
☐ None			

CONSTRUCTION PERMIT

Date Issued 7-24-92
Control #
Permit # 1573-92

IDENTIFICATION Block 88.01 Lot 5

Work Site Location 38 Brower Dr

Owner in Fee Robert Cannavo

Address Same

Tele. ( )

Contractor Self

Address 0

Tele. ( )

Lic. No. or Bldrs. Reg. No. _____ Exp. Date _____

Federal Emp. No. _____

or Social Security No. _____

is hereby granted permission to perform the following work:

[ ] BUILDING [✓] PLUMBING [ ] OTHER _____

[ ] ELECTRICAL [✓] FIRE PROTECTION

DESCRIPTION OF WORK:

Propane to natural gas line

NOTE: If construction does not commence within one (1) year of date of issuance, or if construction ceases for a period of six (6) months, this permit is void.

Estimated Cost of Work $ 150.-

CONSTRUCTION OFFICIAL

PAYMENTS (Office Use Only)			
Building		PLUMBING	25.00
Plumbing	25.	FIRE	33.00
Electrical		C / O	30.00
Fire Protection	33.	TOTAL	88.00
Other		CASH	100.00
Other		CHANGE	12.00
DCA Training Fee			
Cert. of Occ.			
Other			
Total			
Check No.			
Cash			
Collected By:			

LOT 0.00
5 %
13:46

U.C.C. Form F-170A

1 WHITE - OFFICE 2 CANARY - TAX ASSESSER 3 PINK - JACKET 4 GOLD - APPLICANT

PLUMBING SUBCODE
TECHNICAL SECTION

Date Received
Date Issued 7-24-92
Control #
Permit # 1573-92

A. IDENTIFICATION—APPLICANT: COMPLETE ALL APPLICABLE INFORMATION. WHEN CHANGING CONTRACTORS, NOTIFY THIS OFFICE. CALL UTILITY DIG NO: 1-800-272-1000.

Block 88.01 Lot 5
Work Site Location 58 Brauer DR.
BRICK N.J. 08723
Owner in Fee ROBERT CANNARO220
Address SAME
Tele. ( ) ~~SAME~~ 9[redacted]
Contractor SELF
Address SAME
Tele. ( ) SAME
Lic. No.
Federal Emp. No. or Social Security N[redacted]

B. PLUMBING CHARACTERISTICS

Use Group Present Proposed GAS LINE
Building Sewer Size
Water Service Size
Estimated Cost of Plumbing Work $ $150.00

JOB SUMMARY (Office Use Only)

PLAN REVIEW:
[ ] No Plans Required
Joint Plan Review Required:
[ ] Bldg. [ ] Elec. [ ] Fire
[ ] Plumb. Plans Approved
Date: 7-21-92
Approved by: JAK

SUBCODE APPROVAL:
[ ] CO [ ] CCO [X] CA
Approved by:
Date:

INSPECTIONS: Type:	Dates (Month/Day) Failure	Failure	Approval	Initial
Slab				
Rough				
Water				
Sewer				
Fixtures				
Gas ~~Equipment~~			7/27/92	
Gas Final				
Solar				
TCO				

C. CERTIFICATION IN LIEU OF OATH

I hereby certify that I am the (agent of) owner of record and am authorized to make this application and perform the work listed on this application.

Signature-Contractor Seal

[ ] Licensed Plumbing Contractor [ ] Exempt Applicant

D. TECHNICAL SITE DATA (List all fixtures.)

propane stove to nat. gas +

NO.	FIXTURE/EQUIPMENT	FEE (Office Use Only)
	Water Closet	
	Urinal/Bidet	
	Bath Tub	
	Lavatory	
	Shower	
	Floor Drain	
	Sink	
	Dishwasher	
	Drinking Fountain	
	Washing Machine	
	Hose Bibb	
+	Gas Piping	15—
	Fuel Oil Piping	
	Water Heater	
	Steam Boiler	
	Hot Water Boiler	
	Sewer Pump	
	Interceptor/Separator	
	Backflow Preventer	
	Greasetrap	
	Water Cooled A/C or Refrigeration Unit	
	Sewer Connection	
	Water Service Connection	
X	Gas Service Connection	
	Active Solar System	
	Other	10—

Administrative Surcharge $
Paid [ ] Check # Minimum Fee $
Collected by: TOTAL $ 25—

U.C.C. Form F-130A 1 White=Inspector Copy 2 Canary=Office Copy 3 Pink=Office Copy 4 Gold=Applicant Copy

PLUMBING SUBCODE
TECHNICAL SECTION

Date Received
Date Issued 7-24-92
Control #
Permit # 1573-92

A. IDENTIFICATION—APPLICANT: COMPLETE ALL APPLICABLE INFORMATION. WHEN CHANGING CONTRACTORS, NOTIFY THIS OFFICE. CALL UTILITY DIG NO: 1-800-272-1000.

Block 98.01 Lot 5
Work Site Location 58 Rogers Dr
Brick N.J. 08723
Owner in Fee Robert Giannarozzo
Address same
Tele. ( ) same [redacted]
Contractor Colt
Address same
Tele. ( ) same
Lic. No.
Federal Emp. No. _____ or Social Security N [redacted]

B. PLUMBING CHARACTERISTICS

Use Group Present _____ Proposed same
Building Sewer Size
Water Service Size
Estimated Cost of Plumbing Work $ 150.00

JOB SUMMARY (Office Use Only)

PLAN REVIEW:
[ ] No Plans Required
Joint Plan Review Required:
[ ] Bldg. [ ] Elec. [ ] Fire
[ ] Plumb. Plans Approved
Date: 7-31-92
Approved by: [illegible]

SUBCODE APPROVAL:
[ ] CO [ ] CCO [ ] CA
Approved by:
Date:

INSPECTIONS: Type:	Dates (Month/Day) Failure	Failure	Approval	Initial
Slab				
Rough				
Water				
Sewer				
Fixtures				
Gas Equipment				
Gas Final				
Solar				
TCO				

C. CERTIFICATION IN LIEU OF OATH

I hereby certify that I am the (agent of) owner of record and am authorized to make this application and perform the work listed on this application.

Signature-Contractor Seal

[ ] Licensed Plumbing Contractor [ ] Exempt Applicant

D. TECHNICAL SITE DATA (List all fixtures.)

propane stove to nat. gas

NO.	FIXTURE/EQUIPMENT	FEE (Office Use Only)
	Water Closet	
	Urinal/Bidet	
	Bath Tub	
	Lavatory	
	Shower	
	Floor Drain	
	Sink	
	Dishwasher	
	Drinking Fountain	
	Washing Machine	
	Hose Bibb	
1	Gas Piping	15-
	Fuel Oil Piping	
	Water Heater	
	Steam Boiler	
	Hot Water Boiler	
	Sewer Pump	
	Interceptor/Separator	
	Backflow Preventer	
	Greasetrap	
	Water Cooled A/C or Refrigeration Unit	
	Sewer Connection	
	Water Service Connection	
X	Gas Service Connection	
	Active Solar System	
	Other	10-

Administrative Surcharge $ _____
Paid [ ] Check # _____ Minimum Fee $ _____
Collected by: _____ TOTAL $ 25-

U.C.C. Form F-130A 1 White=Inspector Copy 2 Canary=Office Copy 3 Pink=Office Copy 4 Gold=Applicant Copy

FIRE PROTECTION SUBCODE
TECHNICAL SECTION

Date Received
Date Issued 7-24-92
Control #
Permit # 1573-92

A. IDENTIFICATION—APPLICANT: COMPLETE ALL APPLICABLE INFORMATION. WHEN CHANGING CONTRACTORS, NOTIFY THIS OFFICE. CALL UTILITY DIG NO: 1-800-272-1000.

Block 88.01 Lot 5
Work Site Location 58 BROWER DR. BRICK NJ. 08723
Owner in Fee ROBERT CANNAROZZO
Address 58 BROWER DR.
Tele. (908 [redacted]
Contractor
Address SAME
Tele. ( ) SAME
Lic. No.
Federal Emp. No. or Social Security [redacted]

B. FIRE PROTECTION CHARACTERISTICS

Use Group Present Proposed Gas Line
Constr. Class. Present Proposed
Heating Systems [ ] New [ ] Existing
Type: [\] Gas [ ] Oil [ ] Electrical [ ] Solar
[ ] Other
Location: Combustible Oil
Total Est. Cost of Fire Prot. Work $ [ ] Other

JOB SUMMARY (Office Use Only)

PLAN REVIEW:
[ ] No Plans Required
Joint Plan Review Required:
[ ] Bldg. [ ] Plumb. [ ] Elec.
[ ] Fire Plans Approved
Date: 7/21/92
Approved by:
SUBCODE APPROVAL:
[ ] CO [ ] CCO [ ] CA
Date:
Approved by:

INSPECTIONS: Type:	Dates (Month/Day) Failure	Failure	Approval	Initial
Suppression Test				
Fire Alarm Test				
Smoke Test				
Mechanical				
TCO				
Other				
Other				
Other				

C. CERTIFICATION IN LIEU OF OATH

I hereby certify that I am the (agent of) owner of record and am authorized to make this application.

SIGNATURE

D. TECHNICAL SITE DATA

Description of Work propose stove to nat. gas

Water Supply Source
Method of Valve Supervision
Local Alarm Supervision
Central Supervision
Proprietary Supervision

Flammable Liquid Storage Tanks ( ) Capacity Fuel
Combustible Liquid Storage Tanks ( ) Capacity Fuel
L.P.G. Storage Tanks ( ) Capacity Fuel
L.N.G. Storage Tanks ( ) Capacity Fuel

	Number	FEE (Office Use Only)
Wet Sprinkler Heads		
Dry Sprinkler Heads		
TOTAL		
Smoke Detectors		
Heat Detectors		
TOTAL		
Stand Pipes		
Kitchen Hood Exhaust Systems		
Pre-Engineered Systems		
CO_2 Suppression		
Halon Suppression		
Foam Suppression		
Dry Chemical		
Wet Chemical		
Gas or Oil Fired Appliance		
OTHER Gas Line		33.-

Administrative Surcharge $
Paid [ ] Check # Minimum Fee $
Collected by TOTAL FEE $

U.C.C. Form F-140A
1 White=Inspector Copy 2 Canary=Office Copy
3 Pink=Office Copy 4 Gold=Applicant Copy

FIRE PROTECTION SUBCODE
TECHNICAL SECTION

Date Received
Date Issued 7-24-92
Control #
Permit # 1573-92

A. IDENTIFICATION—APPLICANT: COMPLETE ALL APPLICABLE INFORMATION. WHEN CHANGING CONTRACTORS, NOTIFY THIS OFFICE. CALL UTILITY DIG NO: 1-800-272-1000.

Block 88.01 Lot 5
Work Site Location 59 BROWER DR.
BRICK NJ. 08723
Owner in Fee ROBERT CANNAROZZO
Address 59 BROWER DR.

Tele. (908 [redacted]
Contractor SELF
Address SAME

Tele. (____) SAME
Lic. No. ____
Federal Emp. No. ____ or Social Sec [redacted]

B. FIRE PROTECTION CHARACTERISTICS

Use Group Present ____ Proposed GAS LINE
Constr. Class. Present ____ Proposed ____
Heating Systems [ ] New [ ] Existing
Type: [ ] Gas [ ] Oil [ ] Electrical [ ] Solar
[ ] Other ____
Location: ____
Total Est. Cost of Fire Prot. Work $ ____ [ ] Other ____

JOB SUMMARY (Office Use Only)

PLAN REVIEW:
[ ] No Plans Required
Joint Plan Review Required:
[ ] Bldg. [ ] Plumb. [ ] Elec.
[ ] Fire Plans Approved
Date: 7/21/92
Approved by: JC

SUBCODE APPROVAL:
[ ] CO [ ] CCO [ ] CA
Date: ____
Approved by: ____

INSPECTIONS: Type:	Dates (Month/Day) Failure	Failure	Approval	Initial
Suppression Test				
Fire Alarm Test				
Smoke Test				
Mechanical				
TCO				
Other				
Other				
Other				

C. CERTIFICATION IN LIEU OF OATH

I hereby certify that I am the (agent of) owner of record and am authorized to make this application.

SIGNATURE

D. TECHNICAL SITE DATA

Description of Work -propose stove to nat. gas

Water Supply Source ____
Method of Valve Supervision ____
Local Alarm Supervision ____
Central Supervision ____
Proprietary Supervision ____

Flammable Liquid Storage Tanks ( ) Capacity ____ Fuel ____
Combustible Liquid Storage Tanks ( ) Capacity ____ Fuel ____
L.P.G. Storage Tanks ( ) Capacity ____ Fuel ____
L.N.G. Storage Tanks ( ) Capacity ____ Fuel ____

	Number	FEE (Office Use Only)
Wet Sprinkler Heads		
Dry Sprinkler Heads		
TOTAL		
Smoke Detectors		
Heat Detectors		
TOTAL		
Stand Pipes		
Kitchen Hood Exhaust Systems		
Pre-Engineered Systems		
CO_2 Suppression		
Halon Suppression		
Foam Suppression		
Dry Chemical		
Wet Chemical		
Gas or Oil Fired Appliance		
OTHER GAS LINE		33.-

Administrative Surcharge $ ____
Paid [ ] Check # ____ Minimum Fee $ ____
Collected by ____ TOTAL FEE $ ____

U.C.C. Form F-140A 1 White=Inspector Copy 2 Canary=Office Copy 3 Pink=Office Copy 4 Gold=Applicant Copy

HORIZONTAL GAS FURNACES
USERS' INFORMATION MANUAL

We're pleased you've chosen our gas furnace to supply your heating needs. Please keep this manual in a safe yet readily available place. It contains important and useful information.

ATTENTION, INSTALLER! After installing furnace , give the user:

- — Users' Information Manual
- — Installers' Information Manual
- — Parts List
- — Warranty Information

ATTENTION, USER! Your furnace installer should give you four important documents relating to your furnace. Keep these as long as you do your furnace. Pass these documents on to later purchasers or furnace users. If any of the four documents is missing or damaged, contact your installer or furnace manufacturer for replacement. For efficient service, please give your furnace model and serial number, listed in Section 1 and on your furnace rating plate.

WARNING: IMPROPER INSTALLATION, ADJUSTMENT, ALTERATION, SERVICE OR MAINTENANCE CAN CAUSE PROPERTY DAMAGE, INJURY OR DEATH. REFER TO THIS MANUAL. FOR ASSISTANCE OR ADDITIONAL INFORMATION, CONSULT A QUALIFIED INSTALLER, SERVICE AGENCY OR GAS SUPPLIER.

FOR YOUR SAFETY: WHAT TO DO IF YOU SMELL GAS

— Do not try to light any appliance.
— Do not touch any electrical switch; do not use any phone in your building.
— Immediately call your gas supplier from a neighbor's phone. Follow gas supplier's instructions.
— If you cannot reach your gas supplier, call fire department.

FOR YOUR SAFETY: Do not store or use gasoline or other flammable vapors and liquids in vicinity of this or any other appliance.

WARNING: READ AND FOLLOW ALL SAFETY INFORMATION IN THIS MANUAL, OPERATING INSTRUCTIONS, LIGHTING INSTRUCTIONS AND FURNACE SAFETY LABELS. SECTION 4.C. IDENTIFIES LOCATION OF SAFETY LABELS. FAILURE TO FOLLOW SAFETY PRECAUTIONS COULD RESULT IN DAMAGE, INJURY OR DEATH.

IMPORTANT SAFETY NOTE: You must know how to turn off gas and electricity to furnace. Your qualified installer, service agency or gas supplier can teach you to use controls and switches. More information is in Section 6.

WARNING: DO NOT USE THIS FURNACE IF ANY PART HAS BEEN UNDER WATER. CORROSION CAN START IF ELECTRICAL AND GAS CONTROL SYSTEMS BECOME WET. CORROSION CAN CAUSE GAS TO LEAK, WHICH COULD RESULT IN DAMAGE, INJURY OR DEATH. CONSULT A QUALIFIED INSTALLER, SERVICE AGENCY OR GAS SUPPLIER TO INSPECT FURNACE. INSTRUCT THEM TO REPLACE ANY PART WHICH HAS BEEN UNDER WATER.

Thank you for reading these caution statements. Please read on so you'll know how to maintain your furnace for years of dependable service.

207734 A

Pub. No. 22-5137-3
Dwg. No. 21X144489 P03

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Section 3 GETTING THE MOST FROM YOUR NEW FURNACE 3
Section 4 FOLLOWING SAFETY PRECAUTIONS 3
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Section 6 TURNING OFF YOUR FURNACE IN AN EMERGENCY 4
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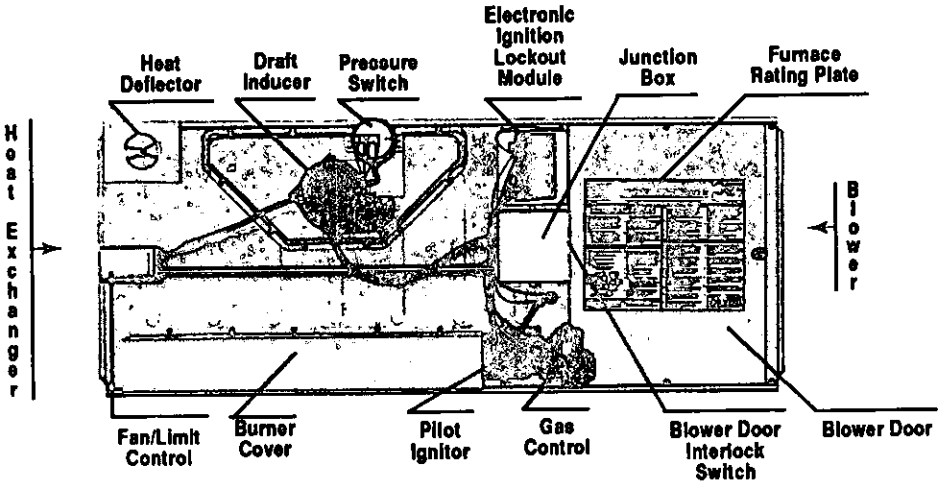
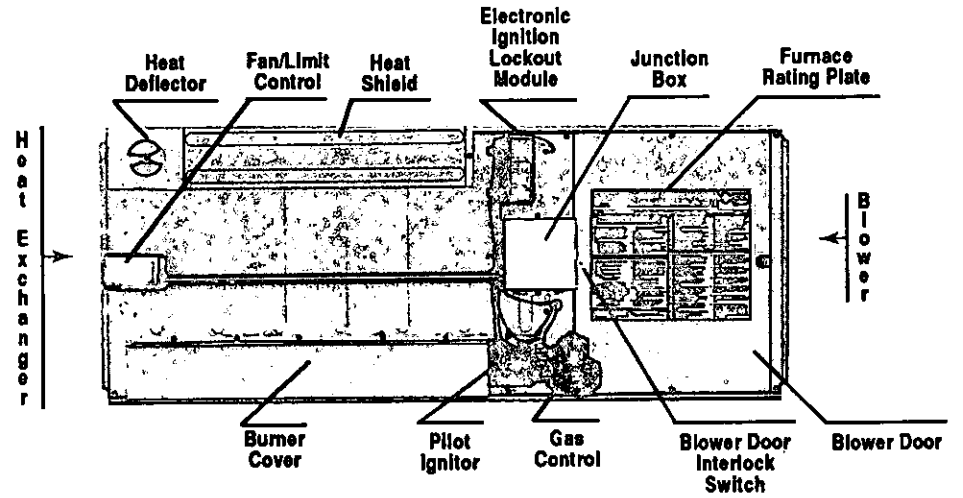
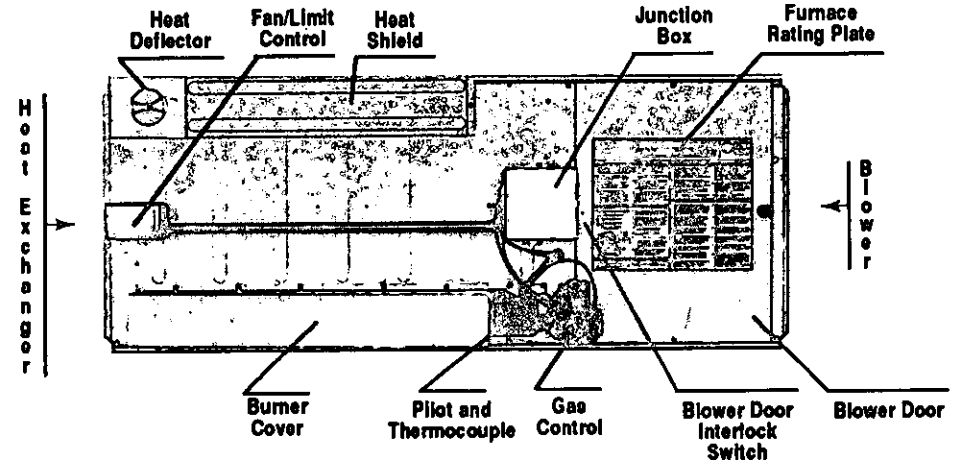
INDUCED DRAFT FURNACE — FIGURE 1



ELECTRONIC IGNITION FURNACE — FIGURE 2



STANDING PILOT FURNACE — FIGURE 3



Dwg. No. 21X144489 P03

SECTION 1 — RECORDING RATING PLATE AND OTHER INFORMATION

Record the manufacturer's name, furnace model number and serial number below. These are on your furnace rating plate; refer to figures in Section 2 to locate your rating plate. Next record installation date, which is important for warranty purposes.

Also fill in the installer's name, address and telephone number. This will be handy if you have questions later. Some companies install an identification tag on furnaces they install or service. If not, ask for the information.

YOUR FURNACE INFORMATION

Furnace Type GAS.

Manufacturer's Name TRANE

Model Number _____

Serial Number _____

Date Installed _____

Installer/Servicer _____

Address _____

City/State/Zip Code _____

Telephone Number _____

SECTION 2 — IDENTIFYING YOUR FURNACE TYPE

This manual sometimes refers to specific furnace types. You will need to know whether yours is an Induced Draft, Electronic Ignition or Standing Pilot furnace. Here's how to determine:

Induced Draft furnace shown in Figure 1 have draft inducer assemblies and electronic ignition lockout modules. Electronic Ignition furnaces shown in Figure 2 have only electronic ignition lockout modules. Standing Pilot furnaces shown in Figure 3 do not have either a draft inducer assembly or electronic ignition lockout module.

SECTION 3 — GETTING THE MOST FROM YOUR NEW FURNACE

We designed your furnace to give years of reliable service. Following operation and maintenance procedures in this manual will help assure better, longer, more reliable service. Please take time to read and understand this information before using your new furnace.

SECTION 4 — FOLLOWING SAFETY PRECAUTIONS

A. Signal Words

We designed your furnace to give years of safe, dependable service. That's assured when you understand and follow all safety precautions. Remember: Your furnace contains flames, gas, electricity, rotating parts and metal edges. Signal words "WARNING" and "CAUTION" alert you to potential hazards.

"WARNING" ALERTS YOU TO SITUATIONS THAT COULD CAUSE SERIOUS INJURY OR DEATH.

"CAUTION" alerts you to situations that could cause minor or moderate injury or property damage.

B. Safety Precautions

These are some of our most important safety precautions; others are throughout this manual. Please read and follow them.

1. Gas and Combustion Products

WARNING: ANY CONDITION THAT WILL ALLOW GAS OR COMBUSTION PRODUCTS TO ENTER STRUCTURE CAN CAUSE NAUSEA, ASPHYXIATION OR FIRE. THESE COULD RESULT IN DAMAGE, INJURY OR DEATH.

Natural gas and propane (LP) gas have characteristic odors. When your furnace is operating correctly, you should not smell any unfamiliar odor.

Normally, burning gas with air produces combustion products which contain carbon dioxide, oxygen and water vapor. Under abnormal conditions, combustion products can contain aldehydes and carbon monoxide.

— Aldehydes have a strong, pungent, acrid smell that can cause nausea.

— Carbon monoxide is tasteless, colorless and odorless. It can cause headaches, flu-like symptoms or nausea. We refer to all these symptoms as nausea in this manual. It can also cause death by asphyxiation.

WARNING: ANY UNFAMILIAR SMELL CAN ALERT YOU TO PRESENCE OF GAS OR ALDEHYDES. IF YOU DETECT AN UNFAMILIAR ODOR, FOLLOW INSTRUCTIONS IN SECTION 6.B.1. OTHERWISE, NAUSEA, ASPHYXIATION OR FIRE COULD OCCUR, RESULTING IN DAMAGE, INJURY OR DEATH.

WARNING: A LOUD NOISE MAY MEAN FAULTY BURNER IGNITION. IF YOUR FURNACE MAKES A LOUD NOISE, TURN IT OFF. FOLLOW INSTRUCTIONS IN SECTION 6.B.4. IF YOU DON'T TURN YOUR FURNACE OFF, IT COULD CAUSE FIRE OR AN EXPLOSION, RESULTING IN DAMAGE, INJURY OR DEATH.

WARNING: DO NOT BLOCK OR COVER BURNER COMBUSTION AIR OPENINGS IN LOWER FRONT OR LOWER REAR OF FURNACE. BLOCKING THESE OPENINGS COULD CAUSE NAUSEA, ASPHYXIATION OR FIRE, RESULTING IN DAMAGE, INJURY OR DEATH.

WARNING: DO NOT BLOCK OR COVER ANY OPENINGS FROM OUTSIDE THE STRUCTURE WHICH SUPPLY COMBUSTION AND VENTILATION AIR TO YOUR FURNACE. KEEP INSULATION AWAY FROM THESE OPENINGS. BLOCKING THESE OPENINGS COULD CAUSE NAUSEA, ASPHYXIATION OR FIRE, RESULTING IN DAMAGE, INJURY OR DEATH.

WARNING: IF YOUR FURNACE IS IN AN ATTIC OR OTHER INSULATED SPACE, KEEP ALL INSULATING MATERIALS AT LEAST TWELVE INCHES AWAY FROM ITS BURNER COMBUSTION AIR OPENINGS. OTHERWISE YOU COULD EXPERIENCE NAUSEA, ASPHYXIATION OR FIRE RESULTING IN DAMAGE, INJURY OR DEATH.

WARNING: DO NOT OPERATE FURNACE WITH BLOWER DOOR OPEN OR REMOVED. DO NOT ALTER FURNACE TO ALLOW OPERATION WITH BLOWER DOOR REMOVED. DOING EITHER COULD ALLOW COMBUSTION PRODUCTS TO CIRCULATE THROUGHOUT THE STRUCTURE, CAUSING NAUSEA, ASPHYXIATION OR FIRE THAT COULD LEAD TO INJURY OR DEATH.

If your furnace is horizontally vented through a sidewall, the following procedures are necessary for proper vent operation.

1. Have vent system inspected by a qualified service technician once before heating season and once during heating season to assure it is gas tight.

2. Have condensate drain system inspected by a qualified service technician once before heating season begins and once during heating season to assure tubing or drain pan is not plugged with debris.

Note: If either item above is not correct, have a qualified service technician determine cause and fix the problem.

WARNING: A HORIZONTAL VENT SYSTEM IS UNDER POSITIVE PRESSURE AND MUST BE GAS TIGHT. IF VENT SYSTEM IS NOT INSTALLED AND MAINTAINED PROPERLY, FLUE PRODUCTS OR CONDENSATE MAY COLLECT IN OR AROUND STRUCTURE CREATING A HAZARD RESULTING IN DAMAGE, INJURY OR DEATH.

WARNING: HORIZONTAL VENT SYSTEMS ARE MADE FROM SPECIAL HIGH TEMPERATURE MATERIAL. USING INCORRECT MATERIAL FOR INSTALLATION OR REPLACEMENT COULD CREATE A HAZARD, RESULTING IN DAMAGE, INJURY OR DEATH.

WARNING: DO NOT STEP ON, HIT OR PLACE ANY WEIGHT ON TERMINATION TEE. IF TERMINATION TEE IS MISHANDLED, VENT SYSTEM MAY BECOME DISCONNECTED AT FURNACE ALLOWING FLUE PRODUCTS TO COLLECT IN STRUCTURE DURING USE, RESULTING IN INJURY OR DEATH.

2. Product Storage and Use Near Your Furnace

WARNING: NEVER STORE OR USE FLAMMABLE LIQUIDS OR VAPORS NEAR OR ON YOUR FURNACE. THESE INCLUDE GASOLINE, KEROSENE, CIGARETTE LIGHTER FLUID, CLEANING FLUIDS, SOLVENTS, PAINT THINNERS OR PAINTING COMPOUNDS. FLAMMABLE VAPORS CAN TRAVEL GREAT DISTANCES BEFORE IGNITING. FLAMMABLES COULD CAUSE FIRES OR EXPLOSIONS AND RESULT IN DAMAGE, INJURY OR DEATH.

WARNING: NEVER STORE OR USE ANYTHING NEAR OR ON YOUR FURNACE THAT CAN PRODUCE VAPORS THAT ARE CORROSIVE TO GAS-FIRED FURNACES. VAPORS FROM PRODUCTS CONTAINING CHLORINES, FLUORINES, BROMINES AND IODINES CAN CAUSE VENT SYSTEM OR HEAT EXCHANGER FAILURE. EXAMPLES OF SUCH PRODUCTS ARE SPRAY OR AEROSOL CONTAINERS, DETERGENTS, BLEACHES, WAXES, ADHESIVES, SOLVENTS AND OTHER CLEANING COMPOUNDS. VENT SYSTEM OR HEAT EXCHANGER FAILURE COULD CAUSE NAUSEA, ASPHYXIATION OR FIRE, RESULTING IN DAMAGE, INJURY OR DEATH.

WARNING: NEVER STORE ANYTHING COMBUSTIBLE NEAR OR ON YOUR FURNACE. THESE INCLUDE BROOMS, DUSTMOPS, VACUUM CLEANERS, OTHER CLEANING TOOLS OR ITEMS, PLASTIC OR PLASTIC CONTAINERS, PAPER BAGS OR OTHER PAPER PRODUCTS. A FIRE COULD OCCUR, RESULTING IN DAMAGE, INJURY OR DEATH.

3. Alteration of Furnace Controls

WARNING: DO NOT ALTER ANY GAS OR ELECTRICAL CONTROLS (GAS CONTROL, PILOT OR SAFETY CONTROLS) IN ANY MANNER. ALTERING THEM COULD CAUSE FURNACE TO OPERATE UNSAFELY, RESULTING IN DAMAGE, INJURY OR DEATH.

C. Safety Label Location and Information

Check to make sure your furnace's safety labels are in place and visible. If they are worn or missing, contact your installer or furnace manufacturer for replacement. The information is in Section 1.

LOCATION	LABEL
Blower door on same furnace side as gas control	BLOWER DOOR LABEL — Furnace Rating Plate — FOR YOUR SAFETY — OPERATING INSTRUCTIONS OR LIGHTING INSTRUCTIONS, — TO TURN OFF GAS TO APPLIANCE — Codes and Clearances
Blower door on opposite furnace side from gas control	WARNING LABEL
Inside blower compartment on bottom of furnace	CAUTION LABEL
Junction box cover outside	ELECTRICAL WIRING DIAGRAMS

SECTION 5 — UNDERSTANDING HOW YOUR HEATING SYSTEM WORKS

A. Induced Draft and Electronic Ignition Furnaces

Your furnace operates automatically after you set your room thermostat at a specific temperature. When the inside temperature drops below this, your thermostat turns on the furnace. If your furnace is an induced draft model, the draft inducer then starts. For both the induced draft and electronic ignition models, the spark ignitor sparks; pilot gas valve inside gas control opens; and gas flows through to pilot burner. The spark ignitor lights the pilot and stops sparking. The pilot-flame sensing probe signals the electronic ignition lockout module to open the main gas valve inside gas control. Gas flows to main burners, and pilot flame lights them.

Your blower turns on automatically when there is enough heat build-up in heat exchanger. Blower pulls air from structure through air filter and over heat exchanger. Warmed air moves through air ducts to room registers.

When room temperature reaches thermostat setting, your furnace turns off. If your furnace is an induced draft model, the draft inducer stops. On both induced draft and electronic ignition models, the gas control closes, and gas flow to pilot and main burners stops. The blower stops automatically after it removes heat from heat exchanger.

B. Standing Pilot Furnaces

See furnace blower door and Section 7 for instructions on lighting pilot. After you manually light pilot, your furnace operates automatically. Set your room thermostat at a specific temperature. When the inside temperature drops below this setting, your thermostat turns on furnace. Gas control opens; gas flows to main burners; and pilot flame lights burners.

Blower turns on automatically when there is enough heat build-up in heat exchanger. Blower pulls air from structure through air filter and over heat exchanger. Warmed air moves through air ducts to room registers.

When room temperature reaches thermostat setting, the furnace turns off. Gas control closes; gas flow to main burners stops; pilot remains lit. Blower stops automatically after it removes heat from heat exchanger.

SECTION 6 — TURNING OFF YOUR FURNACE IN AN EMERGENCY

WARNING: HAVE A QUALIFIED INSTALLER, SERVICE AGENCY OR GAS SUPPLIER TEACH YOU LOCATION AND OPERATION OF GAS AND ELECTRICAL SHUTOFF DEVICES. ASK THEM ANY QUESTIONS YOU HAVE ABOUT THIS SECTION. IF YOU DON'T TURN OFF YOUR FURNACE IN AN EMERGENCY, DAMAGE, INJURY OR DEATH COULD RESULT.

In an emergency you **MUST** know how to turn off gas and electricity. Find out how **BEFORE THE EMERGENCY.**

WARNING: SHOULD OVERHEATING OCCUR OR THE GAS SUPPLY FAIL TO SHUT OFF, SHUT OFF THE MANUAL GAS VALVE TO FURNACE BEFORE SHUTTING OFF THE ELECTRICAL SUPPLY. FAILURE TO DO SO CAN CAUSE A FIRE OR EXPLOSION WHICH COULD RESULT IN DAMAGE, INJURY OR DEATH.

A. Gas and Electrical Shutoff Devices

1. In an emergency, you may not be able to reach all of the gas shutoff devices. You must know how to turn off gas using any one of the three manual types:

   a. Manual Shutoff Knob on Gas Control

   See Section 2 for furnace gas control location. Figure 4 below shows the location of gas control knob.

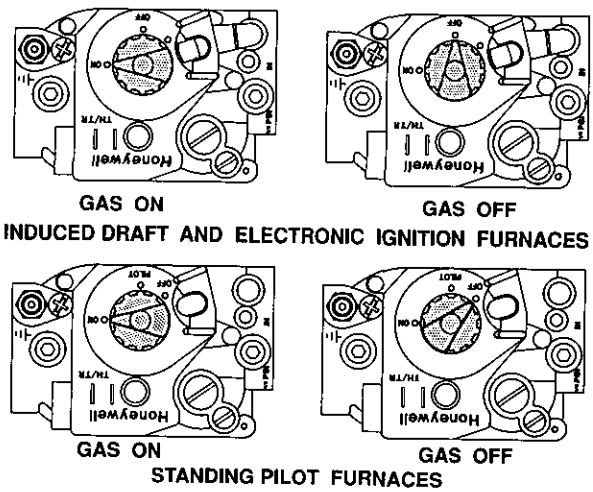


FIGURE 4

To turn the brown gas control furnace knob OFF, turn it clockwise. Use this same procedure when you leave a vacation home vacant and do not want the furnace to operate.

   b. Manual In-Line Shutoff Valve in Gas Supply Line

   This valve is installed next to furnace. Figure 5 shows two types of shutoff valves.

   Normally, gas is ON when you turn the shutoff valve handle parallel to gas pipe. Gas is OFF when you turn handle 90-degrees from gas pipe. See Figure 5.

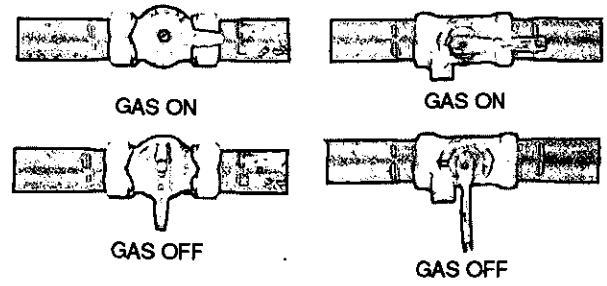


FIGURE 5

   c. Manual Shutoff Valve at Natural Gas Meter or Propane (LP) Gas Tank

   Normally, natural gas is ON when you turn shutoff parallel to gas pipe. Gas is OFF when you turn shutoff 90 degrees from gas pipe. Some valves require a wrench or other tools.

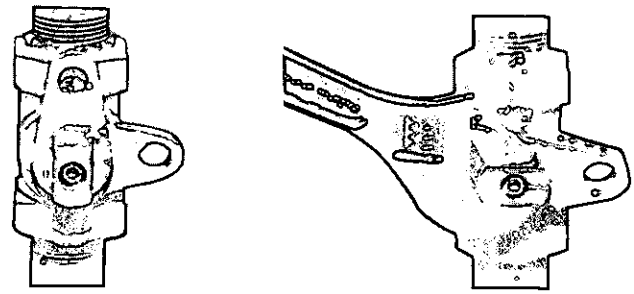


FIGURE 6

Normally, propane (LP) gas is ON when you turn shutoff knob fully counterclockwise. Gas is OFF when you *turn shutoff knob fully clockwise*. Some shutoff valves require a wrench or other tools.

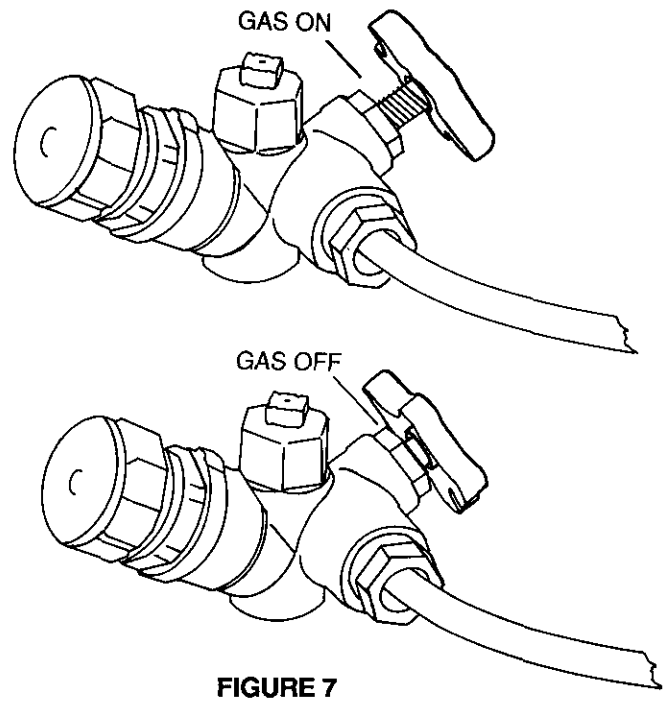
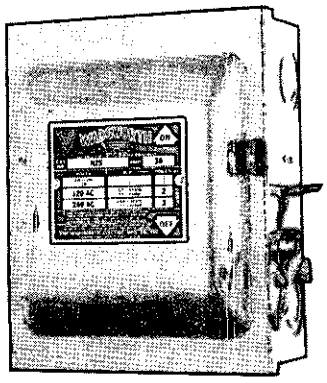


FIGURE 7

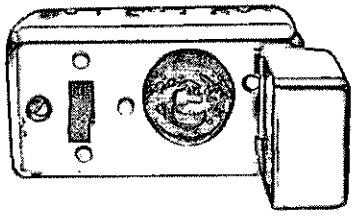
You may have different gas shutoff devices than those shown. Before you need to use them, take time now to learn where they are and how to shut them off.

2. In an emergency, you may not be able to reach both of your electrical shutoff devices. Therefore, you must know how to turn off electricity using either one of them. Here are two types of electrical shutoff devices:

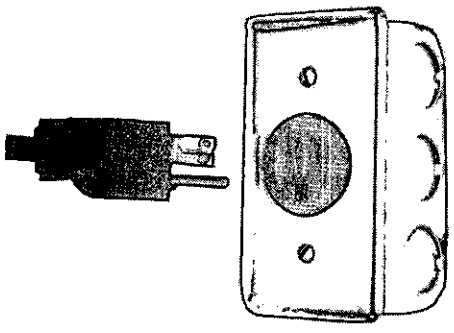
   a. Depending on local codes, one of the following electrical shutoff devices will normally be near your furnace:



Move lever to OFF position. Your electricity is now off.



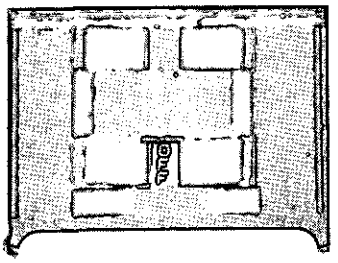
Move switch to OFF position. Your electricity is now off.



Unplug cord. Your electricity is now off.

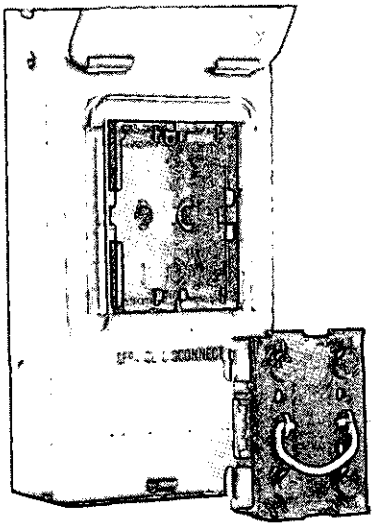
FIGURE 8

   b. Depending on local codes, you will normally find one of the following electrical shutoff devices at your main electrical circuit panel:

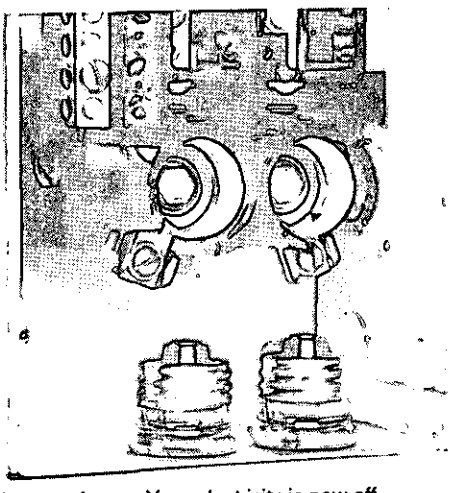


Push IN circuit breaker. Your electricity is now off.

NOTE: You can usually identify furnace circuit breaker by looking inside main electrical panel.



Pull fuse block OUT. Your electricity is now off.



Unscrew fuses. Your electricity is now off.

FIGURE 9

Your electrical shutoff devices may differ from those described. Before you need them, take time now to learn how to operate your electrical shutoff devices.

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B. Possible Emergencies and Recommended Actions

While an emergency is unlikely, we feel it is important for you to know what to do if there is one.

WARNING: IF GAS OR ELECTRICITY IS OFF DUE TO AN EMERGENCY, ONLY A QUALIFIED INSTALLER, SERVICE AGENCY OR GAS SUPPLIER SHOULD TURN IT BACK ON. DOING IT YOURSELF COULD RESULT IN DAMAGE, INJURY OR DEATH.

1. Possible emergency: Smelling gas or other unfamiliar smell; or not knowing what may be wrong or what to do about it.

   Action: For your safety:

   a. Leave your house or building immediately.

   b. Go to a neighbor's or another building.

   c. Use their telephone.

   d. Call your gas supplier; tell them you smell gas; give them your name and address.

   e. If you cannot reach gas supplier, call fire department.

   Caution: Three important things not to do:

   f. Don't try to light any gas appliances.

   g. Don't touch any electrical switches.

   h. Don't use the telephone in your house or building.

2. Possible emergency: Your thermostat is set below room temperature; yet, whether the blower is off or on, the air coming from your room registers continually gets hotter.

   Action: a. Turn room thermostat to its lowest or OFF setting.

   b. If you can do so safely, turn gas off. Use manual shutoff valve at gas meter or on propane (LP gas) tank (you may need wrench or tools). If you cannot do this safely, leave your home or building immediately. Call your gas supplier or fire department from a neighbor's phone for help.

   c. If you can safely turn off electricity at the main circuit panel, do so. If not, leave your home or building immediately. Call your gas supplier or fire department from a neighbor's phone for help.

   d. Your furnace should now be off. If it is, call your service technician or gas supplier.

   e. If your furnace continues to run, leave your home or building immediately. Call your gas supplier or fire department from a neighbor's phone for help.

3. Possible emergency: Your thermostat is set above room temperature. The blower is on, but the air coming from your room registers is hot, then cold, then hot, then cold in a continuing cycle.

   Action: a. Turn thermostat to its lowest or OFF setting.

   b. Turn brown gas control knob clockwise to OFF.

   c. *If blower is not* operating, turn off gas and then immediately turn off electricity to furnace using shutoff device near furnace or at main circuit panel.

   d. If blower is operating, wait five minutes for furnace to cool down and then turn off electricity to furnace using shutoff device near furnace or at main circuit panel.

   e. Call your local qualified service technician or gas supplier.

4. Possible emergency: While furnace is operating, you smell unfamiliar odors that go away when furnace is off.

   WARNING: UNFAMILIAR ODORS MAY MEAN GAS OR ALDEHYDES ARE PRESENT WHICH COULD RESULT IN DAMAGE, INJURY OR DEATH.

   Action: a. Turn thermostat to its lowest or OFF setting.

   b. Turn brown gas control knob clockwise to OFF.

   c. If blower is not operating, immediately turn off electricity to furnace using shutoff device near furnace or at main circuit panel.

   d. If blower is operating, wait five minutes for furnace to cool down and then turn off electricity to furnace using shutoff device near furnace or at main circuit panel.

   e. Call your local qualified service technician or gas supplier.

5. Possible emergency: Main electrical circuit breaker for furnace cannot be reset without tripping again or new fuses continue to blow.

   Action: a. Turn brown gas control knob clockwise to *OFF.*

   b. Call your local qualified service technician or gas supplier.

SECTION 7 — OPERATING AND LIGHTING YOUR FURNACE

After identifying your furnace type in Section 2 and reading the Safety Information and Precautions, *follow the Operating or Lighting Instructions* on furnace blower door and repeated here:

WARNING: IF YOU DO NOT EXACTLY FOLLOW THESE INSTRUCTIONS, A FIRE OR EXPLOSION COULD OCCUR, RESULTING IN DAMAGE, INJURY OR DEATH.

WARNING: NEVER USE TOOLS TO TURN BROWN GAS CONTROL KNOB. ONLY USE YOUR HAND. IF BROWN GAS CONTROL KNOB WILL NOT TURN BY HAND, DO NOT FORCE IT OR TRY TO REPAIR IT. CALL A QUALIFIED INSTALLER, SERVICE AGENCY OR GAS SUPPLIER. FORCING KNOB CAN CAUSE GAS TO LEAK WHICH COULD RESULT IN FIRE OR EXPLOSION.

Properly lighting and operating your furnace requires certain abilities, mechanical skills and tools. If you are uncertain about your abilities or if you lack proper skills or tools, do not proceed. Instead, contact a qualified installer, service agency or gas supplier for lighting and operating service.

A. Operating Your Induced Draft or Electronic Ignition Furnace

An automatic ignition device automatically lights Induced Draft and Electronic Ignition furnaces. Do not try to manually light the pilot. See Figure 10 for step-by-step instructions.

WARNING: IF YOU DO NOT EXACTLY FOLLOW THESE INSTRUCTIONS, A FIRE OR EXPLOSION COULD OCCUR, RESULTING IN DAMAGE, INJURY OR DEATH.

FOR YOUR SAFETY READ BEFORE OPERATING

WARNING: If you do not follow these instructions exactly, a fire or explosion may result causing damage, injury, or loss of life.

A This appliance is equipped with an ignition device which automatically lights the pilot. Do not try to light the pilot by hand.

B BEFORE OPERATING, smell all around the appliance area for gas. Be sure to smell next to the floor because some gas is heavier than air and will settle on the floor.

WHAT TO DO IF YOU SMELL GAS

- **Do not try to light any appliance.**
- **Do not touch any electric switch; do not use any phone in your building.**
- **Immediately call your gas supplier from a neighbor's phone. Follow the gas supplier's instructions.**
- **If you cannot reach your gas supplier, call the fire department.**

C Use only your hand to turn the gas control knob. Never use tools. If the knob will not turn by hand, do not try to repair it; call a qualified service technician. Force or attempted repair may result in a fire or explosion.

D Do not use this appliance if any part has been underwater. Immediately call a qualified service technician to inspect the appliance and to replace any part of the control system and any gas control which has been underwater.

OPERATING INSTRUCTIONS

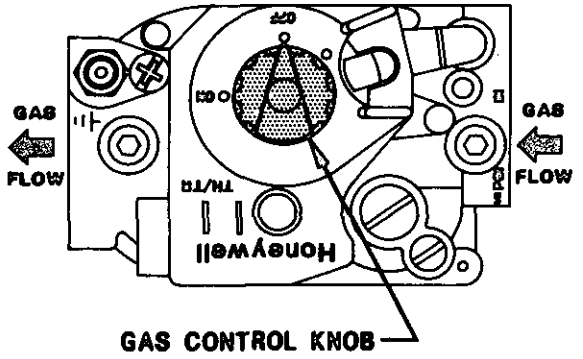
1 STOP! Read the safety information above on this label.

2 Set the room thermostat to lowest setting.

3 Turn off all electric power to the appliance.

4 Turn the brown gas control knob clockwise ↷ to "OFF".

(Control shown in factory installed position)



GAS CONTROL KNOB SHOWN IN "OFF" POSITION

5 This appliance is equipped with an ignition device which automatically lights the pilot. Do not try to light the pilot by hand.

6 Wait five (5) minutes to clear out any gas then smell for gas, including near the floor. If you smell gas, STOP! Follow "B" in the safety information above on this label. If you do not smell gas, go to the next step.

7 Turn the brown gas control knob counterclockwise ↶ to "ON".

8 Turn on all electric power to the appliance.

9 Set room thermostat to desired setting.

- **Some room thermostats have a built-in time delay. In these cases, the furnace will not start immediately. Consult your thermostat operating manual.**

10 If the appliance will not operate, follow the instructions "To Turn Off Gas To Appliance" and call your service techinician or gas supplier.

TO TURN OFF GAS TO APPLIANCE

1 Set the room thermostat to lowest setting.

2 Turn off all electric power to the appliance if service is to be performed.

3 Turn the brown gas control knob clockwise ↷ to "OFF". Do not force.

FIGURE 10

B. Lighting Your Standing Pilot Furnace

Light pilots of Standing Pilot furnaces by hand. See Figure 11 for step-by-step instructions.

WARNING: IF YOU DO NOT EXACTLY FOLLOW THESE INSTRUCTIONS, A FIRE OR EXPLOSION COULD OCCUR, RESULTING IN DAMAGE, INJURY OR DEATH.

WARNING: WHILE LIGHTING PILOT, IF RED RESET BUTTON ON GAS CONTROL DOES NOT POP UP WHEN RELEASED, GAS MAY LEAK. IMMEDIATELY TURN OFF GAS AT MANUAL SHUTOFF VALVE NEXT TO FURNACE. IF THIS CANNOT BE DONE, TURN OFF GAS AT GAS METER OR PROPANE (LP) TANK. YOU MAY NEED WRENCH OR TOOLS. THEN CALL A QUALIFIED INSTALLER, SERVICE AGENCY OR GAS SUPPLIER. FAILURE TO TURN OFF GAS SUPPLY COULD CAUSE A FIRE OR EXPLOSION, RESULTING IN DAMAGE, INJURY OR DEATH.

FOR YOUR SAFETY READ BEFORE OPERATING

WARNING: If you do not follow these instructions exactly, a fire or explosion may result causing damage, injury, or loss of life.

A This appliance has a pilot which must be lighted by hand. When lighting the pilot, follow these instructions exactly.

B BEFORE LIGHTING, smell all around the appliance area for gas. Be sure to smell next to the floor because some gas is heavier than air and will settle on the floor.

WHAT TO DO IF YOU SMELL GAS
- * Do not try to light any appliance.
- * Do not touch any electric switch; do not use any phone in your building.
- * Immediately call your gas supplier from a neighbor's phone. Follow the gas supplier's instructions.
- * If you cannot reach your gas supplier, call the fire department.

C Use only your hand to turn the gas control knob or push in the reset button. Never use tools. If the knob or button will not turn or push in by hand, do not try to repair it; call a qualified service technician. Force or attempted repair may result in a fire or explosion.

D Do not use this appliance if any part has been underwater. Immediately call a qualified service technician to inspect the appliance and to replace any part of the control system and any gas control which has been underwater.

LIGHTING INSTRUCTIONS

1 STOP! Read the safety information above on this label.

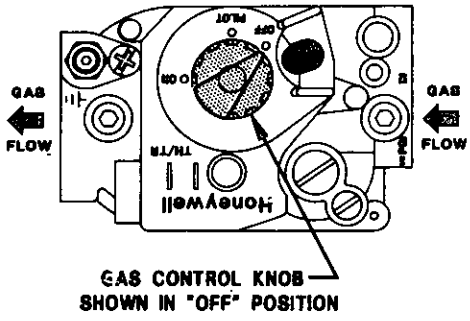
2 Set the room thermostat to lowest setting.

3 Turn off all electric power to the appliance.

4 Turn the brown gas control knob clockwise to "OFF".

5 Remove the burner cover located next to the gas control by removing the three (3) screws with a 5/16" nutdriver.

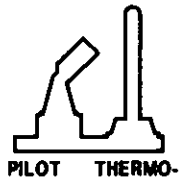
(Control shown in factory installed position.)



GAS CONTROL KNOB SHOWN IN "OFF" POSITION

6 Wait five (5) minutes to clear out any gas then smell for gas, including near the floor. If you smell gas, STOP! Follow "B" in the safety information above on this label. If you don't smell gas, go to the next step.

7 The pilot burner is located behind the 1" diameter hole in the burner flame shield. To find the pilot, follow the 1/4" tube from the gas control to the pilot burner.



8 Turn the brown gas control knob counterclockwise to "PILOT".

9 Push red reset button down all the way and hold down. Immediately light the pilot with a match. Continue to hold the red reset button down for about one (1) minute after the pilot is lit. Release the red reset button and it will pop back up. Pilot should remain lit. If pilot goes out, repeat steps 4 through 9.

- * If the red reset button does not pop up when released, stop and immediately call your service technician or gas supplier. See Users' Information Manual.
- * If the pilot will not stay lit after several tries, turn the brown gas control knob clockwise to "OFF" and call your service technician or gas supplier.

10 Replace the burner cover using the three (3) screws removed in step 5.

- * The burner cover must be replaced to assure correct furnace performance.
- * If you strip threads of the screws that retain burner cover, replace with #12x1/2" sheet metal screws.

11 Turn the brown gas control knob counterclockwise to "ON".

- * Knob can be turned to "ON" only if red reset button is up.

12 Turn on all electric power to the appliance.

13 Set the room thermostat to desired setting.

- * Some room thermostats have a built-in time delay. In these cases, the furnace will not start immediately. Consult your thermostat operating manual.

TO TURN OFF GAS TO APPLIANCE

1 Set the room thermostat to lowest setting.

2 Turn off all electric power to the appliance if service is to be performed.

3 Turn the brown gas control knob clockwise to "OFF". Do not force.

FIGURE 11

SECTION 8 — TAKING RESPONSIBILITY FOR PROPER MAINTENANCE OF YOUR FURNACE

You need special abilities, mechanical skills and tools to properly maintain your furnace. If you are uncertain about your abilities or do not have the proper skills or tools, do not try to maintain or repair your furnace yourself. Instead, contact a qualified installer, service agency or gas supplier.

A. If You Smell Gas or Any Unfamiliar Smell While Working on Your Furnace:

1. Do not try to light pilot or main burners.
2. Do not touch or turn on any electrical switch.
3. Do not use any phone in your building.
4. Immediately call your gas supplier from a neighbor's phone. Follow gas supplier's instructions.
5. If you cannot reach your gas supplier, call fire department.

B. Make Sure Air Filters Are In Place

Ask your installer, local *qualified* service technician or gas supplier to make sure your filters are in place properly. Become *familiar with* their location and procedures for removing, cleaning and replacing them.

Air filters are not factory-supplied with this furnace. Your installer will supply them at time of installation. Look for air filters in return air duct work immediately before furnace or in a return air grille in structure. Access to return grille air filters is through face of return grille.

CAUTION: Operating furnace without clean air filters can damage blower motor or air conditioning system components, if installed with furnace. This can cause system failure which could result in damage or injury.

C. Use the Correct Size Air Filters

Three filter sizes cover all gas input (BTU/HR) categories. Determine the size and number for your furnace using this table:

*GAS INPUT BTU/HR	*MOTOR H.P.	DISPOSABLE AIR FILTERS (FIELD SUPPLIED) (TWO REQUIRED) SIZE	CLEANABLE AIR FILTERS (FIELD SUPPLIED) (ONE REQUIRED) SIZE
40,000	1/4	16" x 20" x 1"	16" x 20" x 1"
50,000	1/4	16" x 20" x 1"	16" x 20" x 1"
60,000	1/6	20" x 20" x 1"	20" x 20" x 1"
60,000	1/4	20" x 20" x 1"	20" x 20" x 1"
60,000	1/3	20" x 20" x 1"	20" x 20" x 1"
75,000	1/6	20" x 20" x 1"	20" x 20" x 1"
75,000	1/4	20" x 20" x 1"	20" x 20" x 1"
75,000	1/3	20" x 20" x 1"	20" x 20" x 1"
80,000	1/5	20" x 20" x 1"	20" x 20" x 1"
80,000	1/3	20" x 20" x 1"	20" x 20" x 1"
100,000	1/5	20" x 20" x 1"	20" x 20" x 1"
100,000	1/3	20" x 20" x 1"	20" x 20" x 1"
80,000	1/2	20" x 25" x 1"	20" x 25" x 1"
100,000	1/2	20" x 25" x 1"	20" x 25" x 1"
120,000	1/2	20" x 25" x 1"	20" x 25" x 1"
140,000	1/2	20" x 25" x 1"	20" x 25" x 1"

*GAS INPUT and MOTOR H.P. can be found on furnace rating plate.

NOTE: Disposable filter sizes are based on an air velocity of no more than 300 feet-per-minute. Cleanable filters are based on air velocity of no more than 650 feet-per-minute.

D. Keep Air Filters Clean

As a user, your personal responsibility is to keep air filters clean.

CAUTION: Dirty air filters reduce system efficiency and can cause erratic control performance. These could result in damage to blower motor or heat exchanger.

WARNING: TO PREVENT ELECTRIC SHOCK, TURN OFF ELECTRICITY TO FURNACE BEFORE REMOVING, CLEANING OR REPLACING AIR FILTERS. FAILURE TO DO SO COULD RESULT IN INJURY OR DEATH.

WARNING: TO PREVENT POSSIBILITY OF ELECTRICAL SHOCK OR TOUCHING ROTATING PARTS, DO NOT OPERATE FURNACE WITH BLOWER DOOR REMOVED. DOING SO COULD RESULT IN INJURY OR DEATH.

1. During the first four weeks after your furnace is installed, inspect your air filters for dirt every week. Then check them monthly.
2. Replace disposable air filters with same type and size. Always do this at the beginning of heating and cooling seasons. Also replace *them* whenever dirty.
3. When cleanable air filters become dirty, remove, clean and *reinstall* them. Some can be cleaned with a hose and water; others with a vacuum cleaner or by shaking them out. Follow filter manufacturer's cleaning recommendations available through your local qualified service technician or gas supplier.

E. Do Not Obstruct Ductwork

For proper furnace operation, keep registers and return air grilles open. Do not cover them with rugs, carpets, drapes or furniture.

F. Keep Insulation Clear of Furnace

If your furnace is in an attic or other insulated space, keep insulating material at least twelve inches away from it, and especially away from burner opening areas. Some insulation is combustible. If you add insulation in furnace area, inspect burner openings to make sure no insulation is nearby.

WARNING: KEEP INSULATING MATERIALS AT LEAST TWELVE INCHES AWAY FROM A FURNACE INSTALLED IN AN ATTIC OR OTHER INSULATED SPACE, ESPECIALLY BOTH BURNER COMBUSTION AIR OPENINGS. FAILURE TO DO SO COULD CAUSE NAUSEA, ASPHYXIATION, OR FIRE, RESULTING IN DAMAGE, INJURY OR DEATH.

G. Have Your Furnace Checked Annually

Every year check your furnace and make sure:

1. Flue product carrying areas external to furnace should be clear and free of obstructions. This includes connector, vent pipe and chimney.
2. Vent connector or vent pipe should be in place. Its slope should be at least 1/4" up per foot. It should be physically sound, without holes or excessive corrosion.
3. Return-air duct connection should be physically sound, sealed to furnace casing and ending outside the space containing furnace.

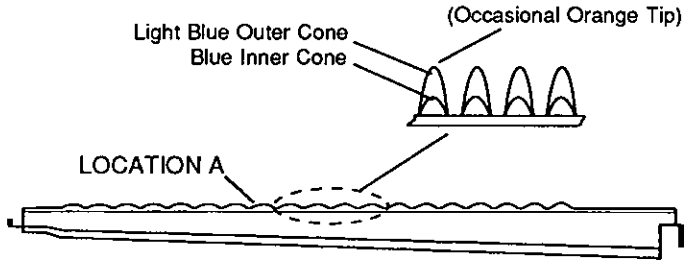
4. Furnace should be well supported, without sagging, cracks or gaps around the base. This is important in providing a good seal between support and base.

5. Signs of obvious deterioration need immediate attention.

6. Main burner and pilot burner flames should be in good adjustment.

   a. Main Burner Flames

   Flames should be stable, quiet and blue with slightly orange or yellow tips. They should extend directly upward from burner ports without curling downward, floating or lifting off burner ports. They should not touch sides of heat exchanger. See Figure 12.



APPROXIMATE FLAME HEIGHT
AT LOCATION "A"

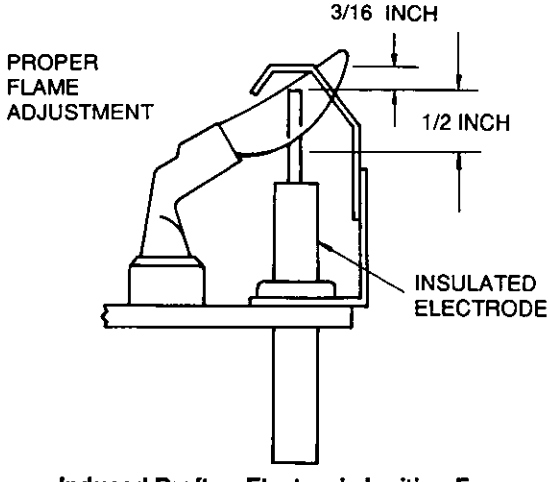
*Input BTU/HR	Natural Gas Flame Height	Propane Flame Height
40,000 60,000 80,000	3/8"	5/16"
50,000 75,000 100,000 120,000 140,000	1/2"	5/16"

*Input is located on furnace rating plate.

FIGURE 12

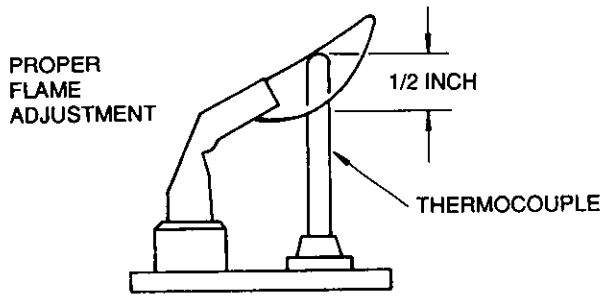
   b. Pilot Burner Flame

   When main burners are on, pilot burner flame should be as shown in Figure 13 or 14.



Induced Draft or Electronic Ignition Furnace

FIGURE 13



Standing Pilot Furnace
FIGURE 14

Contact your qualified installer, service agency or gas supplier if you have any questions after checking these items.

H. Arrange for Periodic Preventive Maintenance

Your furnace's life depends on your care. Proper care assures economical, dependable and safe performance. Periodic preventive maintenance by a qualified installer, service agency or gas supplier is required. Lack of proper care can damage furnace and result in possible hazards, which could cause DAMAGE, INJURY OR DEATH.

WARNING: FOLLOW THESE PROCEDURES BEFORE INSPECTING FURNACE. FAILURE TO DO SO COULD RESULT IN INJURY OR DEATH.

a. TURN ROOM THERMOSTAT TO ITS LOWEST OR OFF SETTING.

b. WAIT AT LEAST FIVE MINUTES FOR FURNACE TO COOL IF IT WAS RECENTLY OPERATING.

c. TURN OFF FURNACE ELECTRICAL POWER (SEE SECTION 6.A.).

d. TURN OFF MANUAL GAS SHUTOFF VALVE LOCATED IN GAS SUPPLY LINE (SEE SECTION 6.A.).

Perform periodic preventive maintenance once before heating season begins and once during heating season to assure proper furnace operation and safe working conditions. This service should include inspection, cleaning, oiling and needed repair of the following items:

1. Combustion and ventilation air openings.

2. Burner combustion air openings.

3. Flue product passages. Inspect burners, pilot, heat exchanger, collector box, draft inducer or diverter assembly and complete vent system.

4. Gas pipes leading to furnace.

5. Electrical wiring and connections, including grounding.

6. Supply air and return air ducts, making sure there are no obstructions, air leaks or loose insulation.

7. Blower housing, blower motor, blower wheel, air filters, air conditioning and draft inducer motor, when so equipped. **Blower motor does not require oiling.** Ask your qualified service technician or gas supplier to oil draft inducer motor every six months. Use no more than 3-4 drops of special high-temperature oil, Anderol L465 or Chemlube 645 (available from your installer or servicer) in each oiler hole.

SECTION 9 — CHECKING YOUR FURNACE BEFORE REQUESTING A SERVICE CALL

Before you call a local qualified service technician or gas supplier, check these items:

A. If Your Furnace Is Operating But Not Heating Your House to Desired Temperature:

1. a. Make sure room thermostat is in HEAT position and gas is on. For Standing Pilot furnaces, make sure pilot is lit. To light pilot, follow lighting instructions in Section 7 and on furnace blower door.

   b. Set your room thermostat above current room temperature.

   c. Make sure room thermostat is not near a heat source, such as a lamp, television, radio, computer or fireplace. These can make your thermostat sense that the room is warmer than it is. Move heat source away from room thermostat. If that does not correct the problem, call a local qualified service technician or gas supplier.

2. Check to see if your air filter is clean. See Section 8.D. for checking instructions.

3. Check both your supply air registers and return air grilles. They should be clean and unobstructed by rugs, carpets, drapes or furniture.

4. If your furnace still fails to provide sufficient heat, call your local qualified service technician or gas supplier for troubleshooting and repairs. Give furnace model and serial numbers, recorded in Section 1. If furnace provides sufficient heat, set room thermostat to desired temperature.

B. If Your Furnace Is Not Operating At All

1. Make sure room thermostat is in HEAT position and gas is on. For Standing Pilot furnaces, check pilot to see if lit. To light pilot, follow lighting instructions in Section 7 and on furnace blower door.

2. Set room thermostat above current room temperature.

3. Make sure electrical disconnect switch for furnace is ON.

4. Check to see if main fuses have blown or main circuit breaker has tripped.

5. Make sure blower door is securely in place. The blower door interlock switch prevents furnace operation if the door is not secured.

6. Make sure gas is on. If gas is off because of an emergency or unsafe condition, do NOT turn gas on. Follow operating or lighting instructions in Section 7 and on furnace blower door.

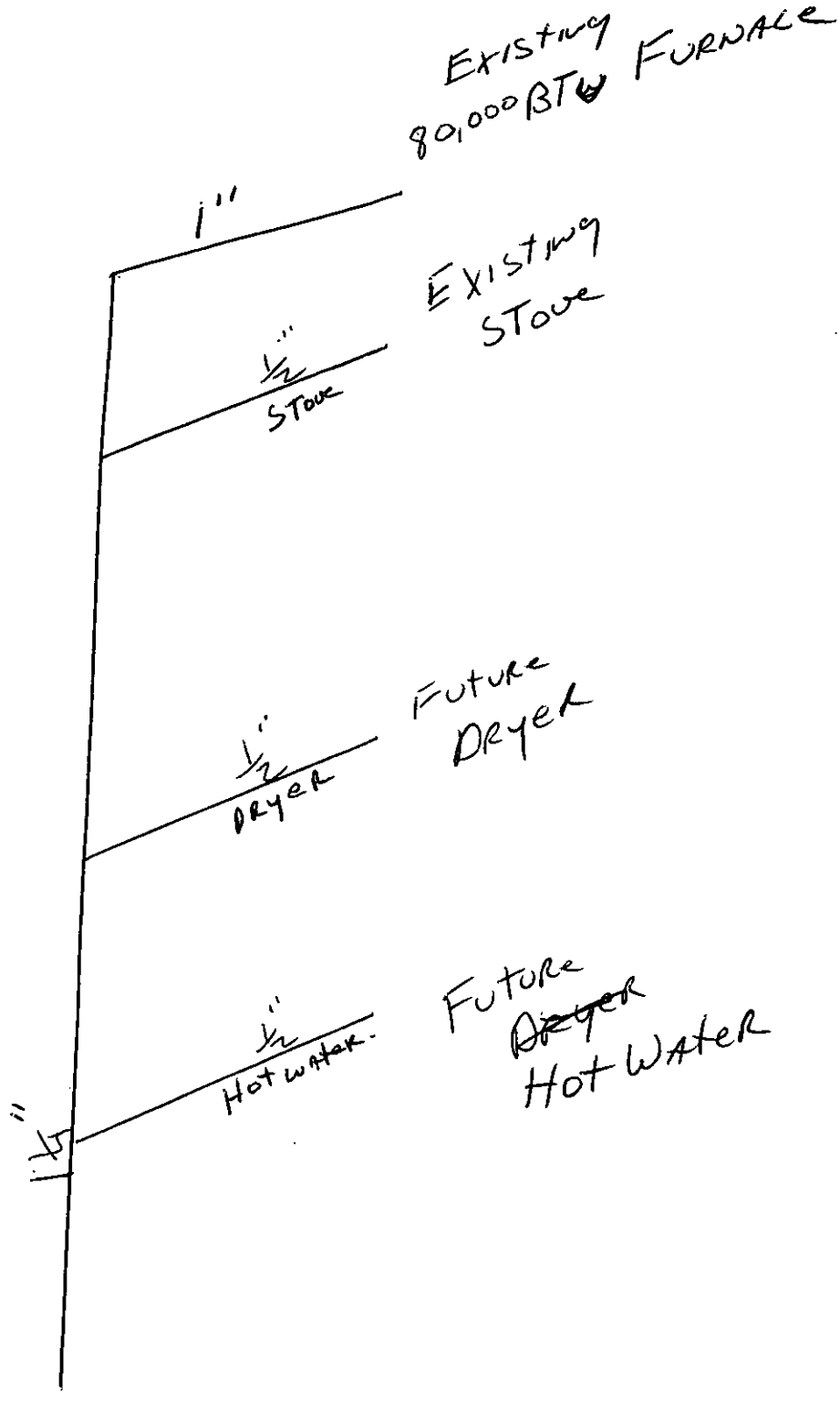
7. If furnace now operates because electricity, gas or thermostat were off, set thermostat to desired temperature.

8. Your furnace may not operate if its vent limit switch has turned the furnace off. The vent limit switch senses blocked vent pipe or chimney conditions and prevents furnace operation until these are corrected. Do not bypass the vent limit switch, it is a safety device for your protection. Call your local qualified service technician or gas supplier to correct cause of blockage and turn furnace back on.

9. Your furnace may not operate if its burner limit switch has turned furnace off. The burner limit switch senses unsafe operating conditions and prevents furnace operation until these are corrected. Do not bypass the burner limit switch, it is a safety device for your protection. Call your local qualified service technician or gas supplier to determine and correct the unsafe condition.

10. If your furnace still fails to operate, follow instructions in Section 7 and on furnace blower door, entitled "To Turn Off Gas to Appliance". Call your local qualified service technician or gas supplier for troubleshooting and repairs. Give model and serial numbers of your furnace, recorded in Section 1.

Robert Cannarozzo
58 Browe Dr.
Brick NJ - 08723



Township of Brick

WHAT TYPES OF WORK REQUIRE BUILDING PERMITS
AND WHAT THE REQUIREMENTS ARE FOR OBTAINING A BUILDING PERMIT

Please read this requirement list very carefully. The applicant is completely responsible for submitting everything listed below. Failure to do so will result in the delay of your permit.

ADDITION Submit two plot plans (see zoning below) showing the location of the addition with setbacks marked on plot. Submit two sets of drawings consisting of cross section drawings showing all materials from footing to roof, and finished elevation view of the sides of the addition. If more than one room is involved, submit two floor plans. If plumbing is involved two applications must be submitted by whoever is doing the plumbing. Electrical permits are obtained from Ocean County Electrical Bureau in Toms River (36 Hadley Ave.). If the plans are drawn by owner, the owner signs each page and the owner section on the application. If the addition is to be over 1500 square foot in size, and in a flood zone, wetlands, beach lagoon, or near any type of water, you must first make application to the Department of Environmental Protection--Division of Coastal Resources. The local office is located at 1433 Hooper Ave. in Toms River (201) 286-6428 (Additional handout information is available).

ALTERATION For inside changes, submit 2 copies of floor plan showing changes. For porch enclosures, submit 2 copies of elevation view showing how porch will be enclosed.

BULKHEADS As of September 26, 1980, on man-made lagoons only, a permit from the state is an approval from the Army Corps of Engineers. This approval is required for a permit in Brick. On all other natural waterways such as Metedeconk River, Kettle Creek, etc. both State and Army permits are necessary. Submit copy of Environmental letter and Army letter is natural waterway, two plot plans showing location of bulkhead and bulkhead designed and sealed by engineer.

DECK 2 sets of plans showing how the deck is going to be built from the footing to the rails, what materials are going to be used, there size, and how deep the footing will be. Also included two plot plans or a survey showing the location of the proposed deck.

ELECTRICAL If there is any electrical work involved, a permit is to be obtained from the Ocean County electrical Bureau in Tomes River. The phone number is 244-2121. IT IS THE OWNERS RESPONSIBILITY TO OBTAIN ELECTRICAL PERMITS. NO CERTIFICATES OF OCCUPANCY WILL BE ISSUED WITHOUT A FINAL ELECTRICAL APPROVAL.

FENCES With the supplied application form, submit two drawings or plot plans showing your property line and where the fence will be built.

FIREPLACE & WOOD STOVE If masonry chimney is on outside of house, submit two plot plans showing location along with 2 copies of cross section of foundation, hearth and throat. On wood burning stoves

PLUMBING Submit 1 TECHNICAL Section with the Heatloss, gas pipe sizing, and the isometric sketch. Also list any existing plumbing fixtures.

PORCH ENCLOSURES If you live in a development with an association, you must first receive the associations's approval. Bring us a copy of the association's approval, submit two copies of cross section drawings showing how the porch will be built from the footing (if its not there already) to the roof, and what materials you will be using. Also submit 2 copies of the elevation view showing how the porch will be enclosed, and two plot plans. Make sure you fill out an Engineering Exemption Form.

ROOFING Just fill out an application form.

SHEDS If you're building your own shed, submit 2 copies or cross section of materials showing where material is going and two plot plans showing location of shed on property and the setbacks. If metal or pre-fab shed just a plot plan is needed.

SIDING Just fill out an application form.

SWIMMING POOLS Submit two plot plans showing location of swimming pool on property. two sets of sealed prints with pool designer's seal on both prints and a brochure on the filter system. Above Ground pools, submit picture of pool, plot plan and the filter system.

ZONING REQUIREMENTS FOR ADDITIONS AND NEW HOMES All plot plans must show the required yard areas for the particular zone. All yard requirements are shown to the building line. The building line is a line formed by the intersection of a horizontal plane and a vertical plane that coincides with the most projected exterior surface of the building including eves and overhangs.

All yard areas facing on a public street shall be considered a front yard and shall be considered a front yard and shall conform to the minimum front yard requirements for the particular area. The rear yard shall be deemed to be the area opposite the narrowest lot frontage and the remaining lot yard shall be determined to the side yard.