NTC6 3.5 #42 up to 7000'

DISTRIBUTION DATE: 02/05/97
REVISION: 1

TEMPSTAR UPFLOW/HORIZONTAL

MODEL NUMBER:	NTC5 / NTN5 / GNJ
BTU SIZES:	50,000 / 75,000 / 100,000 / 125,000 / 150,000 BTU'S

ACCESSIBILITY CLEARANCE

Maintain clearance for fire safety and servicing. A front clearance of 30" is recommended for access to the burner, controls and filter.

CLEARANCE FROM COMBUSTIBLE MATERIAL

Do NOT install furnace directly on carpeting, tile or other combustible material other than wood flooring.

WARNING: If installing horizontally, place furnace on noncombustible cement board or sheet metal.

CLEARANCE TO COMBUSTIBLE MATERIAL FOR ALL UNITS

Rear	0
Front	3"
Single wall vent	6"
Type B-1 double wall vent	3"
For service	30"
All sides of Plenum (recommended within 3" of furnace)	1"
Sides	0
Vent	
Single wall vent	6"
Type B-1 double wall vent	1"
Thermoplastic pipe	4"
Top of furnace	6"

The horizontal furnaces may be installed directly on combustible wood flooring or supports. It is recommended for further fire protection that cement board or sheet metal is placed between the furnace and the combustible wood floor and extend 12" beyond the front of the furnace louver door.

COLD AIR RETURN AIR DUCTS

GARAGE

Residential garage installations require:

Burners and ignitions sources installed at least 18" above the floor.
Located or physically protected from possible damage by a vehicle.

GENERAL

NOTE: Furnaces can operate with LP gas when converted with approved conversion kit.

NOTE: Inspect unit rating plate to be certain model number begins with "NTC5, NTN5 or GNJ". This identifies unit as horizontally mountable. If unit does NOT bear this designation, you may NOT mount this unit horizontally. **Horizontal furnaces may not be mounted on its back.**

For installations above 4,000 feet, the inlet air restrictor of the combustion air blower MUST be changed, whether gas has been derated by the utility or orifices have been changed.

A high altitude kit is available which includes restrictors, orifices and installation instructions.

HIGH ALTITUDE INSTALLATIONS

Deration	
Orifice	See table
Regulator Pressure	
Pressure Switch	If the furnace is installed in a right to left airflow position (left side of furnace facing down), the pressure switch will remain in the same position as installed by the factory. If the furnace is installed in a left to right airflow position (right side of furnace facing down), the pressure switch MUST be relocated to the left side of the furnace using the holes provided in the top panel. Position the pressure switch in the same orientation as the original location. To prevent possible kinking of the pressure switch hose, trim the hose to remove excess. **Note: Care MUST be taken not to cut the tube too short.**

MOBILE HOME

WARNING: This furnace is not designed for use in mobile homes, trailers or recreational vehicles.

VENTING MATERIAL AND REQUIREMENTS

Vent Pipe	Use only vent system pipe and fittings constructed of Amoco Radel® A-200 material from the following manufacturers: Only Ultra Vent® (date code 08/01/93 or later), Plexvent "II"®, & Selvent®, which are manufactured with Radel A-200®. Be thoroughly familiar with the vent manufacturers current instructions.
Vent Fittings	

VENT CLEARANCE FROM COMBUSTIBLE MATERIAL

VENTING PROCEDURE

Important installation requirements for Category III venting with thermoplastic materials:

Install only in uninhabited spaces (i.e.: crawl spaces, attics, vent chases, etc.)

Avoid any installation where leakage of flue products can communicate with indoor living areas.

PLASTIC PIPE

Do NOT insulate vent pipe or fittings.

1. 50,000 thru 125,000 Btu input models are approved for use with 3" diameter vent. 150,000 Btu input models require 4" diameter vent.

2. The maximum length, regardless of pipe diameter, is 30' plus a maximum of up to three (3) 90^0 long radius or "sweep" elbows. If fewer than three elbows are used, maximum vent length is still 30'.

3. A 12" minimum to 18" maximum section of single wall 26 gauge minimum galvanized or stainless steel is required at the vent collar of the furnace prior to connection of the plastic vent pipe. Use 3" diameter for 50,000 through 125,000 Btuh input model and 4" diameter for 150,000 Btuh input models.

4. Minimum of 18" vent from the furnace connector is required before the first 90^0 elbow.

5. A plastic tee vent outlet with screen for vent termination is required to be spaced a distance of 8" from the exterior wall.

MISCELLANEOUS INFORMATION/NOTES

BLOWER SPEED CHART

WIRE COLOR	MOTOR SPEED
Black	High
Orange*	Med - High
Blue	Medium
Red	Low

* Medium-high speed may not be provided on all models

CONTINUOUS FAN OPERATION

A terminal is provided on the electronic fan control located in the circulating blower compartment for operation of the continuous fan option. This connection is intended for the low speed motor tap, and has a lower contact rating (8 amps) than the heat and cool taps. When the low speed blower lead is connected to this terminal, this will provide low speed blower operation whenever the other two speeds (**Heat** or **Cool**) are not energized.

If it is necessary to operate the heating speed and continuous blower speed using the same blower speed, connect a jumper between the **"Heat"** and **"Cont"** terminals on the electronic fan control.

Thoroughly check the system after modification to ensure the proper operation of the circulating air blower in all models of operation.

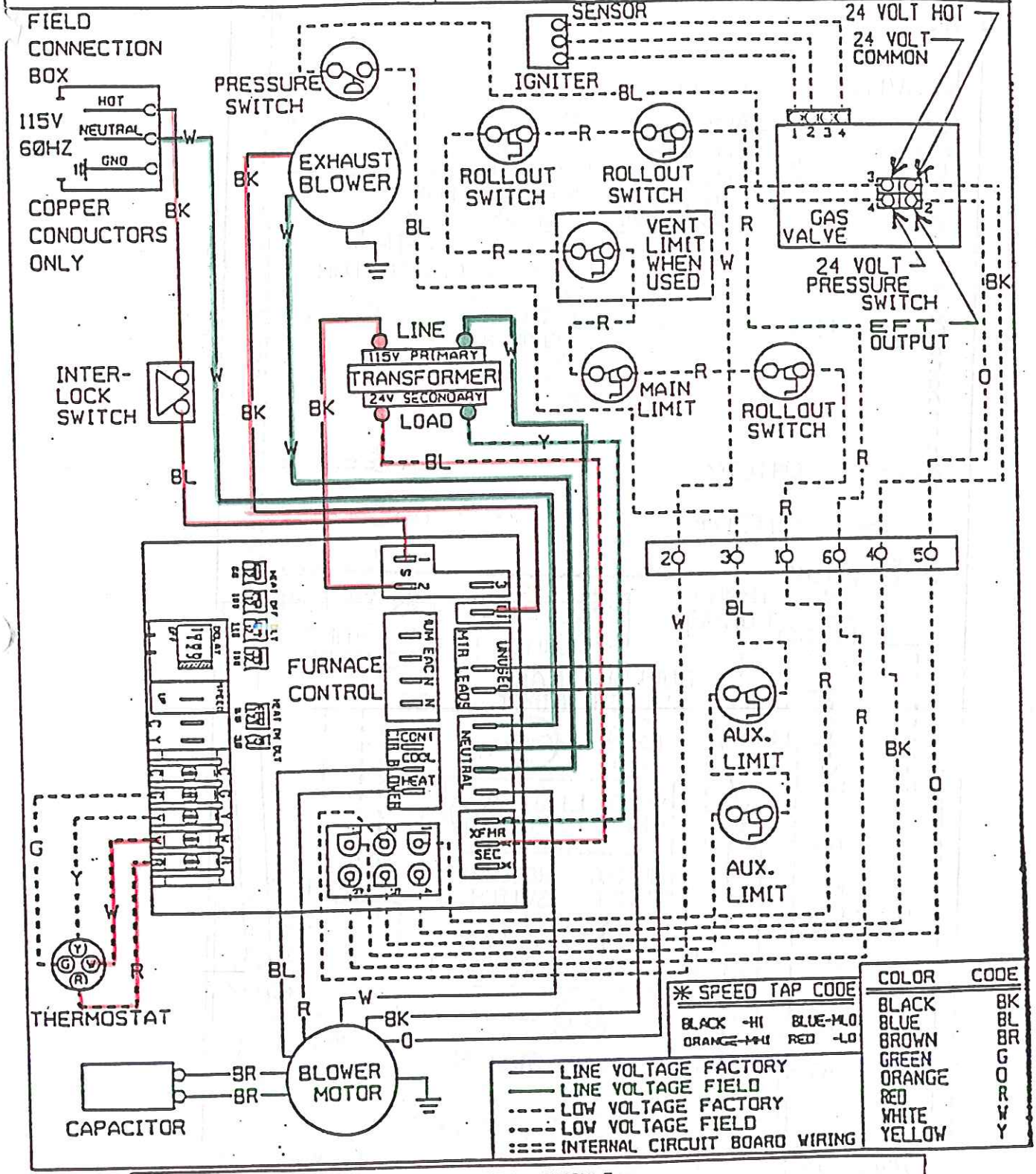
MANIFOLD PRESSURE AND ORIFICE SIZE FOR HIGH ALTITUDE APPLICATION

TABLE 4	NATURAL GAS					
HEATING VALUE BTU/CF. FT.	MEAN ELEVATION FEET ABOVE SEA LEVEL					
	2000 to 2999	3000 to 3999	4000 to 4999	5000 to 5999	6000 to 6999	7000 to 8000
800	3.5 " wc	3.5 " wc	3.5 " wc	3.5 " wc	3.2" wc	2.9" wc
850	3.5 " wc	3.5 " wc	3.5 " wc	3.2" wc	2.9" wc	2.6" wc
900	3.5 " wc	3.4" wc	3.1" wc	2.8" wc	2.5" wc	2.3" wc
950	3.3" wc	3.1" wc	2.8" wc	2.5" wc	2.3" wc	3.5" wc
1000	3.0" wc	2.8" wc	2.5" wc	2.3" wc	3.5" wc	3.1" wc
1050	2.7" wc	2.5" wc	2.3" wc	3.5" wc	3.2" wc	2.8" wc
1100	2.5" wc	2.3" wc	3.5" wc	3.2" wc	2.9" wc	2.6" wc
ORIFICE SIZE	# 42	#42	#45	#45	#45	#45

TEMPSTAR NTC5

CONNECTION DIAGRAM

DANGER: ELECTRICAL SHOCK HAZARD
DISCONNECT BEFORE SERVICING



FAN CONTROL MODULE

COOL ON DELAY: 30 SEC.
COOL OFF DELAY: 30 SEC.

HEAT OFF DELAY

60 SEC | 100 SEC | 140 SEC | 180 SEC

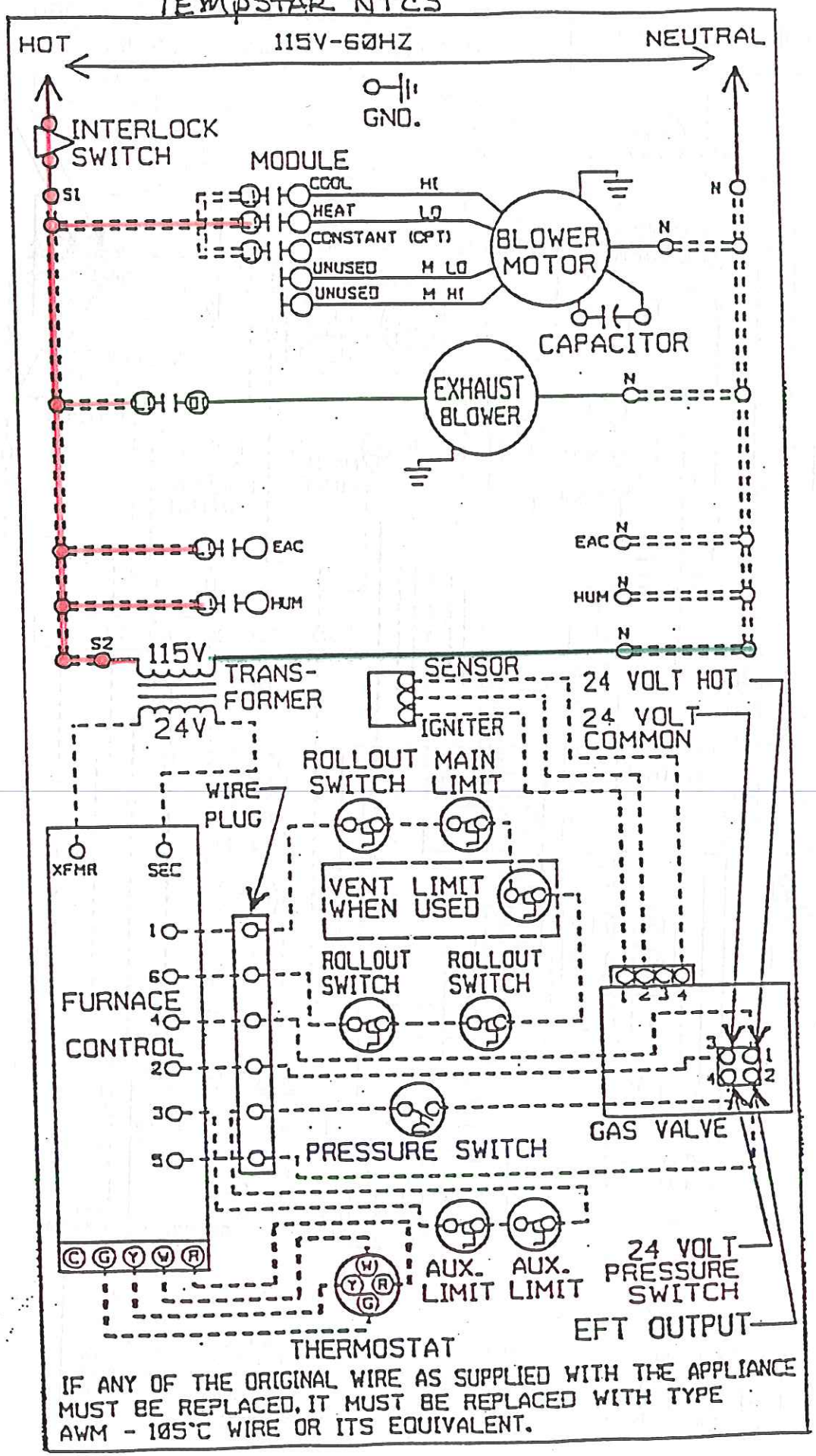
HEAT ON DELAY

60 SEC | 30 SEC

EAC + HUM: 0.8 A MAX. COMBINED

FIELD TWINNING CONNECTIONS ARE ON EDGE OF CIRCUIT BOARD. USE TWINNING KIT NAH003WK0L. MATCH Z1 AND Z2 CONNECTIONS TO SAME POINTS ON 2ND FURNACE CONTROL. ADD LOW VOLTAGE WIRING AND RELAY PER TWINNING KIT INSTRUCTION MANUAL.

TEMPSTAR NTC5

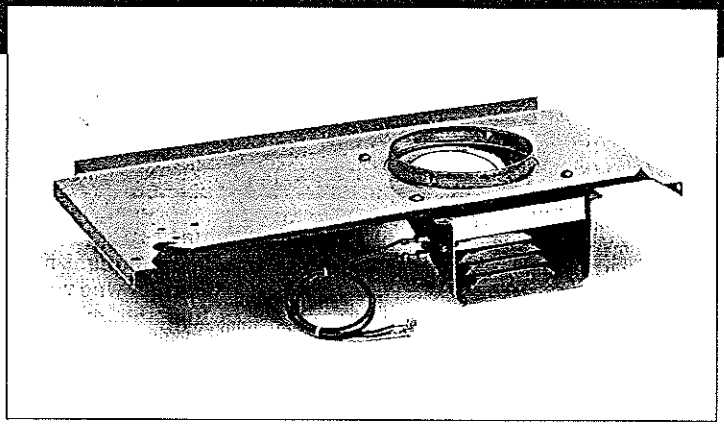


TEMPSTAR

80 %

Furnace Model Number	Restrictor Number
NTC6050 FB	.875
NTC6075 FB	1.125
NTC6100 GF	1.3125
NTC6100 KF	1.3125
NTC6100 KJ	1.3125
NTC6125 KJ	1.625
NTC6150 KJ	1.75
NTG3050 FB	1.125
NTG3075 FB	1.375
NTG3100 GF	1.75
NTG3125 KJ	1.75
Counterflow Furnaces	**Restrictor Number**
NDN6050 FB	1.125
NDN6075 FB	1.375
NDN6100 GF	1.75
NDN6125 KJ	1.75

A SIMPLE CURE FOR THE FLUE.



Historically, venting an 80% AFUE gas furnace into a tile-lined masonry chimney was a real problem. But we've got the solution. It's the Tempstar® indoor chimney venting kit and it eliminates virtually every hassle associated with masonry chimney venting.

Tired of hanging around on icy, snow-covered roofs? The chimney venting kit installs indoors, on the very Tempstar furnace you're setting up. Just remove the 8 screws on the top panel of the furnace, move the low pressure switch from the right to the left sides, and replace the original panel with the new venting kit assembly. It couldn't be simpler! The new assembly has a patent pending draft hood design that brings dilution air into the chimney to reduce the potential for condensate accumulation. Without excessive condensation there's no need for the traditional metal chimney liner!

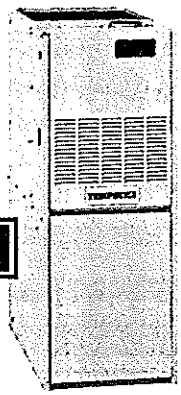
The indoor chimney venting kit cuts your labor time into almost nothing—minutes instead of hours.

And it's amazingly cost-effective. Your bids will really stand out when you eliminate the cost and labor of lining a masonry chimney.

Designed to work with two of our most popular 80% AFUE furnaces, the chimney venting kit installs quickly and easily onto the Tempstar NTC5 and NTC7/DC80 gas furnaces. It meets all the National Fuel Gas Code requirements for draft hood equipped furnaces.

If you're sick of dealing with the flue, get the cure. The Tempstar indoor chimney venting kit.

For more information, see your nearest distributor or write to: Tempstar Products, P.O. Box 120339, Nashville, TN 37212



LIMITED 5 YEAR PARTS WARRANTY

TEMPSTAR®
Heating and Cooling Products

3. Wiring Diagram