

DUCANE 90CMP	
MODEL NUMBER:	CMP A10OU4
BTU SIZES:	50-75-100-125,000 BTU's
ACCESSIBILITY CLEARANCE	
A front clearance of 30" (762mm) is recommended for safety.	
CLEARANCE FROM COMBUSTIBLE MATERIAL	
Furnaces may be installed directly on combustible wood flooring or supports as long as all required furnace clearances are met.	
This furnace must not be installed directly on carpeting or tile or other combustible material other than wood flooring or supports. Furnace requires 2" on top, 1" on side and 3" in front from combustibles and 0" everywhere else.	
COLD AIR RETURN AIR DUCTS	
Cold air returns can enter through either side, both sides or the bottom.	
GARAGE	
Residential garage installations require bottom of furnace installed 18" above the floor. Located or physically protected from possible damage by a vehicle.	
GENERAL	
Check model number for horizontal installations A series are upflow and right to left airflow.	
HIGH ALTITUDE INSTALLATIONS	
Deration	4% deration for each 1,000 feet above sea level. (see chart)
Orifice	Comes with #42, change or set regulator pressure (see chart)
Regulator Pressure	Use high altitude pressure chart.
Pressure Switch	Altitudes over 4,000 feet require a different air pressure switch. Refer to manufacturer's memo regarding changing pressure switches.

MOBILE HOME

This furnace is not approved for installation in mobile homes, trailers or recreational vehicles.

VENTING MATERIAL AND REQUIREMENTS

Vent Pipe	Schedule 40 PVC or ABS.
Vent Fittings	Schedule 40 PVC or ABS.

All pipe should be supported at least every 4'. Horizontal runs shall slope 1/4" rise per foot from furnace to vent terminals. Should use vent termination kit. See chart for size of vent and maximum lengths (also number of elbows).

VENT CLEARANCE FROM COMBUSTIBLE MATERIAL

0"

VENTING PROCEDURE

Per installation instructions

MODEL	PIPE DIAM.	MIN. VENT	MAX. VENT
50	2 inch	5 feet	* 50 feet
75	2 inch	5 feet	* 50 feet
100	3 inch	5 feet	* 50 feet
125	3 inch	5 feet	* 50 feet

* Up to (5) 90 degree elbows may be used.
2 - 45 degree elbows = 1 - 90 degree elbow

MISCELLANEOUS INFORMATION/NOTES

Not to be used as construction heat.

Check model number for installation positions and pressure switch changes.

Keep combustion air vents from contaminated air supply.

HORIZONTAL - RIGHT TO LEFT AIR FLOW

Pressure Switch Kits

Pressure switch kits are required when installing the following:

FPA Furnaces	6000' or above
CMPA Furnaces	4000' or above

FPBB furnaces have been installed up to 7500 ft. and MPG furnaces have been installed up to 10,000 ft without needing to change the pressure switch.

The following pressure switch kits are available for Ducane furnaces.

<u>KIT #</u>	<u>USED WITH</u>	
20274501	CMP	50, 75 and 100
	FPA	50, 75 and 125
20274503	CMP	125
	FPA	100

These kits will include a single P1 (dual ported) differential pressure switch which will be valid through 10,000 feet elevation. The P2 (single ported) pressure switches on these models do not need to be changed.

Orifices

The following list includes the sizes and BOM numbers for available orifices in lots of 50:

<u>Orifice Size</u>	<u>Bill of Material Number</u>
#42	2006601
#43	2006602
#44	2006603
#45	2006604
#54	2006605
#55	2006606
#56	2006607
Blank (1/32 Pilot Hole)	2006608

If there are any questions concerning this Product Information Bulletin, please contact me.

Sincerely yours,

THE DUCANE COMPANY, INC.



Dennis Ducate
Director of Engineering-Combustion Products
DUCANE HEATING & A/C DIVISION

HIGH ALTITUDE MANIFOLD PRESSURE DERATE FOR NATURAL GAS FURNACES

ALTITUDE (FEET)	* HEATING VALUE OF NATURAL GAS (BTU/CU.FT)							
	750	800	850	900	950	1000	1050	1100
0	N/A	N/A	N/A	4.32	3.88	3.5	3.16	2.84
1000	N/A	N/A	N/A	4.32	3.88	3.5	3.16	2.84
2000	N/A	N/A	4.10	3.67	3.29	2.97	2.68	2.41
3000	4.82	4.24	3.75	3.38	3.04	2.74	2.47	2.22
4000	4.40	3.88	3.42	3.11	2.79	2.52	2.27	2.04
5000	3.98	3.50	3.10	2.88	2.58	2.33	2.10	1.89
6000	3.59	3.16	2.80	2.64	2.37	2.14	1.93	1.73

Pressure with stock orifices.

OR

ORIFICE DERATE SIZING CHARTS NUMBER DRILL HOLE SIZE - NATURAL GAS¹

ALTITUDE (FT. ABOVE SEA LEVEL)	² HEATING VALUE OF NATURAL GAS (BTU/CUBIC FT.)							
	750	800	850	900	950	1000	1050	1100
2000	N/A	N/A	N/A	NO CHANGE	NO CHANGE	43	43	44
3000	N/A	N/A	40	NO CHANGE	NO CHANGE	43	44	44
4000	37	40	41	43	43	44	44	45
5000	40	41	42	43	44	44	45	46
6000	41	42	43	44	44	45	46	47
7000	42	43	43	44	45	46	47	48
8000	43	43	44	45	46	47	48	48
9000	43	44	45	46	47	48	48	49
10000	44	45	46	47	48	49	49	50

¹ NATURAL GAS ORIFICE SIZE BASED ON 3.5" WC MANIFOLD PRESSURE.

² HEATING VALUE BASED ON ATMOSPHERIC PRESSURE OF 30" HG AND 60° F (16°C) TEMPERATURE

FACTORY SET HEATING SPEED

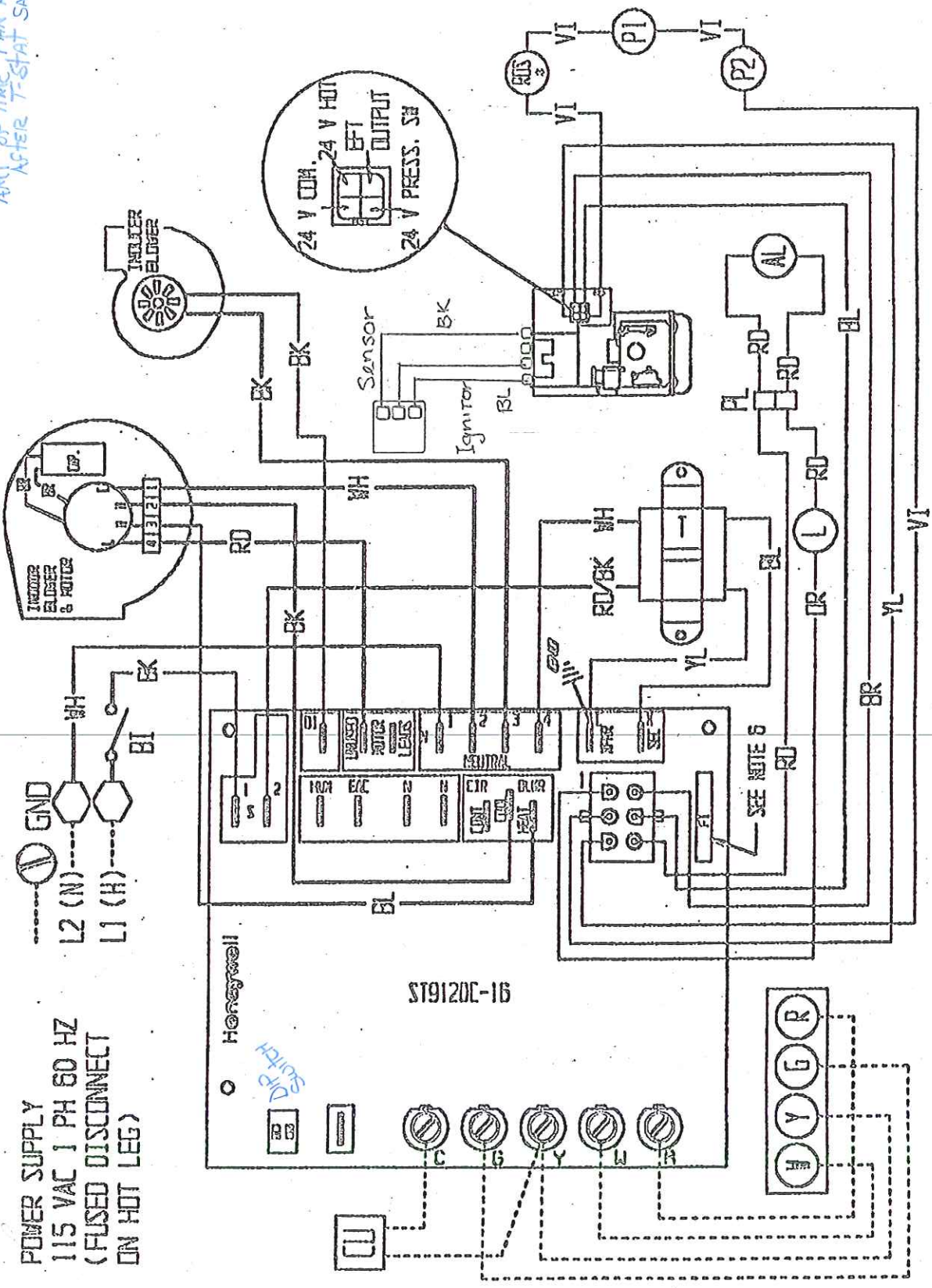
050	--	LOW (L)	100	--	MED (M)
075	--	MED (M)	125	--	HIGH (H)

ENLARGED TOP VIEW 6-PIN PLUG (DN23)

DELAY OFF DIP SWITCH SETTINGS

AMT. OF TIME FOR KVS AFTER T-STAT SATISFIED

POWER SUPPLY
115 VAC 1 PH 60 HZ
(FUSED DISCONNECT
ON HOT LEG)

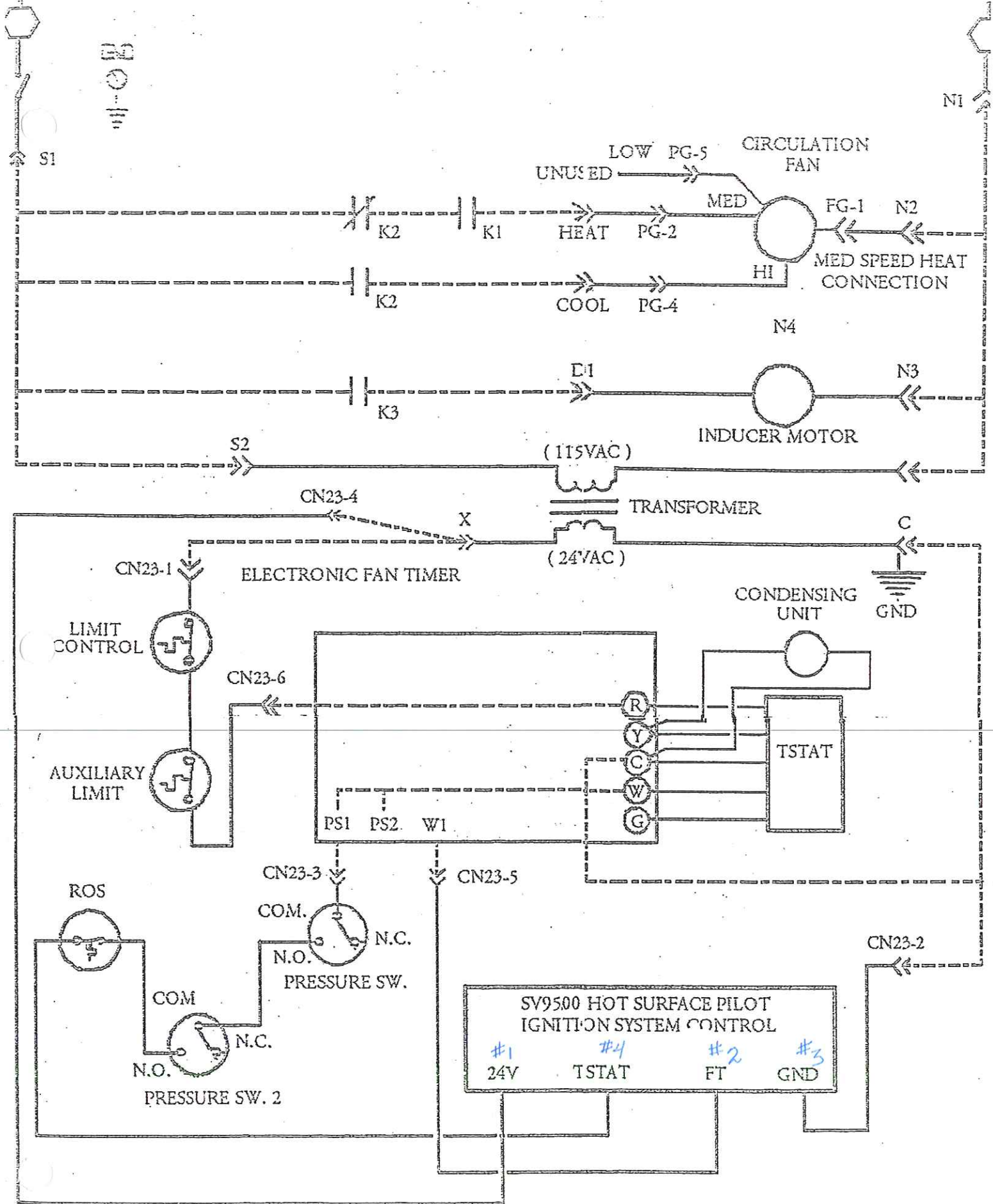


MULTI-POISE CONDENSING GAS FURNACE WITH HONEYWELL ST9120C FAN TIMER & SV9500 SMART VALVE

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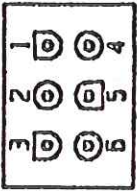


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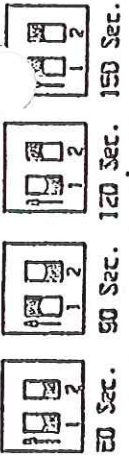
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FACTORY SET	
HEATING SPEED	
05D	-- LOW (L) 100 -- RED (R)
07S	-- MED (M) 125 -- RED (R)

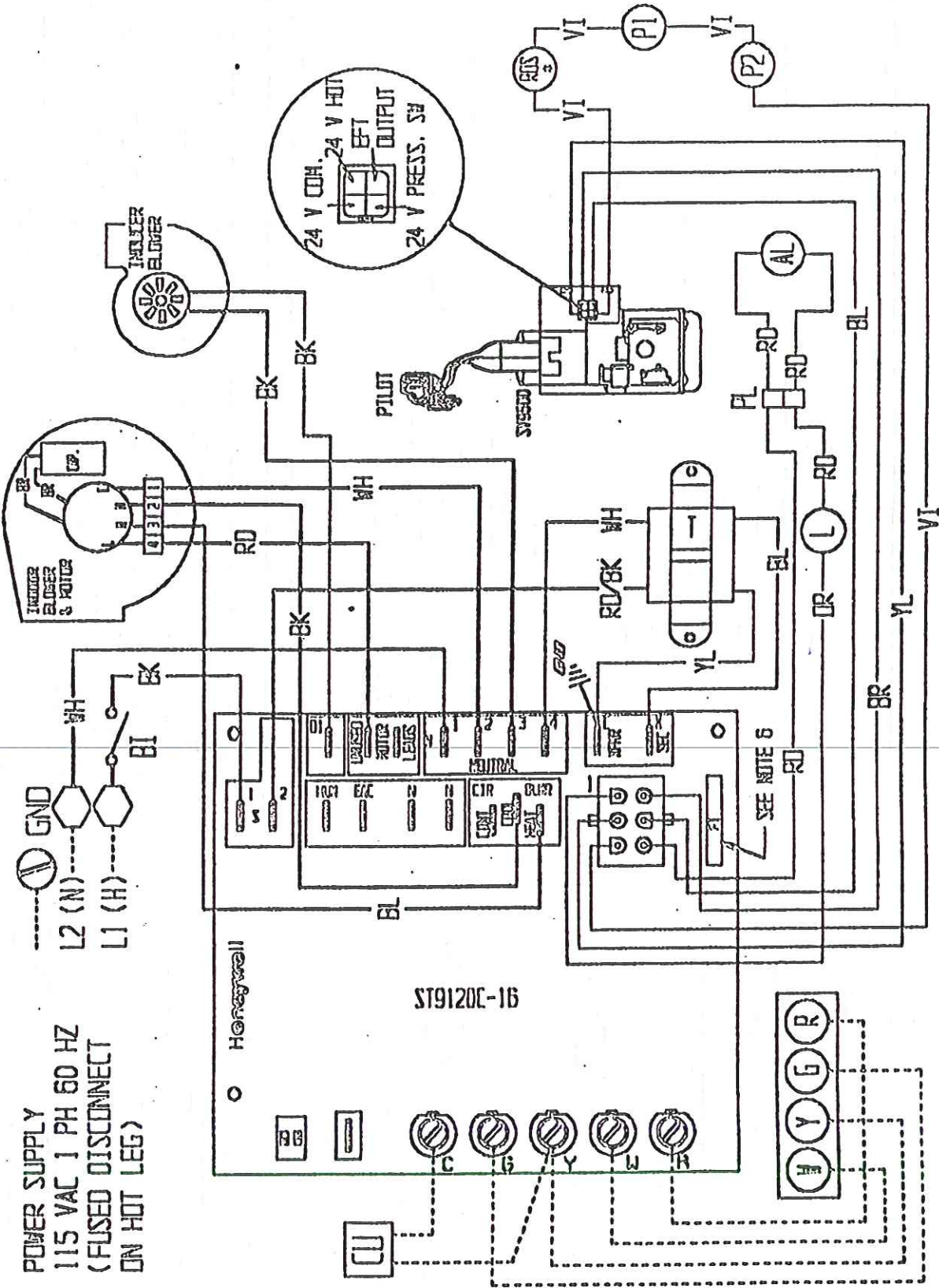


ENLARGED TOP VIEW 6-PIN PLUG (C123)



DELAY OFF DIP SWITCH SETTINGS

POWER SUPPLY
115 VAC 1 PH 60 HZ
(FUSED DISCONNECT
ON HOT LEG)



MULTI-POISE CONDENSING GAS FURNACE WITH HONEYWELL ST9120C FAN TIMER & SV9500 SMART VALVE

