

**CONDENSING GAS
FURNACES**

**Service
Manual**

PART
2

**NUGK
NULK
NUGS**

**NULS
NDGK
NDLK**

This manual supports condensing gas furnaces manufactured after 1988.

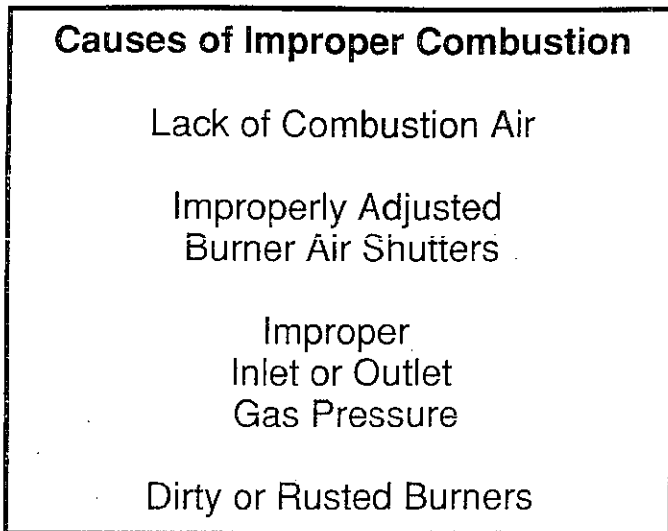
Manufactured by:

Inter-City Products

Corporation
Lavergne, TN USA 37086
Brantford, ONT. CANADA N3T 5P4

**Part No.
2146635**

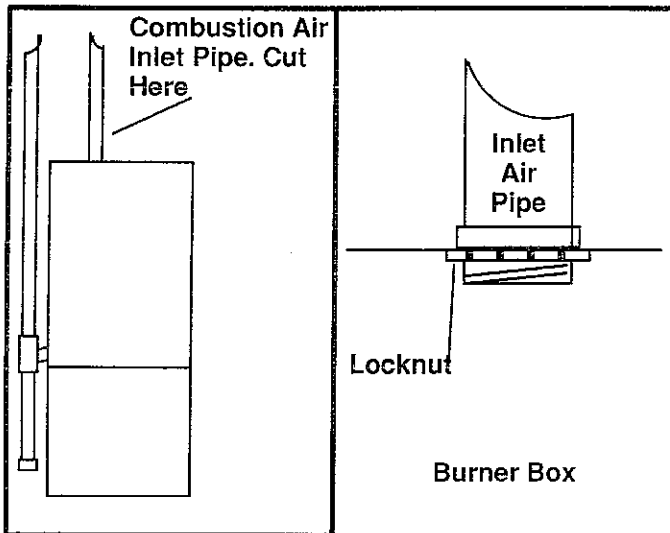
Figure 92.



Primary Heat Exchanger Removal/Replacement (Current Production) –Upflow Models

The interior of the primary heat exchanger will require cleaning as the result of sooting caused by improper combustion. After cleaning the heat exchanger, the cause of improper combustion should be corrected before returning the furnace to operation. If the primary heat exchanger requires cleaning the secondary heat exchanger should also be checked and replaced if found to be sooted.

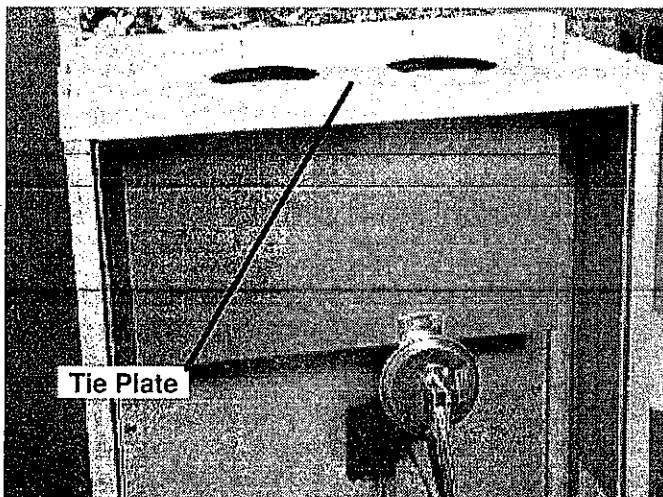
Figure 93.



Direct Vent Models Only

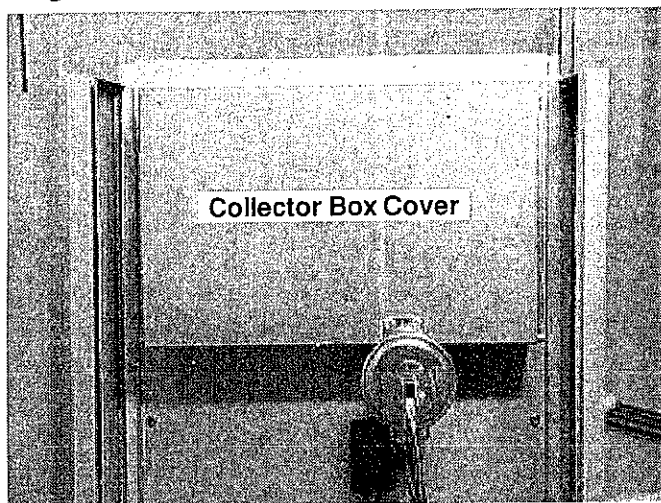
Support the inlet air line. Cut the inlet air pipe outside the furnace cabinet. Remove the remaining inlet air section inside the furnace cabinet by removing the locknut inside the top of the burner box.

Figure 94.



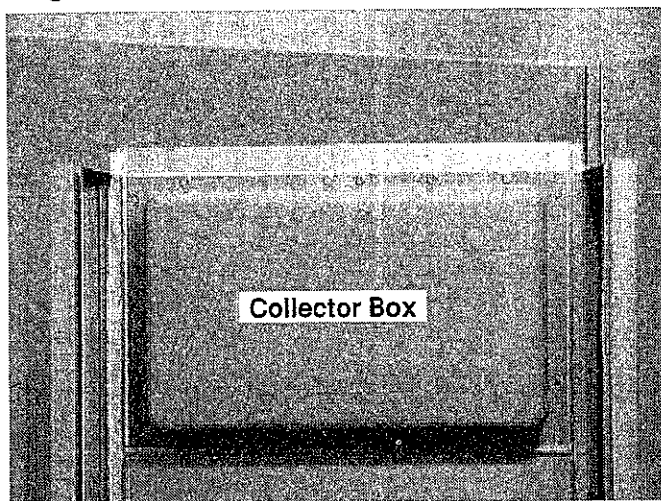
Remove the tie panel at the top front of the furnace.

Figure 95.



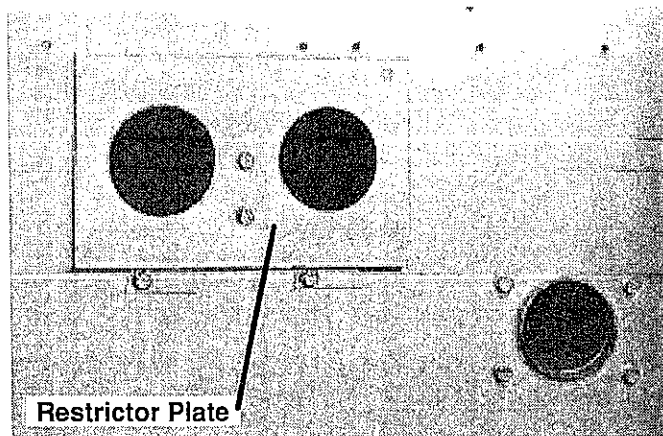
Disconnect wires and tubing from the pressure switch. Remove the collector box cover.

Figure 96.



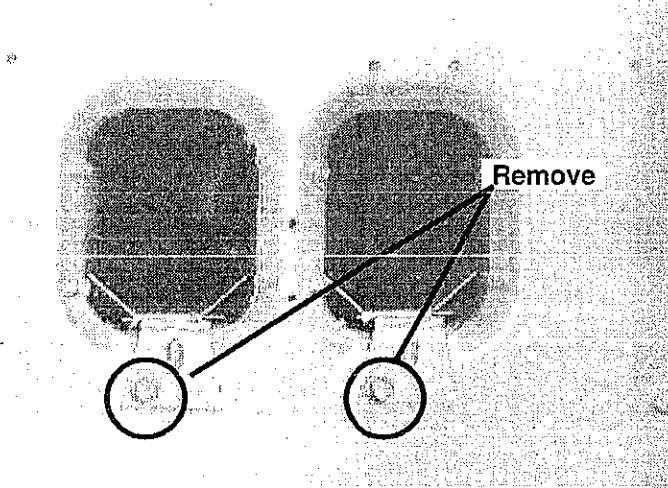
Remove the collector box from the flue outlet at the top of heat exchanger. Exercise care when removing collector box so as not to damage gasket. Should gasket be damaged in any way, a new gasket must be used when re-installing the collector box.

Figure 97.



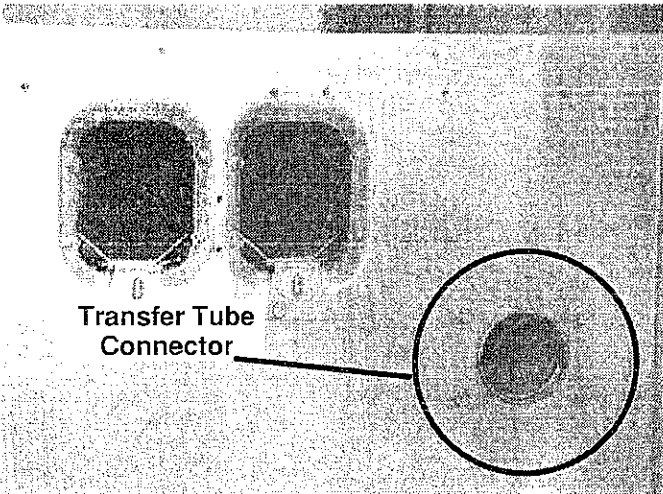
Remove flue restrictor plate.

Figure 98.



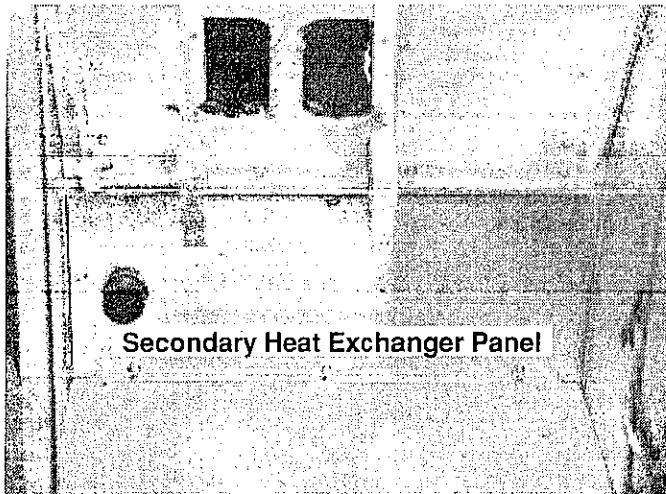
Remove the screws securing the flue baffles to the heat exchanger and remove the flue baffles.

Figure 99.



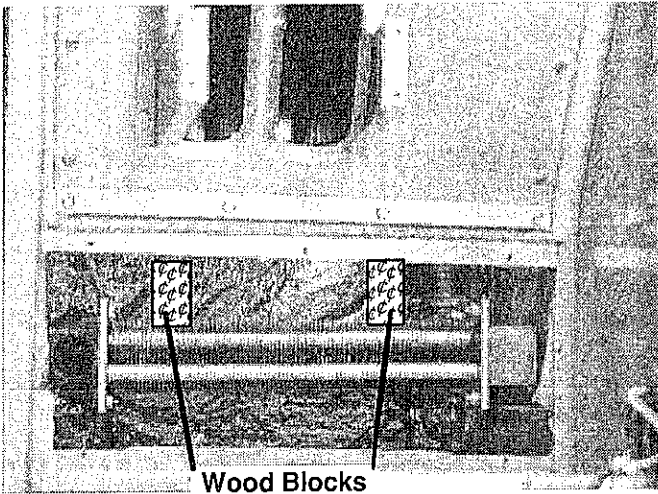
Remove the four screws securing the transfer tube connector to the heat exchanger front panel.

Figure 100.



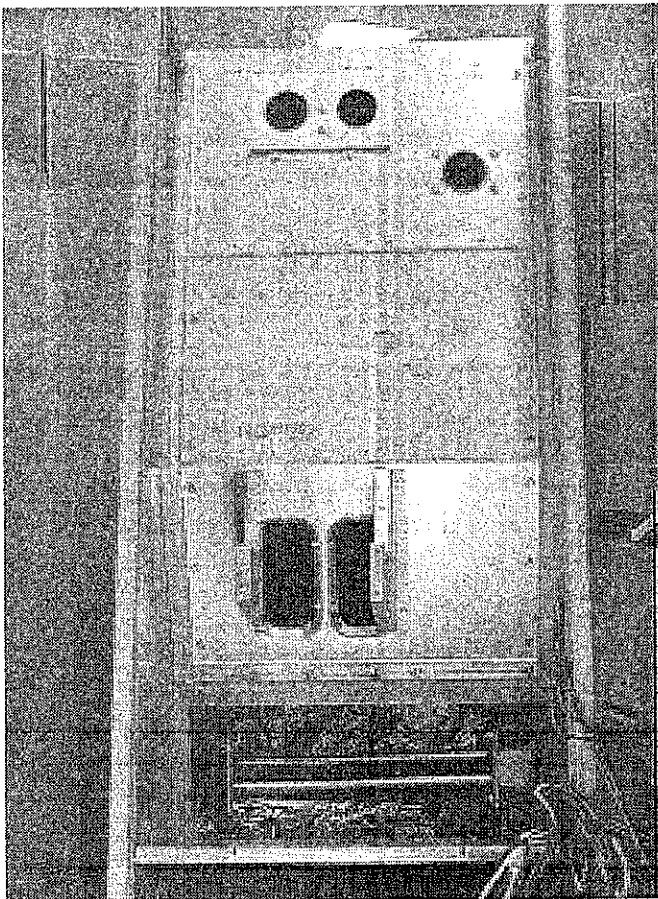
Remove the secondary heat exchanger panel.

Figure 101.



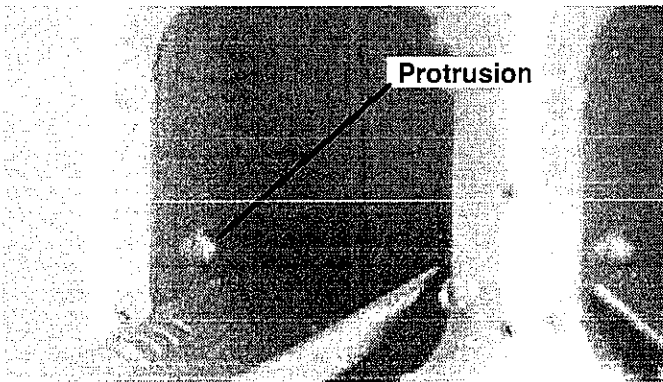
Place two wooden blocks between the bottom of the primary heat exchanger and secondary heat exchanger to prevent the primary heat exchanger from dropping down and damaging the secondary heat exchanger.

Figure 102.



Remove the screws around the outer edge of the heat exchanger front panel and pull the heat exchanger out of the furnace cabinet.

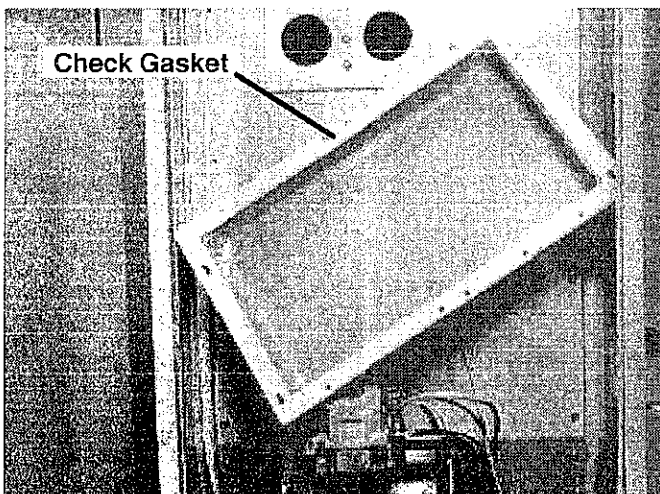
Figure 103.



Install flue baffles in the new heat exchanger. Be sure that the top edge of the flue baffle is under the protrusions on either side of flue opening.

Tip: When installing flue baffle. Insert baffle into flue opening about 1". Get one edge of baffle under one of the protrusion on one side. Rotate baffle until the other edge snaps into place under the protrusion on the other side. Slide the baffle into place and secure with a screw.

Figure 104.



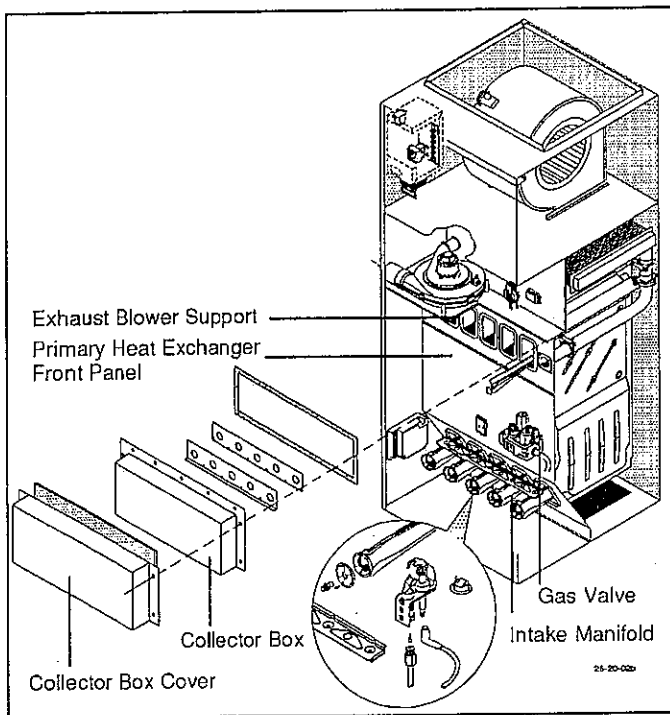
Install the new heat exchanger in reverse order. Inspect **ALL GASKETS** and replace if they are damaged or damage is suspected.

WARNING

Failure to assure the integrity of the gaskets in this area can result in carbon monoxide fumes in structure, resulting in death or other serious injury.

Complete re-assembly in reverse order. Check all gas piping for leaks. If any leaks are found repair before attempting to restart furnace. Run furnace through three or four cycles. If operation checks out all right, return furnace to service.

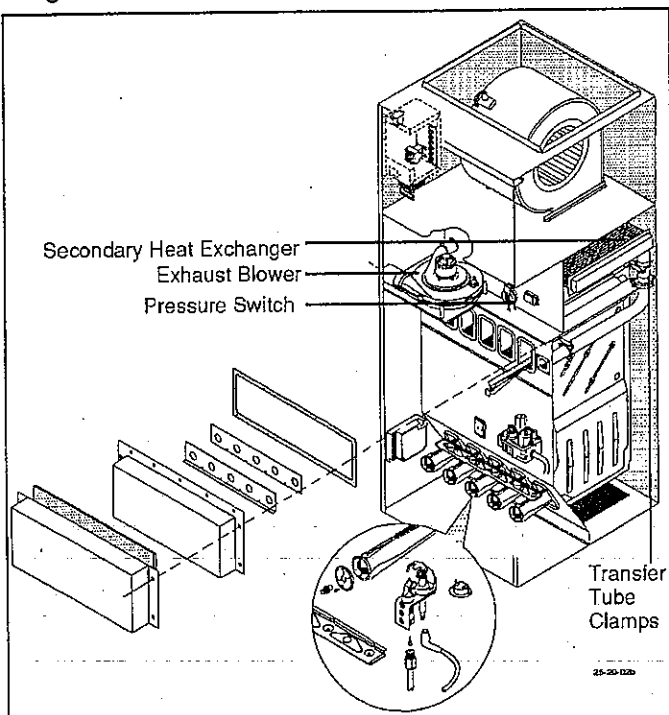
Figure 105.



Primary Heat Exchanger Removal/Replacement – Counterflow Models

1. Remove the exhaust blower support.
2. Remove the collector box cover and collector box.
3. Remove the screws to the transfer tube adapter.
4. Remove the control module.
5. Remove the gas valve, intake manifold, and any piping that will prevent primary heat exchangers from being removed.
6. Remove the burners and crosslighter from the burner ports.
7. Remove the burner shield and manifold support.
8. Remove all screws from the heat exchangers front panel. **DO NOT REMOVE THE SCREWS FROM THE BURNER OR FLUE PORTS.**
9. Remove the heat exchanger assembly.
10. Clean and inspect the heat exchanger using the procedures outlined for the Upflow Models.
11. Replace all parts and assemblies in reverse order as removed.

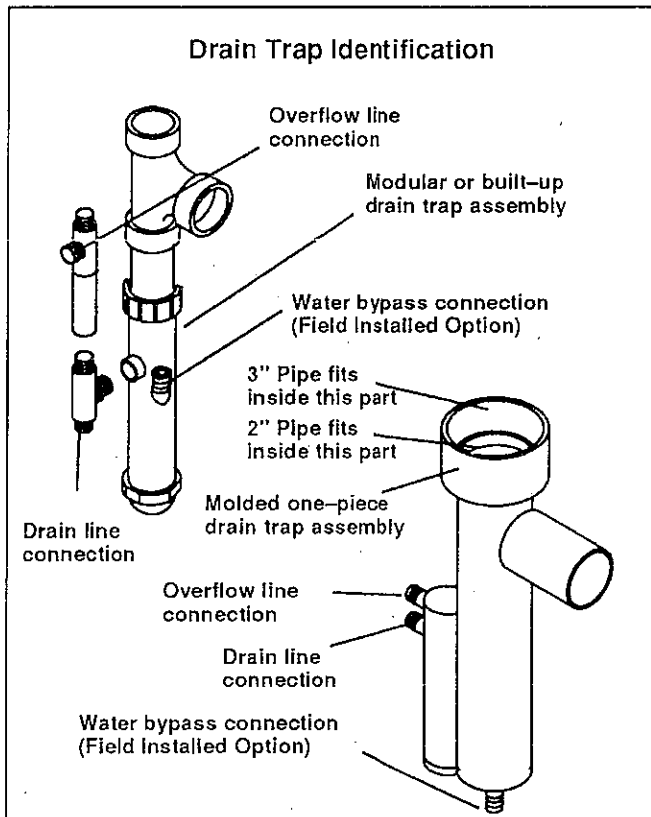
Figure 106.



Secondary Heat Exchanger Removal/Replacement – Counterflow Models

1. Remove the exhaust blower.
2. Remove the pressure switch.
3. Remove the secondary heat exchanger panel.
4. Use a thin wall, deep well socket to remove the transfer tube clamps around the 'O' ring.
5. Remove the secondary heat exchanger by pulling the heat exchanger from the unit.
6. Clean and inspect the heat exchanger using the procedures outlined for the Upflow Models.
7. Replace all parts and assemblies in reverse order as removed.

Figure 107.



Drain Trap Assembly

1. Install the drain trap assembly to provide the necessary 5 inches water column against vent pressure. Ensure all parts fit properly and are correctly oriented before cementing.
2. Install the drain trap assembly within 4 feet horizontally and 5 feet vertically (lower only) of the furnace blower housing.
3. The drain trap **MUST** be reasonably accessible for the homeowner to check.

NOTE: The 2" vent pipe fits into the inside portion of the new molded one-piece drain trap. If a 3" vent pipe is used it fits into the outer portion of the trap, Figure 107.

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| MODEL | PAGE | MODEL | PAGE |
|-------------------|------|-------------------|------|
|40 | | | |
| NDGK040KF03 | 52 | NDLK050DF06 | 52 |
| NDGK040KF04 | 52 | NUGK050MF03 | 57 |
| NDGK040KF05 | 52 | NUGK050MF04 | 55 |
| NDGK040KF06 | 52 | NUGK050MF05 | 55 |
| NUGK040KF03 | 57 | NUGK050MF06 | 54 |
| NUGK040KF04 | 55 | NUGK050MF07 | 53 |
| NUGK040KF05 | 55 | NUGK050NF03 | 57 |
| NUGK040KF06 | 54 | NUGK050NF04 | 55 |
| NUGK040KF07 | 53 | NUGK050NF05 | 55 |
|50 | | | |
| NDGK050DF03 | 52 | NUGK050NF06 | 54 |
| NDGK050DF04 | 52 | NUGK050NF07 | 53 |
| NDGK050DF05 | 52 | NUGS050AF01 | 60 |
| NDGK050DF06 | 52 | NUGS050AF02 | 59 |
| NDGK050KF03 | 52 | NUGS050AF03 | 58 |
| NDGK050KF04 | 52 | NULK050MF03 | 55 |
| NDGK050KF05 | 52 | NULK050MF04 | 55 |
| NDGK050KF06 | 52 | NULK050MF05 | 54 |
| NDLK050DF03 | 52 | NULK050MF06 | 53 |
| NDLK050DF04 | 52 | NULS050AF01 | 60 |
| NDLK050DF05 | 52 | NULS050AF02 | 59 |
| | | NULS050AF03 | 58 |

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| NDGK075DF03 | 52 | NUGK075DG07 | 54 |
| NDGK075DF04 | 52 | NUGK075DG08 | 53 |
| NDGK075DF05 | 52 | NUGK075KG03 | 57 |
| NDGK075DF06 | 52 | NUGK075KG04 | 55 |
| NDGK075DF07 | 52 | NUGK075KG05 | 55 |
| NDGK075KF03 | 52 | NUGK075KG06 | 54 |
| NDGK075KF04 | 52 | NUGK075KG07 | 53 |
| NDGK075KF05 | 52 | NUGS075AG01 | 61 |
| NDGK075KF06 | 52 | NUGS075BG01 | 60 |
| NDGK075KF07 | 52 | NUGS075BG02 | 59 |
| NDLK075DF03 | 52 | NUGS075BG03 | 58 |
| NDLK075DF04 | 52 | NULK075DG03 | 55 |
| NDLK075DF05 | 52 | NULK075DG04 | 55 |
| NDLK075DF06 | 52 | NULK075DG05 | 54 |
| NDLK075DF07 | 52 | NULK075DG06 | 53 |
| NUGK075DG03 | 57 | NULS075AG01 | 61 |
| NUGK075DG04 | 57 | NULS075BG01 | 60 |
| NUGK075DG05 | 55 | NULS075BG02 | 59 |
| NUGK075DG06 | 55 | NULS075BG03 | 58 |

| MODEL | PAGE | MODEL | PAGE |
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|100 | | | |
| NDGK100DG03 | 52 | NUGK100KH03 | 57 |
| NDGK100DG04 | 52 | NUGK100KH04 | 57 |
| NDGK100DG05 | 52 | NUGK100KH05 | 57 |
| NDGK100DG07 | 52 | NUGK100KH06 | 55 |
| NDGK100KG03 | 52 | NUGK100KH07 | 55 |
| NDGK100KG04 | 52 | NUGK100KH08 | 56 |
| NDGK100KG05 | 52 | NUGK100KH09 | 54 |
| NDGK100KG06 | 52 | NUGK100KH11 | 53 |
| NDLK100DG03 | 52 | NUGS100AH01 | 61 |
| NDLK100DG04 | 52 | NUGS100BH01 | 60 |
| NDLK100DG05 | 52 | NUGS100BH02 | 59 |
| NDLK100DG07 | 52 | NUGS100BH03 | 58 |
| NUGK100DH03 | 57 | NULK100DH03 | 55 |
| NUGK100DH04 | 57 | NULK100DH04 | 57 |
| NUGK100DH05 | 57 | NULK100DH05 | 55 |
| NUGK100DH06 | 55 | NULK100DH06 | 54 |
| NUGK100DH07 | 55 | NULK100DH07 | 53 |
| NUGK100DH08 | 56 | NULS100AH01 | 61 |
| NUGK100DH09 | 54 | NULS100BH01 | 60 |
| NUGK100DH11 | 53 | NULS100BH02 | 59 |
| | | NULS100BH03 | 58 |

| MODEL | PAGE | MODEL | PAGE |
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| |125 | | |
| NDGK125DK03 | 52 | NUGK125KK04 | 55 |
| NDGK125DK04 | 52 | NUGK125KK05 | 55 |
| NDGK125DK05 | 52 | NUGK125KK06 | 56 |
| NDGK125KK03 | 52 | NUGK125KK07 | 54 |
| NDGK125KK04 | 52 | NUGK125KK08 | 53 |
| NDGK125KK05 | 52 | NUGS125AK01 | 60 |
| NDLK125DK03 | 52 | NUGS125AK02 | 59 |
| NDLK125DK04 | 52 | NUGS125AK03 | 58 |
| NDLK125DK05 | 52 | NULK125DK03 | 55 |
| NUGK125DK03 | 57 | NULK125DK04 | 55 |
| NUGK125DK04 | 55 | NULK125DK05 | 56 |
| NUGK125DK05 | 55 | NULK125DK06 | 54 |
| NUGK125DK06 | 56 | NULK125DK07 | 53 |
| NUGK125DK07 | 54 | NULS125AK01 | 60 |
| NUGK125DK08 | 53 | NULS125AK02 | 59 |
| NUGK125KK03 | 57 | NULS125AK03 | 58 |

Specifications: Counterflow Natural Gas Models

| MODEL/SERIES | NDGK040 | | NDGK050 | | NDGK075 | | NDGK100 | | NDGK125 | |
|----------------------------------|---------------|--------|---------------|--------|---------------|--------|---------------|--------|---------------|---------|
| Input Rating (BTUH) | STD | ALT | STD | ALT | STD | ALT | STD | ALT | STD | ALT |
| Output (BTUH) | 50,000 | 40,000 | 50,000 | 40,000 | 75,000 | 60,000 | 100,000 | 80,000 | 125,000 | 100,000 |
| Max. Ext. Static Press | .5 | | .5 | | .5 | | .5 | | .5 | |
| Temperature Rise | 20° - 50° F | | 20° - 50° F | | 40° - 70° F | | 50° - 80° F | | 35° - 65° F | |
| Volts/AMP | 115/8.0 | | 115/8.0 | | 115/8.0 | | 115/10.8 | | 115/11.1 | |
| Transformer Size (VA) | 40 | | 40 | | 40 | | 40 | | 40 | |
| Anticipator Setting | .15 | | .15 | | .15 | | .15 | | .15 | |
| Limit Setting, MAX. | 130 | | 130 | | *200 | | **200 | | 170 | |
| Fan Switch Setting OFF | 90 | | 90 | | 90 | | 90 | | 90 | |
| *** Gas Valve MFG/Type | WR36E | | WR36E | | WR36E | | WR36E | | WR36E | |
| Regulation Type | SNAP | | SNAP | | SNAP | | SNAP | | SNAP | |
| Manifold Pressure | 3.5 | | 3.5 | | 3.5 | | 3.5 | | 3.5 | |
| Orifice Sizes (Req'd) | #42(2) #45 | | #42(2) #45 | | #42(3) #44 | | #42(4) #44 | | #42(5) #44 | |
| **** Ignition Type (Hot Surface) | HSI/50F47 | | HSI/50F47 | | HSI/50F47 | | HSI/50F47 | | HSI/50F47 | |
| Lock-Out | After 3 tries | | After 3 tries | | After 3 tries | | After 3 tries | | After 3 tries | |
| Filter Sq. In. HT/Cool | 246/346 | | 246/346 | | 246/346 | | 288/461 | | 432/576 | |
| Auxiliary Limit | 120°F | | 120°F | | 130°F | | 130°F | | 150°F | |
| Std. Pressure Switch (Open) | -4.0 in. | | -4.0 in. | | -2.8 in. | | -2.2 in. | | -1.8 in. | |
| Hi Alt. Press. Sw. (Open) | -3.82 in. | | -3.82 in. | | -2.8 in. | | -1.95 in. | | -1.65 in. | |

* NDGK075DF05 and NDGK075KF05 = 250
 NDGK075DF06, NDGK075KF06, NDGK075DF07, NDGK075KF07 = 170

** NDGK100DG05 and NDGK100KG05 = 250

*** Some models have a MH/VR8440P with STEP type regulation and a manifold pressure of 1.2/3.5.

**** Some models have spark to pilot ignitions, Model S86F or S8600M, with a spark gap of 1/8 in.

Specifications: Counterflow LP Gas Models

| MODEL/SERIES | NDLK050 | | NDLK075 | | NDLK100 | | NDLK125 | |
|----------------------------------|---------------|--------|---------------|--------|---------------|--------|---------------|---------|
| Input Rating (BTUH) | STD | ALT | STD | ALT | STD | ALT | STD | ALT |
| Output (BTUH) | 50,000 | 40,000 | 75,000 | 60,000 | 100,000 | 80,000 | 125,000 | 100,000 |
| Max. Ext. Static Press | .5 | | .5 | | .5 | | .5 | |
| Temperature Rise | 20° - 50° F | | 40° - 70° F | | 50° - 80° F | | 35° - 65° F | |
| Volts/AMP | 115/8.0 | | 115/8.0 | | 115/10.8 | | 115/11.1 | |
| Transformer Size (VA) | 40 | | 40 | | 40 | | 40 | |
| Anticipator Setting | .15 | | .15 | | .15 | | .15 | |
| Limit Setting, MAX. | 130 | | *200 | | **200 | | 170 | |
| Fan Switch Setting OFF | 90 | | 90 | | 90 | | 90 | |
| *** Gas Valve MFG/Type | WR36E36 | | WR36E36 | | WR36E36 | | WR36E36 | |
| Regulation Type | SNAP | | SNAP | | SNAP | | SNAP | |
| Manifold Pressure | 10 | | 10 | | 10 | | 10 | |
| Orifice Sizes (Req'd) | #54(2) #55 | | #54(3) #55 | | #54(4) #55 | | #54(5) #55 | |
| **** Ignition Type (Hot Surface) | HSI/50F47 | | HSI/50F47 | | HSI/50F47 | | HSI/50F47 | |
| Lock-Out | After 3 tries | | After 3 tries | | After 3 tries | | After 3 tries | |
| Filter Sq. In. HT/Cool | 246/346 | | 246/346 | | 288/461 | | 432/576 | |
| Auxiliary Limit | 120°F | | 130°F | | 130°F | | 150°F | |
| Std. Pressure Switch (Open) | -4.0 in. | | -3.2 in. | | -2.2 in. | | -1.8 in. | |
| Hi Alt. Press. Sw. (Open) | -3.82 in. | | -2.8 in. | | -1.95 in. | | -1.65 in. | |

* NDLK075DF05 and NDLK075KF05 = 250.
 NDLK075DF06, NDLK075KF06, NDLK075DF07, NDLK075KF07 = 170.

** NDLK100DG05 and NDLK100KG05 = 250.

*** Some models have WR36E38 with STEP type regulation and a manifold pressure of 2.5/10.

**** Some models have a HSI/50E47 or spark to pilot Model S8600M with a spark gap of 1/8 inch.

1007516

Specifications: Upflow Natural Gas Models (NUGK)

| MODEL/SERIES | NUGK040KF07 | | NUGK050MF07 NUGK050NF07 | | NUGK075DG08 NUGK075KG08 | | NUGK100DH11 NUGK100KH11 | | NUGK125DK08 NUGK125KK08 | |
|---|----------------|--------|----------------------------|--------|----------------------------|--------|----------------------------|--------|----------------------------|---------|
| | STD | ALT | STD | ALT | STD | ALT | STD | ALT | STD | ALT |
| Input Rating (BTUH) | 40,000 | 50,000 | 50,000 | 40,000 | 75,000 | 60,000 | 100,000 | 80,000 | 125,000 | 100,000 |
| Output (BTUH) | 38,000 | 48,500 | 48,000 | 38,000 | 70,000 | - | 92,000 | - | 113,000 | - |
| Temperature Rise | 15° - 45° F | | 15° - 45° F | | 35° - 65° F | | 40° - 70° F | | 35° - 65° F | |
| Flue Size | 2 in | | 2 in | | 2 in | | 2 in | | 2 in | |
| Elec. Volts/PH./F.L.A. | 115/1/8.0 | | 115/1/8.0 | | 115/1/10.8 | | 115/1/10.8 | | 115/1/11.8 | |
| Transformer Size (VA) | 40 | | 40 | | 40 | | 40 | | 40 | |
| Orifice Sizes (Req'd) | #45(2) #42 | | #42(2) #45 | | #42(3) #44 | | #42(4) #44 | | #42(5) #44 | |
| Limit Setting | 200 | | 200 | | 250 | | 170 | | 170 | |
| Fan Setting Delay ON | 15-90 | | 15-90 | | 15-90 | | 15-90 | | 15-90 | |
| Fan Setting Delay OFF | 30-120 | | 30-120 | | 30-120 | | 30-120 | | 30-120 | |
| Exhaust Limit (Man. Thermal Sensor Reset) | 120°F 300°F | | 120°F 300°F | | 130°F 300°F | | 130°F 300°F | | 150°F 300°F | |
| Gas Valve MFG/Type | WR36E | | WR36E | | WR36E | | WR36E | | WR36E | |
| Manifold Pressure | 3.5 | | 3.5 | | 3.5 | | 3.5 | | 3.5 | |
| Regulation Type | SNAP | | SNAP | | SNAP | | SNAP | | SNAP | |
| Ignition Type/Model | I.I.D./S8600M | | I.I.D./S8600M | | I.I.D./S8600M | | I.I.D./S8600M | | I.I.D./S8600M | |
| Pilot Orifice Size | .020 | | .020 | | .020 | | .020 | | .020 | |
| Spark Gap | 1/8 in. | | 1/8 in. | | 1/8 in. | | 1/8 in. | | 1/8 in. | |
| Anticipator Setting | .55 | | .55 | | .55 | | .55 | | .55 | |
| Cap. Rating MFD/Volts | 5/370 | | 5/370 | | 5/370 | | 5/370 | | 5/370 | |
| Combustion Air Blower | 5/370 | | 5/370 | | 5/370 | | 5/370 | | 5/370 | |
| Furnace Blower Rated Ext. Static Press | .10-.50 | | .10-.50 | | .12-.50 | | .15-.50 | | .20-.50 | |

Specifications: Upflow LP Gas Models (NULK)

| MODEL/SERIES | NULK050MF06 | | NULK075DG06 | | NULK100DH07 | | NULK125DK07 | |
|---|----------------|--------|----------------|--------|----------------|--------|----------------|---------|
| | STD | ALT | STD | ALT | STD | ALT | STD | ALT |
| Input Rating (BTUH) | 50,000 | 40,000 | 75,000 | 60,000 | 100,000 | 80,000 | 125,000 | 100,000 |
| Output (BTUH) | 48,000 | 38,000 | 70,000 | - | 92,000 | - | 113,000 | - |
| Temperature Rise | 15° - 45° F | | 35° - 65° F | | 40° - 70° F | | 35° - 65° F | |
| Flue Size | 2 in | | 2 in | | 2 in | | 2 in | |
| Elec. Volts/PH./F.L.A. | 115/1/8.0 | | 115/1/10.8 | | 115/1/10.8 | | 115/1/11.1 | |
| Transformer Size (VA) | 40 | | 40 | | 40 | | 40 | |
| Orifice Sizes (Req'd) | #54(2) #55 | | #54(3) #55 | | #54(4) #55 | | #54(5) #55 | |
| Limit Setting | 200 | | 250 | | 170 | | 170 | |
| Fan Setting Delay ON | 15-90 | | 15-90 | | 15-90 | | 15-90 | |
| Fan Setting Delay OFF | 30-120 | | 30-120 | | 30-120 | | 30-120 | |
| Exhaust Limit (Man. Thermal Sensor Reset) | 120°F 300°F | | 130°F 300°F | | 130°F 300°F | | 150°F 300°F | |
| Gas Valve MFG/Type | WR36E | | WR36E | | WR36E | | WR36E | |
| Manifold Pressure | 2.5/10 | | 2.5/10 | | 2.5/10 | | 2.5/10 | |
| Regulation Type | STEP | | STEP | | STEP | | STEP | |
| Ignition Type/Model | I.I.D./S8600M | | I.I.D./S8600M | | I.I.D./S8600M | | I.I.D./S8600M | |
| Pilot Orifice Size | .012 | | .012 | | .012 | | .012 | |
| Spark Gap | 1/8 in. | | 1/8 in. | | 1/8 in. | | 1/8 in. | |
| Anticipator Setting | .55 | | .55 | | .55 | | .55 | |
| Cap. Rating MFD/Volts | 5/370 | | 5/370 | | 5/370 | | 5/370 | |
| Combustion Air Blower | 5/370 | | 5/370 | | 5/370 | | 5/370 | |
| Furnace Blower Rated Ext. Static Press | .10-.50 | | .12-.50 | | .15-.50 | | .20-.50 | |

1007200

Specifications: Upflow Natural Gas Models (NUGK)

| MODEL/SERIES | NUGK040KF06 | | NUGK050MF06 NUGK050NF06 | | NUGK075DG07 NUGK075KG07 | | NUGK100DH09 NUGK100KH09 | | NUGK125DK07 NUGK125KK07 | |
|--|----------------|--------|----------------------------|--------|----------------------------|--------|----------------------------|--------|----------------------------|---------|
| Input Rating (BTUH) | STD | ALT | STD | ALT | STD | ALT | STD | ALT | STD | ALT |
| Output (BTUH) | 40,000 | 50,000 | 50,000 | 40,000 | 75,000 | 60,000 | 100,000 | 80,000 | 125,000 | 100,000 |
| Temperature Rise | 15° - 45° F | | 15° - 45° F | | 35° - 65° F | | 40° - 70° F | | 35° - 65° F | |
| Flue Size | 2 in | | 2 in | | 2 in | | 2 in | | 2 in | |
| Elec.Volts/PH./F.L.A. | 115/1/8.0 | | 115/1/8.0 | | 115/1/10.8 | | 115/1/10.8 | | 115/1/11.8 | |
| Transformer Size (VA) | 40 | | 40 | | 40 | | 40 | | 40 | |
| Orifice Sizes (Req'd) | #45(2) #42 | | #42(2) #45 | | #42(3) #44 | | #42(4) #44 | | #42(5) #44 | |
| Limit Setting | 200 | | 200 | | 250 | | 170 | | 170 | |
| Fan Setting Delay ON | 15-90 | | 15-90 | | 15-90 | | 15-90 | | 15-90 | |
| Fan Setting Delay OFF | 30-120 | | 30-120 | | 30-120 | | 30-120 | | 30-120 | |
| Exhaust Limit (Man. Thermal Sensor Reset) | 120°F 300°F | | 120°F 300°F | | 130°F 300°F | | 130°F 300°F | | 150°F 300°F | |
| Gas Valve MFG/Type | MH/VR8204A | | MH/VR8204A | | MH/VR8204A | | MH/VR8204A | | MH/VR8204A | |
| Manifold Pressure | 3.5 | | 3.5 | | 3.5 | | 3.5 | | 3.5 | |
| Regulation Type | SNAP | | SNAP | | SNAP | | SNAP | | SNAP | |
| Ignition Type/Model | I.I.D./S8600M | | I.I.D./S8600M | | I.I.D./S8600M | | I.I.D./S8600M | | I.I.D./S8600M | |
| Pilot Orifice Size | .018 | | .018 | | .018 | | .018 | | .018 | |
| Spark Gap | 1/8 in. | | 1/8 in. | | 1/8 in. | | 1/8 in. | | 1/8 in. | |
| Anticipator Setting | .75 | | .75 | | .75 | | .75 | | .75 | |
| Cap. Rating MFD/Volts Combustion Air Blower | 5/370 | | 5/370 | | 5/370 | | 5/370 | | 5/370 | |
| Furnace Blower Rated Ext. Static Press | .10-.50 | | .10-.50 | | .12-.50 | | .15-.50 | | .20-.50 | |

Specifications: Upflow LP Gas Models (NULK)

| MODEL/SERIES | NULK050MF05 | | NULK075DG05 | | NULK100DH06 | | NULK125DK06 | |
|--|----------------|--------|----------------|--------|----------------|--------|----------------|---------|
| Input Rating (BTUH) | STD | ALT | STD | ALT | STD | ALT | STD | ALT |
| Output (BTUH) | 50,000 | 40,000 | 75,000 | 60,000 | 100,000 | 80,000 | 125,000 | 100,000 |
| Temperature Rise | 15° - 45° F | | 35° - 65° F | | 40° - 70° F | | 35° - 65° F | |
| Flue Size | 2 in | | 2 in | | 2 in | | 2 in | |
| Elec.Volts/PH./F.L.A. | 115/1/8.0 | | 115/1/10.8 | | 115/1/10.8 | | 115/1/11.1 | |
| Transformer Size (VA) | 40 | | 40 | | 40 | | 40 | |
| Orifice Sizes (Req'd) | #54(2) #55 | | #54(3) #55 | | #54(4) #55 | | #54(5) #55 | |
| Limit Setting | 200 | | 250 | | 170 | | 170 | |
| Fan Setting Delay ON | 15-90 | | 15-90 | | 15-90 | | 15-90 | |
| Fan Setting Delay OFF | 30-120 | | 30-120 | | 30-120 | | 30-120 | |
| Exhaust Limit (Man. Thermal Sensor Reset) | 120°F 300°F | | 130°F 300°F | | 130°F 300°F | | 150°F 300°F | |
| Gas Valve MFG/Type | WR36E | | WR36E | | WR36E | | WR36E | |
| Manifold Pressure | 10 | | 10 | | 10 | | 10 | |
| Regulation Type | SNAP | | SNAP | | SNAP | | SNAP | |
| Ignition Type/Model | HSI/50F47 | | HSI/50F47 | | HSI/50F47 | | HSI/50F47 | |
| Lock-Out Timing | After 3 Tries | | After 3 Tries | | After 3 Tries | | After 3 Tries | |
| Anticipator Setting | .55 | | .55 | | .55 | | .55 | |
| Cap. Rating MFD/Volts Combustion Air Blower | 5/370 | | 5/370 | | 5/370 | | 5/370 | |
| Furnace Blower Rated Ext. Static Press | .10-.50 | | .12-.50 | | .15-.50 | | .20-.50 | |

Specifications: Upflow Natural Gas Models (NUGK)

1005218

| MODEL/SERIES | NUGK040KF04 NUGK040KF05 | NUGK050MF04 NUGK050MF05 NUGK050NF04 NUGK050NF05 | NUGK075DG05 NUGK075DG06 NUGK075KG04 NUGK075KG05 | NUGK100DH06 NUGK100DH07 NUGK100KH06 NUGK100KH07 | NUGK125DK04 NUGK125DK05 NUGK125KK04 NUGK125KK05 |
|--|---|--|--|--|--|
| Input Rating (BTUH) Output (BTUH) | STD ALT 40,000 50,000 38,000 48,500 | STD ALT 50,000 40,000 48,000 38,000 | STD ALT 75,000 60,000 70,000 - | STD ALT 100,000 80,000 92,000 - | STD ALT 125,000 100,000 113,000 - |
| Temperature Rise | 15° - 45° F | 15° - 45° F | 35° - 65° F | 40° - 70° F | 35° - 65° F |
| Flue Size | 2 in | 2 in | 2 in | 2 in | 2 in |
| Elec.Volts/PH./F.L.A. Transformer Size (VA) | 115/1/8.0 40 | 115/1/8.0 40 | 115/1/10.8 40 | 115/1/10.8 40 | 115/1/11.8 40 |
| Orifice Sizes (Req'd) | #45(2) #42 | #42(2) #45 | #42(3) #44 | #42(4) #44 | #42(5) #44 |
| Limit Setting | 170 | 170 | 170 | 170 | 170 |
| Fan Switch Setting OFF | 90 | 90 | 90 | 90 | 90 |
| Exhaust Limit Thermal Sensor | 120°F 300°F | 120°F 300°F | 130°F 300°F | 130°F 300°F | 150°F 300°F |
| Gas Valve MFG/Type Manifold Pressure Regulation Type | MH/VR8204C 1.2/3.5 STEP | MH/VR8204C 1.2/3.5 STEP | MH/VR8204C 1.2/3.5 STEP | MH/VR8204C 1.2/3.5 STEP | MH/VR8204C 1.2/3.5 STEP |
| Ignition Type/Model Pilot Orifice Size | I.I.D./S86F .018 | I.I.D./S86F .018 | I.I.D./S86F .018 | I.I.D./S86F .018 | I.I.D./S86F .018 |
| Spark Gap | 1/8 in. | 1/8 in. | 1/8 in. | 1/8 in. | 1/8 in. |
| Anticipator Setting | .15 | .15 | .15 | .15 | .15 |
| Cap. Rating MFD/Volts Combustion Air Blower | 5/370 | 5/370 | 5/370 | 5/370 | 5/370 |
| Furnace Blower Rated Ext. Static Press | .10-.50 | .10-.50 | .12-.50 | .15-.50 | .20-.50 |

Specifications: Upflow LP Gas Models (NULK)

| MODEL/SERIES | NULK050MF03 NULK050MF04 | NULK075DG03 NULK075DG04 | NULK100DH03 NULK100DH05 | NULK125DK03 NULK125DK04 |
|--|---|--------------------------------------|---------------------------------------|---|
| Input Rating (BTUH) Output (BTUH) | STD ALT 50,000 40,000 48,000 38,000 | STD ALT 75,000 60,000 70,000 - | STD ALT 100,000 80,000 92,000 - | STD ALT 125,000 100,000 113,000 - |
| Temperature Rise | 15° - 45° F | 35° - 65° F | 40° - 70° F | 35° - 65° F |
| Flue Size | 2 in | 2 in | 2 in | 2 in |
| Elec.Volts/PH./F.L.A. Transformer Size (VA) | 115/1/8.0 40 | 115/1/10.8 40 | 115/1/10.8 40 | 115/1/11.1 40 |
| Orifice Sizes (Req'd) | #54(2) #55 | #54(3) #55 | #54(4) #55 | #54(5) #55 |
| Limit Setting | 170 | 170 | 170 | 170 |
| Fan Switch Setting OFF | 90 | 90 | 90 | 90 |
| Exhaust Limit Thermal Sensor | 120°F 300°F | 130°F 300°F | 130°F 300°F | 150°F 300°F |
| Gas Valve MFG/Type Manifold Pressure Regulation Type | WR36E 2.2/10 STEP | WR36E 2.2/10 STEP | WR36E 2.2/10 STEP | WR36E 2.2/10 STEP |
| Ignition Type/Model Lock-Out Timing | HSI/50E47 After 3 Tries | HSI/50E47 After 3 Tries | HSI/50E47 After 3 Tries | HSI/50E47 After 3 Tries |
| Anticipator Setting | .15 | .15 | .15 | .15 |
| Cap. Rating MFD/Volts Combustion Air Blower | 5/370 | 5/370 | 5/370 | 5/370 |
| Furnace Blower Rated Ext. Static Press | .10-.50 | .12-.50 | .15-.50 | .20-.50 |

Specifications: Upflow Natural Gas Models (NUGK)

1005997

| MODEL/SERIES | NUGK040KF06 | NUGK050MF06 NUGK050NF06 | NUGK075DG07 NUGK075KG06 | NUGK100DH08 NUGK100KH08 | NUGK125DK06 NUGK125KK06 |
|--|---|---|--------------------------------------|---------------------------------------|---|
| Input Rating (BTUH) Output (BTUH) | STD ALT 40,000 50,000 38,000 48,500 | STD ALT 50,000 40,000 48,000 38,000 | STD ALT 75,000 60,000 70,000 - | STD ALT 100,000 80,000 92,000 - | STD ALT 125,000 100,000 113,000 - |
| Temperature Rise | 15° - 45° F | 15° - 45° F | 35° - 65° F | 40° - 70° F | 35° - 65° F |
| Flue Size | 2 in | 2 in | 2 in | 2 in | 2 in |
| Elec. Volts/PH./F.L.A. Transformer Size (VA) | 115/1/8.0 40 | 115/1/8.0 40 | 115/1/10.8 40 | 115/1/10.8 40 | 115/1/11.8 40 |
| Orifice Sizes (Req'd) | #45(2) #42 | #42(2) #45 | #42(3) #44 | #42(4) #44 | #42(5) #44 |
| Limit Setting | 200 | 200 | 250 | 170 | 170 |
| Fan Setting Delay ON | 15-90 | 15-90 | 15-90 | 15-90 | 15-90 |
| Timer (Sec's) Delay OFF | 30-120 | 30-120 | 30-120 | 30-120 | 30-120 |
| Exhaust Limit (Man. Thermal Sensor Reset) | 120°F 300°F | 120°F 300°F | 130°F 300°F | 130°F 300°F | 150°F 300°F |
| Gas Valve MFG/Type Manifold Pressure Regulation Type | MH/VR8204A 3.5 SNAP | MH/VR8204A 3.5 SNAP | MH/VR8204A 3.5 SNAP | MH/VR8204A 3.5 SNAP | MH/VR8204A 3.5 SNAP |
| Ignition Type/Model Pilot Orifice Size | I.I.D./S8600M .018 | I.I.D./S8600M .018 | I.I.D./S8600M .018 | I.I.D./S8600M .018 | I.I.D./S8600M .018 |
| Spark Gap | 1/8 in. | 1/8 in. | 1/8 in. | 1/8 in. | 1/8 in. |
| Anticipator Setting | .75 | .75 | .75 | .75 | .75 |
| Cap. Rating MFD/Volts Combustion Air Blower | 5/370 | 5/370 | 5/370 | 5/370 | 5/370 |
| Furnace Blower Rated Ext. Static Press | .10-.50 | .10-.50 | .12-.50 | .15-.50 | .20-.50 |

Specifications: Upflow LP Gas Models (NULK)

| MODEL/SERIES | NULK050MF05 | NULK075DG05 | NULK100DH06 | NULK125DK05 |
|--|---|--------------------------------------|---------------------------------------|---|
| Input Rating (BTUH) Output (BTUH) | STD ALT 50,000 40,000 48,000 38,000 | STD ALT 75,000 60,000 70,000 - | STD ALT 100,000 80,000 92,000 - | STD ALT 125,000 100,000 113,000 - |
| Temperature Rise | 15° - 45° F | 35° - 65° F | 40° - 70° F | 35° - 65° F |
| Flue Size | 2 in | 2 in | 2 in | 2 in |
| Elec. Volts/PH./F.L.A. Transformer Size (VA) | 115/1/8.0 40 | 115/1/10.8 40 | 115/1/10.8 40 | 115/1/11.1 40 |
| Orifice Sizes (Req'd) | #54(2) #55 | #54(3) #55 | #54(4) #55 | #54(5) #55 |
| Limit Setting | 200 | 250 | 170 | 170 |
| Fan Setting Delay ON | 15-90 | 15-90 | 15-90 | 15-90 |
| Timer (Sec's) Delay OFF | 30-120 | 30-120 | 30-120 | 30-120 |
| Exhaust Limit (Man. Thermal Sensor Reset) | 120°F 300°F | 130°F 300°F | 130°F 300°F | 150°F 300°F |
| Gas Valve MFG/Type Manifold Pressure Regulation Type | WR36E 10 SNAP | WR36E 10 SNAP | WR36E 10 SNAP | WR36E 10 SNAP |
| Ignition Type/Model Lock-Out Timing | HSI/50F47 After 3 Tries | HSI/50F47 After 3 Tries | HSI/50F47 After 3 Tries | HSI/50F47 After 3 Tries |
| Anticipator Setting | .85 | .85 | .85 | .85 |
| Cap. Rating MFD/Volts Combustion Air Blower | 5/370 | 5/370 | 5/370 | 5/370 |
| Furnace Blower Rated Ext. Static Press | .10-.50 | .12-.50 | .15-.50 | .20-.50 |

Specifications: Upflow Natural Gas Models (NUGK)

1005147

| MODEL/SERIES | NUGK040KF03 | NUGK050MF03 NUGK050NF03 | NUGK075DG03 NUGK075DG04 NUGK075KG03 | NUGK100DH03 NUGK100DH04 NUGK100DH05 NUGK100KH03 NUGK100KH04 NUGK100KH05 | NUGK125DK03 NUGK125KK03 |
|--|---|---|---|--|---|
| Input Rating (BTUH) Output (BTUH) | STD ALT 40,000 50,000 38,000 48,500 | STD ALT 50,000 40,000 48,000 38,000 | STD ALT 75,000 60,000 70,000 - | STD ALT 100,000 80,000 92,000 - | STD ALT 125,000 100,000 113,000 - |
| Temperature Rise | 15° - 45° F | 15° - 45° F | 35° - 65° F | 40° - 70° F | 35° - 65° F |
| Flue Size | 2 in | 2 in | 2 in | 2 in | 2 in |
| Elec.Volts/PH./F.L.A. Transformer Size (VA) | 115/1/8.0 40 | 115/1/8.0 40 | 115/1/10.8 40 | 115/1/10.8 40 | 115/1/11.1 40 |
| Orifice Sizes (Req'd) | #45(2) #42 | #42(2) #45 | #42(3) #44 | #42(4) #44 | #42(5) #44 |
| Limit Setting | 170 | 170 | 170 | 170 | 170 |
| Fan Switch Setting OFF | 90 | 90 | 90 | 90 | 90 |
| Exhaust Limit Thermal Sensor | 120°F 300°F | 120°F 300°F | 130°F 300°F | 130°F 300°F | 150°F 300°F |
| Gas Valve MFG/Type Manifold Pressure Regulation Type | MH/VR8440P 1.2/3.5 STEP | MH/VR8440P 1.2/3.5 STEP | MH/VR8440P 1.2/3.5 STEP | MH/VR8440P 1.2/3.5 STEP | MH/VR8440P 1.2/3.5 STEP |
| Ignition Type/Model Pilot Orifice Size | I.I.D./S86F .018 | I.I.D./S86F .018 | I.I.D./S86F .018 | I.I.D./S86F .018 | I.I.D./S86F .018 |
| Spark Gap | 1/8 in. | 1/8 in. | 1/8 in. | 1/8 in. | 1/8 in. |
| Anticipator Setting | .15 | .15 | .15 | .15 | .15 |
| Cap. Rating MFD/Volts Combustion Air Blower | 5/370 | 5/370 | 5/370 | 5/370 | 5/370 |
| Furnace Blower Rated Ext. Static Press | .10-.50 | .10-.50 | .12-.50 | .15-.50 | .20-.50 |

Specifications: Upflow LP Gas Models (NULK)

| MODEL/SERIES | NULK050MF03 | NULK075DG03 NULK075DG04 | NULK100DH03 NULK100DH04 NULK100DH05 | NULK125DK03 |
|--|---|--------------------------------------|---|---|
| Input Rating (BTUH) Output (BTUH) | STD ALT 50,000 40,000 48,000 38,000 | STD ALT 75,000 60,000 70,000 - | STD ALT 100,000 80,000 92,000 - | STD ALT 125,000 100,000 113,000 - |
| Temperature Rise | 15° - 45° F | 35° - 65° F | 40° - 70° F | 35° - 65° F |
| Flue Size | 2 in | 2 in | 2 in | 2 in |
| Elec.Volts/PH./F.L.A. Transformer Size (VA) | 115/1/8.0 40 | 115/1/10.8 40 | 115/1/10.8 40 | 115/1/11.1 40 |
| Orifice Sizes (Req'd) | #54(2) #55 | #54(3) #55 | #54(4) #55 | #54(5) #55 |
| Limit Setting | 170 | 170 | 170 | 170 |
| Fan Switch Setting OFF | 90 | 90 | 90 | 90 |
| Exhaust Limit Thermal Sensor | 120°F 300°F | 130°F 300°F | 130°F 300°F | 150°F 300°F |
| Gas Valve MFG/Type Manifold Pressure Regulation Type | WR36E 2.2/10 STEP | WR36E 2.2/10 STEP | WR36E 2.2/10 STEP | WR36E 2.2/10 STEP |
| Ignition Type/Model Lock-Out Timing | HSI/50E47 After 3 Tries | HSI/50E47 After 3 Tries | HSI/50E47 After 3 Tries | HSI/50E47 After 3 Tries |
| Anticipator Setting | .15 | .15 | .15 | .15 |
| Cap. Rating MFD/Volts Combustion Air Blower | 5/370 | 5/370 | 5/370 | 5/370 |
| Furnace Blower Rated Ext. Static Press | .10-.50 | .12-.50 | .15-.50 | .20-.50 |

Specifications: Upflow Natural Gas Models (NUGS)

1007567

| MODEL/SERIES | NUGS050AF03 | NUGS075BG03 | NUGS100BH03 | NUGS125AK03 |
|--|-------------|-------------|-------------|-------------|
| Gas Type-NAT | STD | STD | STD | STD |
| Input Rating (BTUH) | 50,000 | 75,000 | 100,000 | 125,000 |
| Output (BTUH) | 48,000 | 70,000 | 92,000 | 113,000 |
| Temperature Rise | 15° - 45° F | 35° - 65° F | 40° - 70° F | 35° - 65° F |
| Flue Size | 2 in | 3 in | 3 in | 3 in |
| Elec. Volts/PH./F.L.A. | 115/1/8.0 | 115/1/10.8 | 115/1/10.8 | 115/1/11.8 |
| Transformer Size (VA) | 40 | 40 | 40 | 40 |
| Orifice Sizes (Req'd) | #42(2) | #42(3) | #42(4) | #42(5) |
| Limit Setting | 250 | 250 | 200 | 170 |
| Fan Setting Delay ON | 15-90 | 15-90 | 15-90 | 15-90 |
| Timer (Sec's) Delay OFF | 30-120 | 30-120 | 30-120 | 30-120 |
| Exhaust Limit | 150°F | 150°F | 150°F | 180°F |
| Thermal Sensor | 300°F | 300°F | 300°F | 300°F |
| Gas Valve MFG/Type | WR36E | WR36E | WR36E | WR36E |
| Manifold Pressure | 1.2/3.5 | 1.2/3.5 | 1.2/3.5 | 1.2/3.5 |
| Regulation Type | STEP | STEP | STEP | STEP |
| Ignition Type/Model | IID/S8600M | IID/S8600M | IID/S8600M | IID/S8600M |
| Pilot Orifice Size | .20 | .20 | .20 | .20 |
| Anticipator Setting | .55 | .55 | .55 | .55 |
| Cap. Rating MFD/Volts Combustion Air Blower | 5/370 | 5/370 | 5/370 | 5/370 |
| Furnace Blower Rated Ext. Static Press | .10-.50 | .12-.50 | .15-.50 | .20-.50 |

Specifications: Upflow LP Gas Models (NULS)

| MODEL/SERIES | NULS050AF03 | NULS075BG03 | NULS100BH03 | NULS125AK03 |
|--|-------------|-------------|-------------|-------------|
| Gas Type-NAT | STD | STD | STD | STD |
| Input Rating (BTUH) | 50,000 | 75,000 | 100,000 | 125,000 |
| Output (BTUH) | 48,000 | 70,000 | 92,000 | 113,000 |
| Temperature Rise | 15° - 45° F | 35° - 65° F | 40° - 70° F | 35° - 65° F |
| Flue Size | 2 in | 3 in | 3 in | 3 in |
| Elec. Volts/PH./F.L.A. | 115/1/8.0 | 115/1/10.8 | 115/1/10.8 | 115/1/11.8 |
| Transformer Size (VA) | 40 | 40 | 40 | 40 |
| Orifice Sizes (Req'd) | #54(2) | #54(3) | #54(4) | #54(5) |
| Limit Setting | 250 | 250 | 200 | 170 |
| Fan Setting Delay ON | 15-90 | 15-90 | 15-90 | 15-90 |
| Timer (Sec's) Delay OFF | 30-120 | 30-120 | 30-120 | 30-120 |
| Exhaust Limit | 150°F | 150°F | 150°F | 180°F |
| Thermal Sensor | 300°F | 300°F | 300°F | 300°F |
| Gas Valve MFG/Type | WR36E | WR36E | WR36E | WR36E |
| Manifold Pressure | 2.5/10 | 2.5/10 | 2.5/10 | 2.5/10 |
| Regulation Type | STEP | STEP | STEP | STEP |
| Ignition Type/Model | IID/S8600M | IID/S8600M | IID/S8600M | IID/S8600M |
| Pilot Orifice Size | .012 | .012 | .012 | .012 |
| Anticipator Setting | .55 | .55 | .55 | .55 |
| Cap. Rating MFD/Volts Combustion Air Blower | 5/370 | 5/370 | 5/370 | 5/370 |
| Furnace Blower Rated Ext. Static Press | .10-.50 | .12-.50 | .15-.50 | .20-.50 |

Specifications: Upflow Natural Gas Models (NUGS)

1007213

| MODEL/SERIES | NUGS050AF02 | NUGS075BG02 | NUGS100BH02 | NUGS125AK02 |
|--------------------------------|-------------|-------------|-------------|-------------|
| Gas Type-NAT | STD | STD | STD | STD |
| Input Rating (BTUH) | 50,000 | 75,000 | 100,000 | 125,000 |
| Output (BTUH) | 48,000 | 70,000 | 92,000 | 113,000 |
| Temperature Rise | 15° - 45° F | 35° - 65° F | 40° - 70° F | 35° - 65° F |
| Flue Size | 2 in | 3 in | 3 in | 3 in |
| Elec.Volts/PH./F.L.A. | 115/1/8.0 | 115/1/10.8 | 115/1/10.8 | 115/1/11.8 |
| Transformer Size (VA) | 40 | 40 | 40 | 40 |
| Orifice Sizes (Req'd) | #42(2) | #42(3) | #42(4) | #42(5) |
| Limit Setting | 250 | 250 | 200 | 170 |
| Fan Timer Settings (Sec's) OFF | Timed | Timed | Timed | Timed |
| Exhaust Limit | 150°F | 150°F | 150°F | 180°F |
| Thermal Sensor | 300°F | 300°F | 300°F | 300°F |
| Gas Valve MFG/Type | WR36E | WR36E | WR36E | WR36E |
| Manifold Pressure | 3.5 | 3.5 | 3.5 | 3.5 |
| Regulation Type | SNAP | SNAP | SNAP | SNAP |
| Ignition Type/Model | HSI/50F47 | HSI/50F47 | HSI/50F47 | HSI/50F47 |
| Anticipator Setting | .80 | .80 | .80 | .80 |
| Cap. Rating MFD/Volts | | | | |
| Combustion Air Blower | 5/370 | 5/370 | 5/370 | 5/370 |
| Furnace Blower Rated | | | | |
| Ext. Static Press | .10-.50 | .12-.50 | .15-.50 | .20-.50 |

Specifications: Upflow LP Gas Models (NULS)

| MODEL/SERIES | NULS050AF02 | NULS075BG02 | NULS100BH02 | NULS125AK02 |
|--------------------------------|-------------|-------------|-------------|-------------|
| Gas Type-NAT | STD | STD | STD | STD |
| Input Rating (BTUH) | 50,000 | 75,000 | 100,000 | 125,000 |
| Output (BTUH) | 48,000 | 70,000 | 92,000 | 113,000 |
| Temperature Rise | 15° - 45° F | 35° - 65° F | 40° - 70° F | 35° - 65° F |
| Flue Size | 2 in | 3 in | 3 in | 3 in |
| Elec.Volts/PH./F.L.A. | 115/1/8.0 | 115/1/10.8 | 115/1/10.8 | 115/1/11.8 |
| Transformer Size (VA) | 40 | 40 | 40 | 40 |
| Orifice Sizes (Req'd) | #54(2) | #54(3) | #54(4) | #54(5) |
| Limit Setting | 250 | 250 | 200 | 170 |
| Fan Timer Settings (Sec's) OFF | Timed | Timed | Timed | Timed |
| Exhaust Limit | 150°F | 150°F | 150°F | 180°F |
| Thermal Sensor | 300°F | 300°F | 300°F | 300°F |
| Gas Valve MFG/Type | WR36E | WR36E | WR36E | WR36E |
| Manifold Pressure | 10 | 10 | 10 | 10 |
| Regulation Type | SNAP | SNAP | SNAP | SNAP |
| Ignition Type/Model | HSI/50F47 | HSI/50F47 | HSI/50F47 | HSI/50F47 |
| Anticipator Setting | .80 | .80 | .80 | .80 |
| Cap. Rating MFD/Volts | | | | |
| Combustion Air Blower | 5/370 | 5/370 | 5/370 | 5/370 |
| Furnace Blower Rated | | | | |
| Ext. Static Press | .10-.50 | .12-.50 | .15-.50 | .20-.50 |

Specifications: Upflow Natural Gas Models (NUGS)

1006412

| MODEL/SERIES | NUGS050AF01 | NUGS075BG01 | NUGS100BH01 | NUGS125AK01 |
|--------------------------------|---------------|---------------|---------------|---------------|
| Gas Type-NAT | STD | STD | STD | STD |
| Input Rating (BTUH) | 50,000 | 75,000 | 100,000 | 125,000 |
| Output (BTUH) | 48,000 | 70,000 | 92,000 | 113,000 |
| Temperature Rise | 15° - 45° F | 35° - 65° F | 40° - 70° F | 35° - 65° F |
| Flue Size | 2 in | 3 in | 3 in | 3 in |
| Elec.Volts/PH./F.L.A. | 115/1/8.0 | 115/1/10.8 | 115/1/10.8 | 115/1/11.8 |
| Transformer Size (VA) | 40 | 40 | 40 | 40 |
| Orifice Sizes (Req'd) | #42(2) | #42(3) | #42(4) | #42(5) |
| Limit Setting | 250 | 250 | 200 | 170 |
| Fan Timer Settings (Sec's) OFF | Timed | Timed | Timed | Timed |
| Exhaust Limit | 120°F | 130°F | 130°F | 150°F |
| Thermal Sensor | 300°F | 300°F | 300°F | 300°F |
| Gas Valve MFG/Type | WR36E | WR36E | WR36E | WR36E |
| Manifold Pressure | 3.5 | 3.5 | 3.5 | 3.5 |
| Regulation Type | SNAP | SNAP | SNAP | SNAP |
| Ignition Type/Model | HSI/50F47 | HSI/50F47 | HSI/50F47 | HSI/50F47 |
| Lock-Out Timing | After 3 Tries | After 3 Tries | After 3 Tries | After 3 Tries |
| Anticipator Setting | .80 | .80 | .80 | .80 |
| Cap. Rating MFD/Volts | | | | |
| Combustion Air Blower | 5/370 | 5/370 | 5/370 | 5/370 |
| Furnace Blower Rated | | | | |
| Ext. Static Press | .10-.50 | .12-.50 | .15-.50 | .20-.50 |

Specifications: Upflow LP Gas Models (NULS)

| MODEL/SERIES | NULS050AF01 | NULS075BG01 | NULS100BH01 | NULS125AK01 |
|---|----------------|----------------|----------------|----------------|
| Gas Type-NAT | STD | STD | STD | STD |
| Input Rating (BTUH) | 50,000 | 75,000 | 100,000 | 125,000 |
| Output (BTUH) | 48,000 | 70,000 | 92,000 | 113,000 |
| Temperature Rise | 15° - 45° F | 35° - 65° F | 40° - 70° F | 35° - 65° F |
| Flue Size | 2 in | 3 in | 3 in | 3 in |
| Elec.Volts/PH./F.L.A. | 115/1/8.0 | 115/1/10.8 | 115/1/10.8 | 115/1/11.8 |
| Transformer Size (VA) | 40 | 40 | 40 | 40 |
| Orifice Sizes (Req'd) | #54(2) | #54(3) | #54(4) | #54(5) |
| Limit Setting | 250 | 250 | 200 | 170 |
| Fan Timer Settings (Sec's) OFF | Timed | Timed | Timed | Timed |
| Exhaust Limit (Man. Thermal Sensor Reset) | 120°F 300°F | 130°F 300°F | 130°F 300°F | 150°F 300°F |
| Gas Valve MFG/Type | WR36E | WR36E | WR36E | WR36E |
| Manifold Pressure | 10 | 10 | 10 | 10 |
| Regulation Type | SNAP | SNAP | SNAP | SNAP |
| Ignition Type/Model | HSI/50F47 | HSI/50F47 | HSI/50F47 | HSI/50F47 |
| Lock-Out Timing | After 3 Tries | After 3 Tries | After 3 Tries | After 3 Tries |
| Anticipator Setting | .80 | .80 | .80 | .80 |
| Cap. Rating MFD/Volts | | | | |
| Combustion Air Blower | 5/370 | 5/370 | 5/370 | 5/370 |
| Furnace Blower Rated | | | | |
| Ext. Static Press | .10-.50 | .12-.50 | .15-.50 | .20-.50 |

Specifications: Upflow Natural Gas Models (NUGS)

1006034

| MODEL/SERIES | NUGS050AF01 | NUGS075AG01 | NUGS100AH01 | NUGS125AK01 |
|--------------------------------|---------------|---------------|---------------|---------------|
| Gas Type-NAT | STD | STD | STD | STD |
| Input Rating (BTUH) | 50,000 | 75,000 | 100,000 | 125,000 |
| Output (BTUH) | 48,000 | 70,000 | 92,000 | 113,000 |
| Temperature Rise | 15° - 45° F | 35° - 65° F | 40° - 70° F | 35° - 65° F |
| Flue Size | 2 in | 2 in | 2 in | 3 in |
| Elec. Volts/PH./F.L.A. | 115/1/8.0 | 115/1/10.8 | 115/1/10.8 | 115/1/11.8 |
| Transformer Size (VA) | 40 | 40 | 40 | 40 |
| Orifice Sizes (Req'd) | #42(2) | #42(3) | #42(4) | #42(5) |
| Limit Setting | 250 | 250 | 200 | 170 |
| Fan Timer Settings (Sec's) OFF | Timed | Timed | Timed | Timed |
| Exhaust Limit | 120°F | 130°F | 130°F | 150°F |
| Thermal Sensor | 300°F | 300°F | 300°F | 300°F |
| Gas Valve MFG/Type | WR36E | WR36E | WR36E | WR36E |
| Manifold Pressure | 3.5 | 3.5 | 3.5 | 3.5 |
| Regulation Type | SNAP | SNAP | SNAP | SNAP |
| Ignition Type/Model | HSI/50F47 | HSI/50F47 | HSI/50F47 | HSI/50F47 |
| Lock-Out Timing | After 3 Tries | After 3 Tries | After 3 Tries | After 3 Tries |
| Anticipator Setting | .80 | .80 | .80 | .80 |
| Cap. Rating MFD/Volts | | | | |
| Combustion Air Blower | 5/370 | 5/370 | 5/370 | 5/370 |
| Furnace Blower Rated | | | | |
| Ext. Static Press | .10-.50 | .12-.50 | .15-.50 | .20-.50 |

Specifications: Upflow LP Gas Models (NULS)

| MODEL/SERIES | NULS050AF01 | NULS075AG01 | NULS100AH01 | NULS125AK01 |
|--------------------------------|---------------|---------------|---------------|---------------|
| Gas Type-NAT | STD | STD | STD | STD |
| Input Rating (BTUH) | 50,000 | 75,000 | 100,000 | 125,000 |
| Output (BTUH) | 48,000 | 70,000 | 92,000 | 113,000 |
| Temperature Rise | 15° - 45° F | 35° - 65° F | 40° - 70° F | 35° - 65° F |
| Flue Size | 2 in | 2 in | 2 in | 3 in |
| Elec. Volts/PH./F.L.A. | 115/1/8.0 | 115/1/10.8 | 115/1/10.8 | 115/1/11.8 |
| Transformer Size (VA) | 40 | 40 | 40 | 40 |
| Orifice Sizes (Req'd) | #54(2) | #54(3) | #54(4) | #54(5) |
| Limit Setting | 250 | 250 | 200 | 170 |
| Fan Timer Settings (Sec's) OFF | Timed | Timed | Timed | Timed |
| Exhaust Limit | 120°F | 130°F | 130°F | 150°F |
| Thermal Sensor | 300°F | 300°F | 300°F | 300°F |
| Gas Valve MFG/Type | WR36E | WR36E | WR36E | WR36E |
| Manifold Pressure | 10 | 10 | 10 | 10 |
| Regulation Type | SNAP | SNAP | SNAP | SNAP |
| Ignition Type/Model | HSI/50F47 | HSI/50F47 | HSI/50F47 | HSI/50F47 |
| Lock-Out Timing | After 3 Tries | After 3 Tries | After 3 Tries | After 3 Tries |
| Anticipator Setting | .80 | .80 | .80 | .80 |
| Cap. Rating MFD/Volts | | | | |
| Combustion Air Blower | 5/370 | 5/370 | 5/370 | 5/370 |
| Furnace Blower Rated | | | | |
| Ext. Static Press | .10-.50 | .12-.50 | .15-.50 | .20-.50 |

| MODEL | PAGE | MODEL | PAGE |
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|40 | | | |
| NDGK040KF03 | 67 | NDLK050DF06 | 66 |
| NDGK040KF04 | 67 | NUGK050MF03 | 68 |
| NDGK040KF05 | 66 | NUGK050MF04 | 68 |
| NDGK040KF06 | 66 | NUGK050MF05 | 68 |
| NUGK040KF03 | 68 | NUGK050MF06 | 69 |
| NUGK040KF04 | 68 | NUGK050MF07 | 69 |
| NUGK040KF05 | 68 | NUGK050NF03 | 68 |
| NUGK040KF06 | 69 | NUGK050NF04 | 68 |
| NUGK040KF07 | 69 | NUGK050NF05 | 68 |
|50 | | NUGK050NF06 | 69 |
| NDGK050DF03 | 67 | NUGK050NF07 | 69 |
| NDGK050DF04 | 67 | NUGS050AF01 | 69 |
| NDGK050DF05 | 66 | NUGS050AF02 | 69 |
| NDGK050DF06 | 66 | NUGS050AF03 | 69 |
| NDGK050KF03 | 67 | NULK050MF03 | 68 |
| NDGK050KF04 | 67 | NULK050MF04 | 68 |
| NDGK050KF05 | 66 | NULK050MF05 | 69 |
| NDGK050KF06 | 66 | NULK050MF06 | 69 |
| NDLK050DF03 | 67 | NULS050AF01 | 69 |
| NDLK050DF04 | 67 | NULS050AF02 | 69 |
| NDLK050DF05 | 66 | NULS050AF03 | 69 |

| MODEL | PAGE | MODEL | PAGE |
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|75 | | | |
| NDGK075DF03 | 67 | NUGK075DG07 | 69 |
| NDGK075DF04 | 67 | NUGK075DG08 | 69 |
| NDGK075DF05 | 66 | NUGK075KG03 | 68 |
| NDGK075DF06 | 66 | NUGK075KG04 | 68 |
| NDGK075DF07 | 66 | NUGK075KG05 | 68 |
| NDGK075KF03 | 67 | NUGK075KG06 | 69 |
| NDGK075KF04 | 67 | NUGK075KG07 | 69 |
| NDGK075KF05 | 66 | NUGS075AG01 | 69 |
| NDGK075KF06 | 66 | NUGS075BG01 | 69 |
| NDGK075KF07 | 66 | NUGS075BG02 | 69 |
| NDLK075DF03 | 67 | NUGS075BG03 | 69 |
| NDLK075DF04 | 67 | NULK075DG03 | 68 |
| NDLK075DF05 | 66 | NULK075DG04 | 68 |
| NDLK075DF06 | 66 | NULK075DG05 | 69 |
| NDLK075DF07 | 66 | NULK075DG06 | 69 |
| NUGK075DG03 | 68 | NULS075AG01 | 69 |
| NUGK075DG04 | 68 | NULS075BG01 | 69 |
| NUGK075DG05 | 68 | NULS075BG02 | 69 |
| NUGK075DG06 | 68 | NULS075BG03 | 69 |

| MODEL | PAGE | MODEL | PAGE |
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| |100 | | |
| NDGK100DG03 | 67 | NUGK100KH03 | 68 |
| NDGK100DG04 | 67 | NUGK100KH04 | 68 |
| NDGK100DG05 | 66 | NUGK100KH05 | 68 |
| NDGK100DG07 | 66 | NUGK100KH06 | 68 |
| NDGK100KG03 | 67 | NUGK100KH07 | 68 |
| NDGK100KG04 | 67 | NUGK100KH08 | 69 |
| NDGK100KG05 | 66 | NUGK100KH09 | 69 |
| NDGK100KG06 | 66 | NUGK100KH11 | 69 |
| NDLK100DG03 | 67 | NUGS100AH01 | 69 |
| NDLK100DG04 | 67 | NUGS100BH01 | 69 |
| NDLK100DG05 | 66 | NUGS100BH02 | 69 |
| NDLK100DG07 | 66 | NUGS100BH03 | 69 |
| NUGK100DH03 | 68 | NULK100DH03 | 68 |
| NUGK100DH04 | 68 | NULK100DH04 | 68 |
| NUGK100DH05 | 68 | NULK100DH05 | 68 |
| NUGK100DH06 | 68 | NULK100DH06 | 69 |
| NUGK100DH07 | 68 | NULK100DH07 | 69 |
| NUGK100DH08 | 69 | NULS100AH01 | 69 |
| NUGK100DH09 | 69 | NULS100BH01 | 69 |
| NUGK100DH11 | 69 | NULS100BH02 | 69 |
| | | NULS100BH03 | 69 |

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|125 | | | |
| NDGK125DK03 | 67 | NUGK125KK04 | 68 |
| NDGK125DK04 | 67 | NUGK125KK05 | 68 |
| NDGK125DK05 | 66 | NUGK125KK06 | 69 |
| NDGK125KK03 | 67 | NUGK125KK07 | 69 |
| NDGK125KK04 | 67 | NUGK125KK08 | 69 |
| NDGK125KK05 | 66 | NUGS125AK01 | 69 |
| NDLK125DK03 | 67 | NUGS125AK02 | 69 |
| NDLK125DK04 | 66 | NUGS125AK03 | 69 |
| NDLK125DK05 | 66 | NULK125DK03 | 68 |
| NUGK125DK03 | 68 | NULK125DK04 | 68 |
| NUGK125DK04 | 68 | NULK125DK05 | 69 |
| NUGK125DK05 | 68 | NULK125DK06 | 69 |
| NUGK125DK06 | 69 | NULK125DK07 | 69 |
| NUGK125DK07 | 69 | NULS125AK01 | 69 |
| NUGK125DK08 | 69 | NULS125AK02 | 69 |
| NUGK125KK03 | 68 | NULS125AK03 | 69 |

BLOWER PERFORMANCE DATA

NOTE: Use the Blower Performance Index to find the correct chart.

| Model Number | | NDGK040 | NDGK050 NDLK050 | NDGK075 NDLK075 | NDGK100 NDLK100 | NDGK125 NDLK125 | |
|---|-----|----------|--------------------|--------------------|--------------------|--------------------|------|
| Blower Type & Size | | DD10-8A | DD10-8A | DD10-9A | DD10-9A | DD12-11AT | |
| Motor Amps/RPM | | 8.0/1050 | 8.0/1050 | 8.0/1050 | 8.0/1050 | 11.8/1050 | |
| Nominal H.P./Type | | 1/2 PSC | 1/2 PSC | 3/4 PSC | 3/4 PSC | 1 PSC | |
| Capacitor | | 7.5 MFD | 7.5 MFD | 10.0 MFD | 10.0 MFD | 15.0 MFD | |
| Air Delivery in C.F.M. Varying Static Pressure (in WC.) | .10 | LO | 850 | 850 | 860 | 1055 | 1575 |
| | | MED. LO | 1090 | 1090 | 1100 | 1330 | 1720 |
| | | MED. HI | 1320 | 1320 | 1330 | 1550 | 1975 |
| | | HI | 1460 | 1460 | 1470 | 1690 | 2210 |
| | .20 | LO | 850 | 850 | 855 | 1050 | 1550 |
| | | MED. LO | 1080 | 1080 | 1080 | 1295 | 1695 |
| | | MED. HI | 1270 | 1270 | 1300 | 1495 | 1935 |
| | | HI | 1400 | 1400 | 1415 | 1625 | 2135 |
| | .30 | LO | 840 | 840 | 855 | 1035 | 1520 |
| | | MED. LO | 1050 | 1050 | 1060 | 1245 | 1665 |
| | | MED. HI | 1220 | 1220 | 1240 | 1430 | 1885 |
| | | HI | 1340 | 1340 | 1360 | 1550 | 2075 |
| | .40 | LO | 820 | 820 | 840 | 1000 | 1490 |
| | | MED. LO | 1010 | 1010 | 1030 | 1190 | 1620 |
| | | MED. HI | 1160 | 1160 | 1195 | 1360 | 1835 |
| | | HI | 1275 | 1275 | 1295 | 1470 | 2020 |
| | .50 | LO | 790 | 790 | 820 | 965 | 1460 |
| | | MED. LO | 970 | 970 | 990 | 1140 | 1580 |
| | | MED. HI | 1105 | 1105 | 1140 | 1300 | 1785 |
| | | HI | 1200 | 1200 | 1230 | 1380 | 1965 |

BLOWER PERFORMANCE DATA (Cont.)

NOTE: Use the Blower Performance Index to find the correct chart.

| Model Number | | | NDGK040 | NDGK050 NDLK050 | NDGK075 NDLK075 | NDGK100 NDLK100 | NDGK125 NDLK125 |
|---|-----|---------|----------|--------------------|--------------------|--------------------|--------------------|
| Blower Type & Size | | | DD10-8AT | DD10-8AT | DD10-9AT | DD10-9AT | DD12-11AT |
| Motor Amps/RPM | | | 8.0/1050 | 8.0/1050 | 8.0/1050 | 10.8/1050 | 11.1/1050 |
| Nominal H.P./Type | | | 1/2 PSC | 1/2 PSC | 1/2 PSC | 3/4 PSC | 3/4 PSC |
| Capacitor | | | 7.5 MFD | 7.5 MFD | 7.5 MFD | 10.0 MFD | 15.0 MFD |
| Air Delivery in C.F.M. Varying Static Pressure (in WC.) | .10 | LO | 850 | 850 | 860 | 1055 | 1575 |
| | | MED. LO | 1090 | 1090 | 1100 | 1330 | 1720 |
| | | MED. HI | 1320 | 1320 | 1330 | 1550 | 1975 |
| | | HI | 1460 | 1460 | 1470 | 1690 | 2210 |
| | .20 | LO | 850 | 850 | 855 | 1050 | 1550 |
| | | MED. LO | 1080 | 1080 | 1080 | 1295 | 1695 |
| | | MED. HI | 1270 | 1270 | 1300 | 1495 | 1935 |
| | | HI | 1400 | 1400 | 1415 | 1625 | 2135 |
| | .30 | LO | 840 | 840 | 855 | 1035 | 1520 |
| | | MED. LO | 1050 | 1050 | 1060 | 1245 | 1665 |
| | | MED. HI | 1220 | 1220 | 1240 | 1430 | 1885 |
| | | HI | 1340 | 1340 | 1360 | 1550 | 2075 |
| | .40 | LO | 820 | 820 | 840 | 1000 | 1490 |
| | | MED. LO | 1010 | 1010 | 1030 | 1190 | 1620 |
| | | MED. HI | 1160 | 1160 | 1195 | 1360 | 1835 |
| | | HI | 1275 | 1275 | 1295 | 1470 | 2020 |
| | .50 | LO | 790 | 790 | 820 | 965 | 1460 |
| | | MED. LO | 970 | 970 | 990 | 1140 | 1580 |
| | | MED. HI | 1105 | 1105 | 1140 | 1300 | 1785 |
| | | HI | 1200 | 1200 | 1230 | 1380 | 1965 |

BLOWER PERFORMANCE DATA (Cont.)

NOTE: Use the Blower Performance Index to find the correct chart.

| Model Number | | NUGK040 NUGK050 NULK050 | NUGK075 NULK075 | NUGK100 NULK100 | NUGK125 NULK125 | |
|---|---------|-------------------------------|--------------------|--------------------|--------------------|------|
| Blower Type & Size | | DD10-8AT | DD10-9AT | DD10-9AT | DD12-11AT | |
| Motor Amps/RPM | | 8.0/1050 | 8.0/1050 | 10.8/1050 | 11.1/1050 | |
| Nominal H.P./Type | | 1/2 PSC | 3/4 PSC | 3/4 PSC | 3/4 PSC | |
| Capacitor | | 7.5 MFD | 10.0 MFD | 10.0 MFD | 15.0 MFD | |
| Air Delivery in C.F.M. Varying Static Pressure (In WC.) | .10 | LO | 800 | 1035 | 1050 | 1460 |
| | | MED. LO | 1080 | 1305 | 1355 | 1620 |
| | | MED. HI | 1350 | 1545 | 1660 | 1950 |
| | | HI | 1570 | 1720 | 1880 | 2320 |
| | .20 | LO | 850 | 1030 | 1040 | 1455 |
| | | MED. LO | 1075 | 1270 | 1330 | 1610 |
| | | MED. HI | 1320 | 1490 | 1600 | 1910 |
| | | HI | 1510 | 1650 | 1820 | 2255 |
| | .30 | LO | 855 | 1020 | 1035 | 1460 |
| | | MED. LO | 1060 | 1235 | 1305 | 1610 |
| | | MED. HI | 1280 | 1430 | 1545 | 1885 |
| | | HI | 1445 | 1580 | 1750 | 2205 |
| | .40 | LO | 855 | 995 | 1025 | 1445 |
| | | MED. LO | 1040 | 1195 | 1280 | 1590 |
| | | MED. HI | 1230 | 1375 | 1490 | 1855 |
| HI | | 1375 | 1510 | 1675 | 2145 | |
| .50 | LO | 835 | 960 | 1010 | 1430 | |
| | MED. LO | 1010 | 1145 | 1230 | 1570 | |
| | MED. HI | 1180 | 1300 | 1425 | 1825 | |
| | HI | 1300 | 1435 | 1585 | 2105 | |

BLOWER PERFORMANCE DATA (Cont.)

NOTE: Use the Blower Performance Index to find the correct chart.

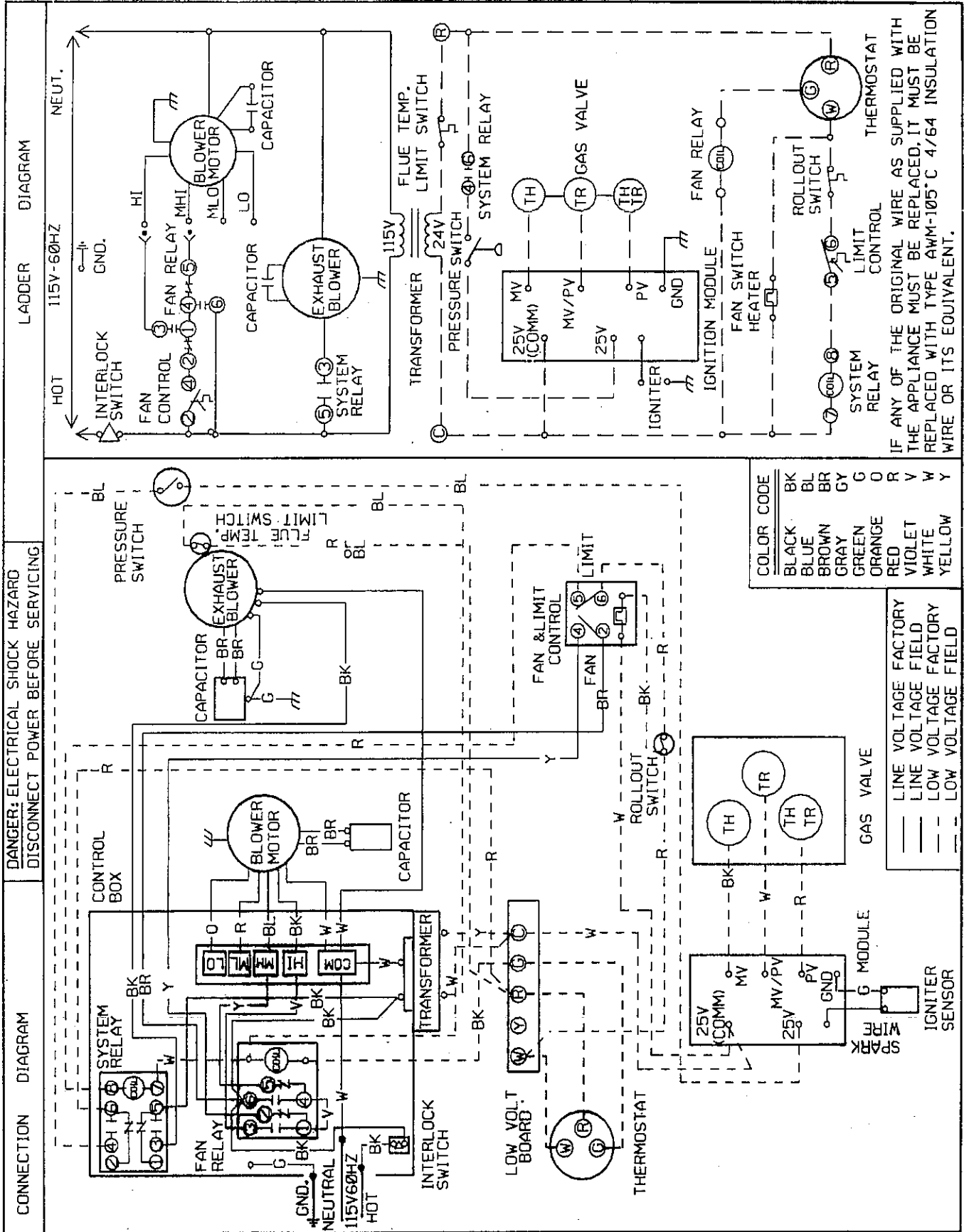
| Model Number | | | NUGK040 NUGK050 NUGS050 NULK050 NULS050 | NUGK075 NUGS075 NULK075 NULS075 | NUGK100 NUGS100 NULK100 NULS100 | NUGK125 NUGS125 NULK125 NULS125 |
|---|---------|---------|---|--|--|--|
| Blower Type & Size | | | DD10-8A | DD10-9A | DD10-9A | DD12-11AT |
| Motor Amps/RPM | | | 8.0/1050 | 10.8/1050 | 10.8/1050 | 11.8/1050 |
| Nominal H.P./Type | | | 1/2 PSC | 3/4 PSC | 3/4 PSC | 1 PSC |
| Capacitor | | | 7.5 MFD | 10.0 MFD | 10.0 MFD | 15.0 MFD |
| Air Delivery in C.F.M. Varying Static Pressure (In WC.) | .10 | LO | 945 | 1105 | 1100 | 1480 |
| | | MED. LO | 1190 | 1360 | 1370 | 1565 |
| | | MED. HI | 1375 | 1605 | 1660 | 1835 |
| | | HI | 1625 | 1775 | 1900 | 2135 |
| | .20 | LO | 945 | 1090 | 1076 | 1475 |
| | | MED. LO | 1180 | 1335 | 1350 | 1560 |
| | | MED. HI | 1360 | 1560 | 1608 | 1820 |
| | | HI | 1570 | 1705 | 1830 | 2090 |
| .30 | LO | 940 | 1070 | 1075 | 1460 | |
| | MED. LO | 1160 | 1360 | 1325 | 1545 | |
| | MED. HI | 1340 | 1500 | 1559 | 1785 | |
| | HI | 1500 | 1630 | 1752 | 2050 | |
| .40 | LO | 935 | 1045 | 1035 | 1440 | |
| | MED. LO | 1140 | 1255 | 1280 | 1525 | |
| | MED. HI | 1305 | 1435 | 1505 | 1750 | |
| | HI | 1445 | 1560 | 1675 | 2005 | |
| .50 | LO | 920 | 1010 | 1000 | 1425 | |
| | MED. LO | 1110 | 1205 | 1245 | 1500 | |
| | MED. HI | 1265 | 1375 | 1445 | 1715 | |
| | HI | 1385 | 1485 | 1605 | 1965 | |
| .60 | LO | 905 | 960 | 965 | 1385 | |
| | MED. LO | 1080 | 1140 | 1195 | 1475 | |
| | MED. HI | 1205 | 1295 | 1370 | 1680 | |
| | HI | 1320 | 1395 | 1520 | 1900 | |
| .70 | LO | 870 | 885 | 905 | 1340 | |
| | MED. LO | 1030 | 1050 | 1125 | 1430 | |
| | MED. HI | 1145 | 1205 | 1290 | 1625 | |
| | HI | 1245 | 1305 | 1430 | 1855 | |
| .80 | LO | 820 | 815 | 830 | 1275 | |
| | MED. LO | 965 | 940 | 1040 | 1360 | |
| | MED. HI | 1070 | 1080 | 1200 | 1575 | |
| | HI | 1160 | 1200 | 1335 | 1790 | |

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| NDGK040KF03 | 74 | NDLK050DF06 | 81 |
| NDGK040KF04 | 75 | NUGK050MF03 | 78 |
| NDGK040KF05 | 80 | NUGK050MF04 | 79 |
| NDGK040KF06 | 81 | NUGK050MF05 | 79 |
| NUGK040KF03 | 78 | NUGK050MF06 | 77 |
| NUGK040KF04 | 79 | NUGK050MF07 | 77 |
| NUGK040KF05 | 79 | NUGK050NF03 | 78 |
| NUGK040KF06 | 77 | NUGK050NF04 | 79 |
| NUGK040KF07 | 77 | NUGK050NF05 | 79 |
|50 | | NUGK050NF06 | 77 |
| NDGK050DF03 | 75 | NUGK050NF07 | 77 |
| NDGK050DF04 | 75 | NUGS050AF01 | 82 |
| NDGK050DF05 | 80 | NUGS050AF02 | 82 |
| NDGK050DF06 | 81 | NUGS050AF03 | 77 |
| NDGK050KF03 | 74 | NULK050MF03 | 83 |
| NDGK050KF04 | 75 | NULK050MF04 | 83 |
| NDGK050KF05 | 80 | NULK050MF05 | 82 |
| NDGK050KF06 | 81 | NULK050MF06 | 77 |
| NDLK050DF03 | 75 | NULS050AF01 | 82 |
| NDLK050DF04 | 75 | NULS050AF02 | 82 |
| NDLK050DF05 | 80 | NULS050AF03 | 77 |

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| |75 | | |
| NDGK075DF03 | 74 | NUGK075DG07 | 77 |
| NDGK075DF04 | 75 | NUGK075DG08 | 77 |
| NDGK075DF05 | 80 | NUGK075KG03 | 78 |
| NDGK075DF06 | 80 | NUGK075KG04 | 79 |
| NDGK075DF07 | 81 | NUGK075KG05 | 79 |
| NDGK075KF03 | 74 | NUGK075KG06 | 77 |
| NDGK075KF04 | 75 | NUGK075KG07 | 77 |
| NDGK075KF05 | 80 | NUGS075AG01 | 82 |
| NDGK075KF06 | 80 | NUGS075BG01 | 82 |
| NDGK075KF07 | 81 | NUGS075BG02 | 82 |
| NDLK075DF03 | 75 | NUGS075BG03 | 77 |
| NDLK075DF04 | 75 | NULK075DG03 | 83 |
| NDLK075DF05 | 80 | NULK075DG04 | 83 |
| NDLK075DF06 | 80 | NULK075DG05 | 82 |
| NDLK075DF07 | 81 | NULK075DG06 | 77 |
| NUGK075DG03 | 78 | NULS075AG01 | 82 |
| NUGK075DG04 | 78 | NULS075BG01 | 82 |
| NUGK075DG05 | 79 | NULS075BG02 | 82 |
| NUGK075DG06 | 79 | NULS075BG03 | 77 |

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|-------------------|----------|-------------------|------|
| |100 | | |
| NDGK100DG03 | 74 | NUGK100KH03 | 78 |
| NDGK100DG04 | 75 | NUGK100KH04 | 78 |
| NDGK100DG05 | 80 | NUGK100KH05 | 78 |
| NDGK100DG07 | 81 | NUGK100KH06 | 79 |
| NDGK100KG03 | 74 | NUGK100KH07 | 79 |
| NDGK100KG04 | 75 | NUGK100KH08 | 84 |
| NDGK100KG05 | 80 | NUGK100KH09 | 77 |
| NDGK100KG06 | 81 | NUGK100KH11 | 77 |
| NDGK100KG07 | 81 | NUGS100AH01 | 82 |
| NDLK100DG03 | 75 | NUGS100BH01 | 82 |
| NDLK100DG04 | 75 | NUGS100BH02 | 82 |
| NDLK100DG05 | 80 | NUGS100BH03 | 77 |
| NDLK100DG07 | 81 | NULK100DH03 | 83 |
| NUGK100DH03 | 78 | NULK100DH04 | 83 |
| NUGK100DH04 | 78 | NULK100DH05 | 83 |
| NUGK100DH05 | 78 | NULK100DH06 | 82 |
| NUGK100DH06 | 79 | NULK100DH07 | 77 |
| NUGK100DH07 | 79 | NULS100AH01 | 82 |
| NUGK100DH08 | 84 | NULS100BH01 | 82 |
| NUGK100DH09 | 77 | NULS100BH02 | 82 |
| NUGK100DH11 | 77 | NULS100BH03 | 77 |

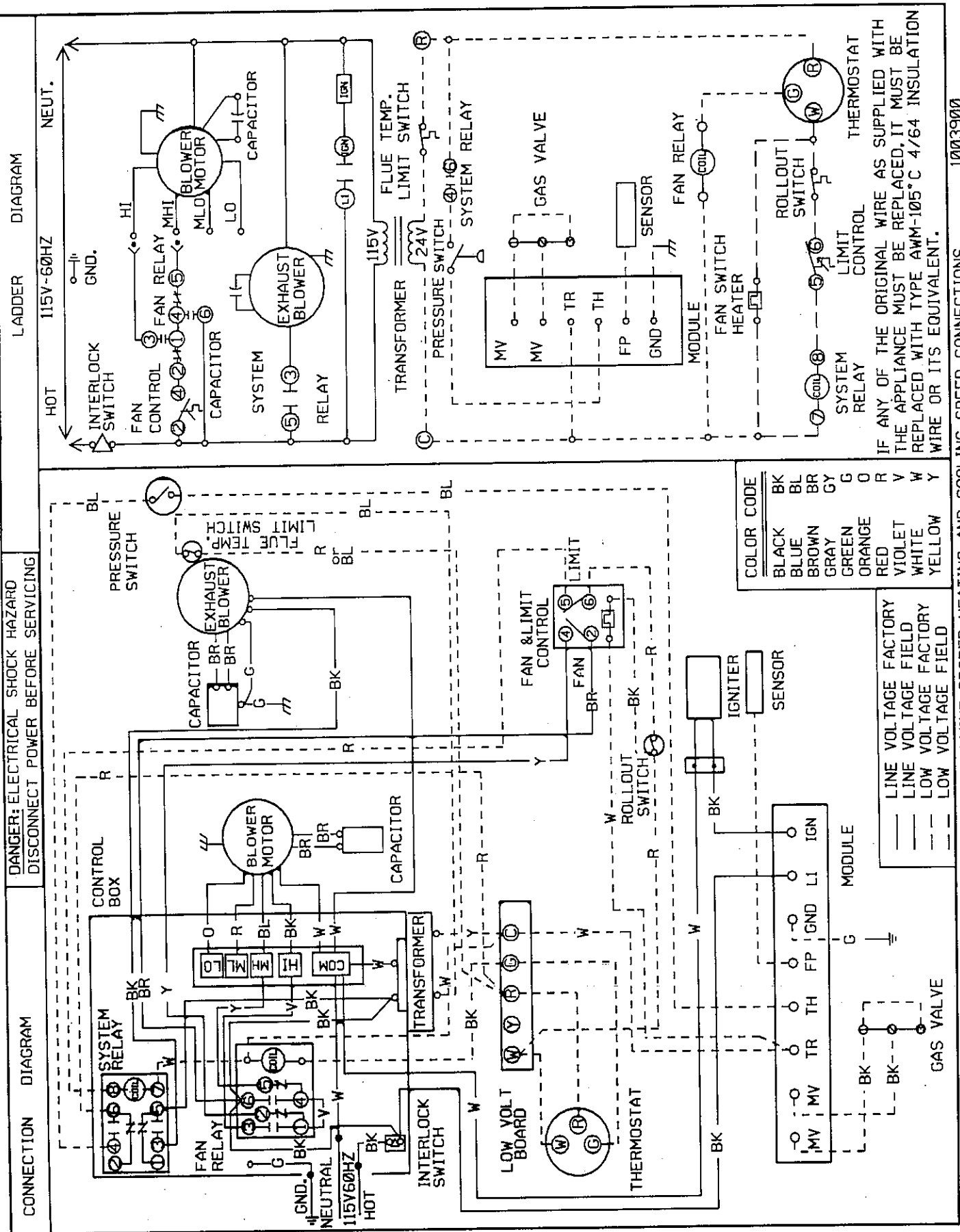
| MODEL | PAGE | MODEL | PAGE |
|-------------------|----------|-------------------|------|
| |125 | | |
| NDGK125DK03 | 74 | NUGK125KK04 | 79 |
| NDGK125DK04 | 80 | NUGK125KK05 | 79 |
| NDGK125DK05 | 81 | NUGK125KK06 | 84 |
| NDGK125KK03 | 74 | NUGK125KK07 | 77 |
| NDGK125KK04 | 80 | NUGK125KK08 | 77 |
| NDGK125KK05 | 81 | NUGS125AK01 | 82 |
| NDLK125DK03 | 75 | NUGS125AK02 | 82 |
| NDLK125DK04 | 80 | NUGS125AK03 | 77 |
| NDLK125DK05 | 81 | NULK125DK03 | 83 |
| NUGK125DK03 | 78 | NULK125DK04 | 83 |
| NUGK125DK04 | 79 | NULK125DK05 | 82 |
| NUGK125DK05 | 79 | NULK125DK06 | 82 |
| NUGK125DK06 | 84 | NULK125DK07 | 77 |
| NUGK125DK07 | 77 | NULS125AK01 | 82 |
| NUGK125DK08 | 77 | NULS125AK02 | 82 |
| NUGK125KK03 | 78 | NULS125AK03 | 77 |



IF ANY OF THE ORIGINAL WIRE AS SUPPLIED WITH THE APPLIANCE MUST BE REPLACED, IT MUST BE REPLACED WITH TYPE AWM-105°C 4/64 INSULATION WIRE OR ITS EQUIVALENT.

* SEE TABLE IN MANUAL FOR C.F.M. VS. E.S.P. TO DETERMINE PROPER HEATING AND COOLING SPEED CONNECTIONS

1002751 rev.1



DANGER: ELECTRICAL SHOCK HAZARD
DISCONNECT POWER BEFORE SERVICING

CONNECTION DIAGRAM

LADDER DIAGRAM

COLOR CODE

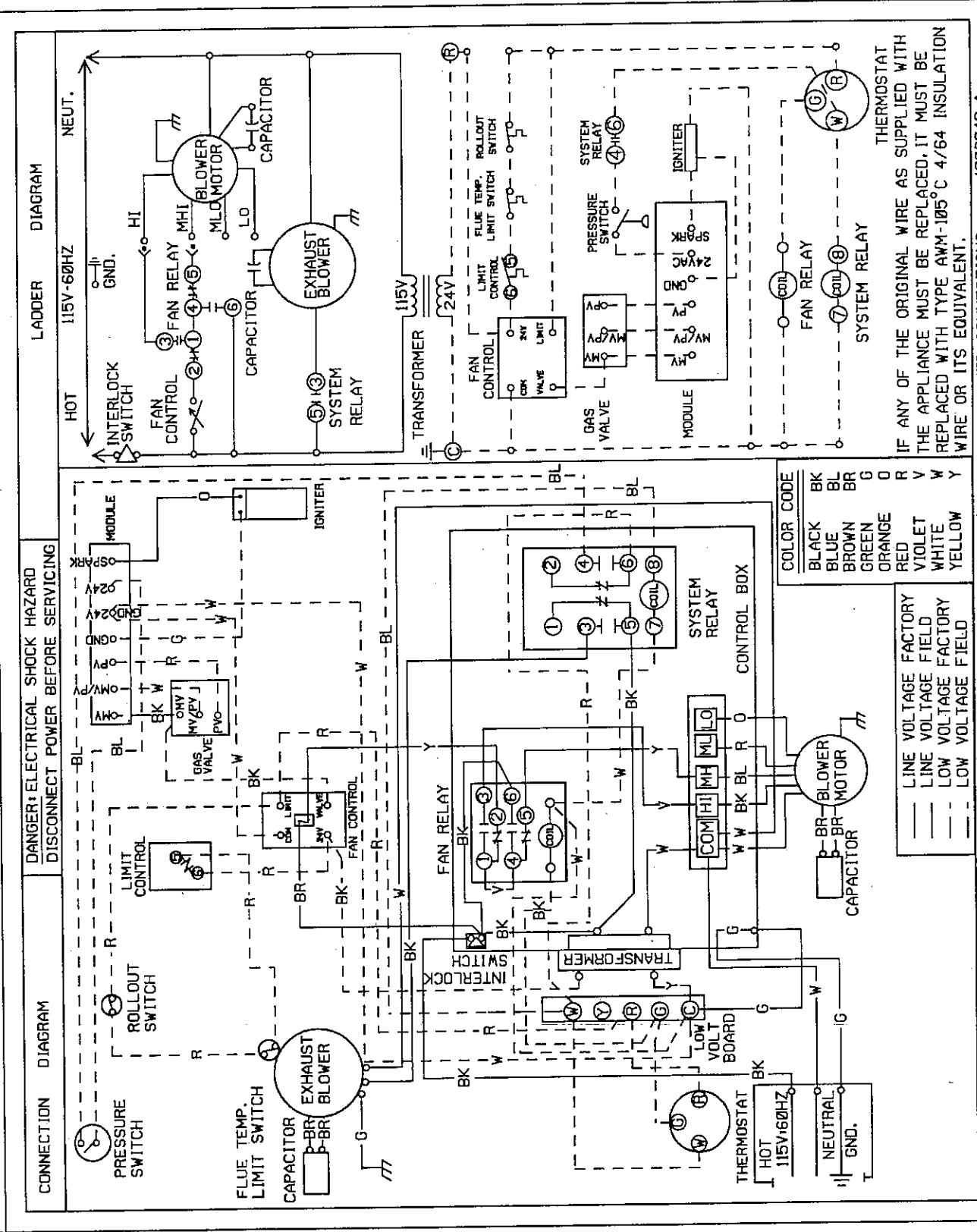
| | |
|--------|----|
| BLACK | BK |
| BLUE | BL |
| BROWN | BR |
| GRAY | GY |
| GREEN | G |
| ORANGE | O |
| RED | R |
| VIOLET | V |
| WHITE | W |
| YELLOW | Y |

| | |
|-----|----------------------|
| — | LINE VOLTAGE FACTORY |
| — | LINE VOLTAGE FIELD |
| --- | LOW VOLTAGE FACTORY |
| --- | LOW VOLTAGE FIELD |

IF ANY OF THE ORIGINAL WIRE AS SUPPLIED WITH THE APPLIANCE MUST BE REPLACED, IT MUST BE REPLACED WITH TYPE AWM-105°C 4/64 INSULATION WIRE OR ITS EQUIVALENT.

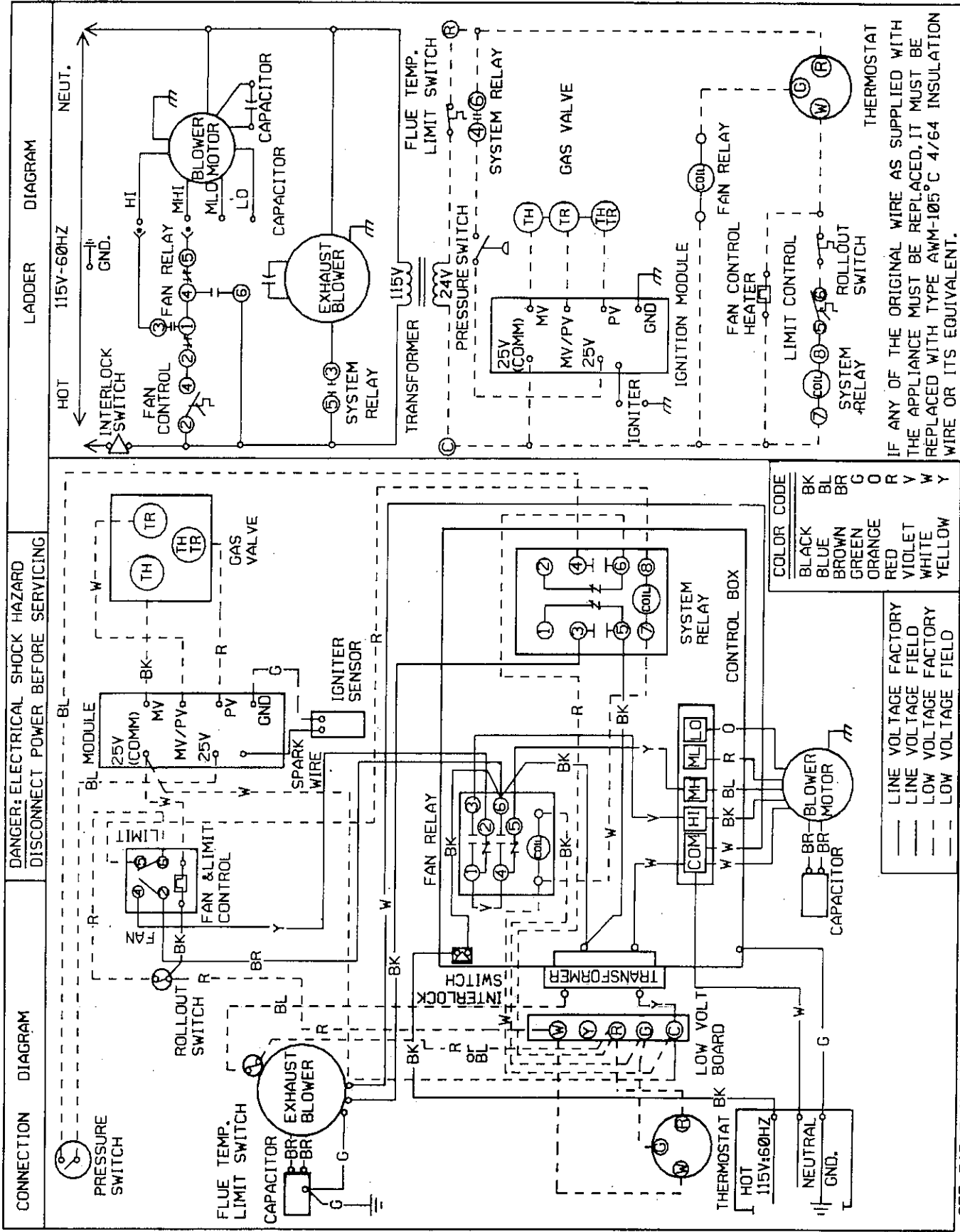
* SEE TABLE IN MANUAL FOR C.F.M. VS. E.S.P. TO DETERMINE PROPER HEATING AND COOLING SPEED CONNECTIONS

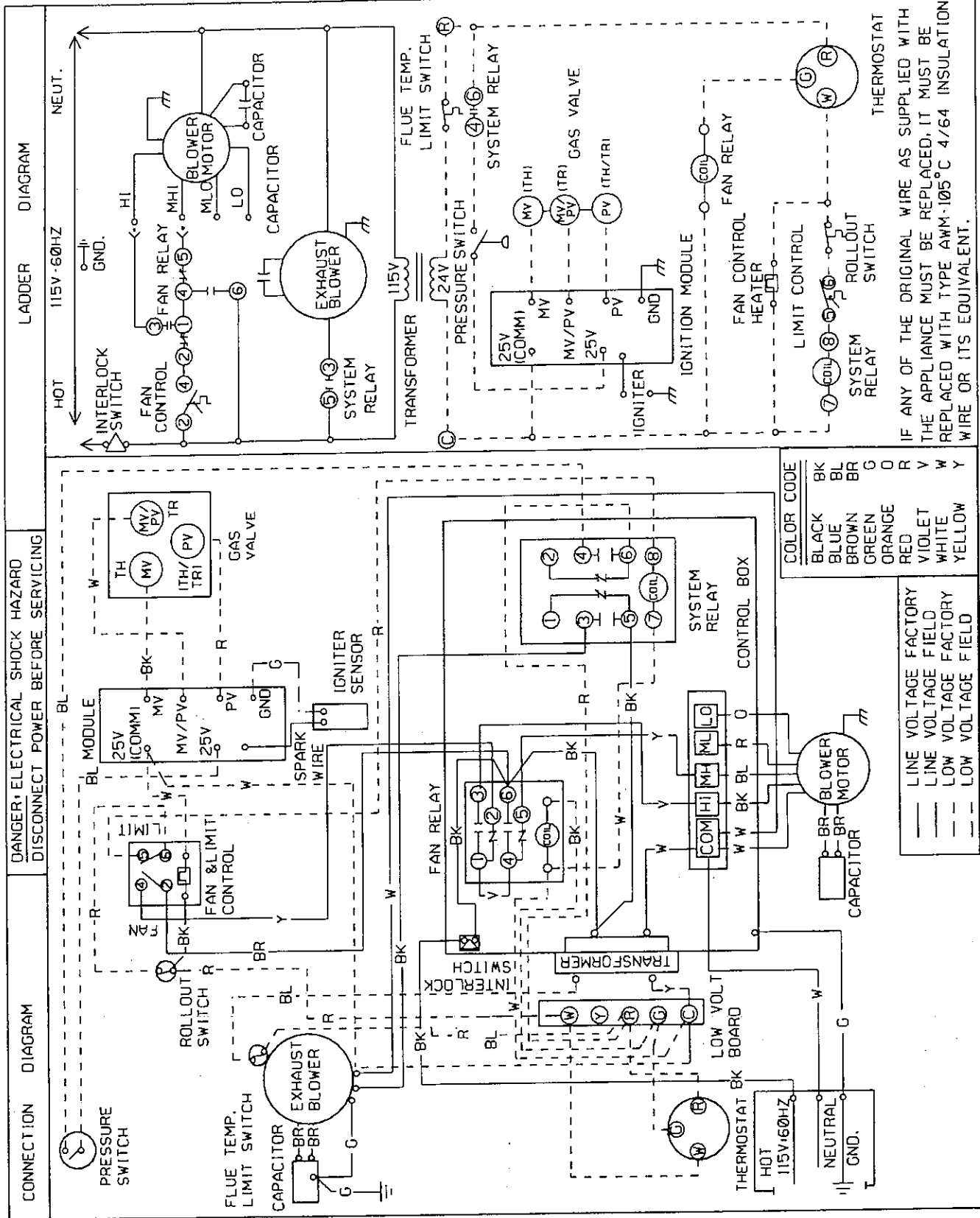
1003900



IF ANY OF THE ORIGINAL WIRE AS SUPPLIED WITH THE APPLIANCE MUST BE REPLACED, IT MUST BE REPLACED WITH TYPE AW-105 °C 4/64 INSULATION WIRE OR ITS EQUIVALENT.

SEE TABLE IN MANUAL FOR C.F.M. VS. E.S.P. TO DETERMINE PROPER HEATING AND COOLING SPEED CONNECTIONS. 1006042-A





IF ANY OF THE ORIGINAL WIRE AS SUPPLIED WITH THE APPLIANCE MUST BE REPLACED, IT MUST BE REPLACED WITH TYPE AWM-105°C 4/64 INSULATION WIRE OR ITS EQUIVALENT.

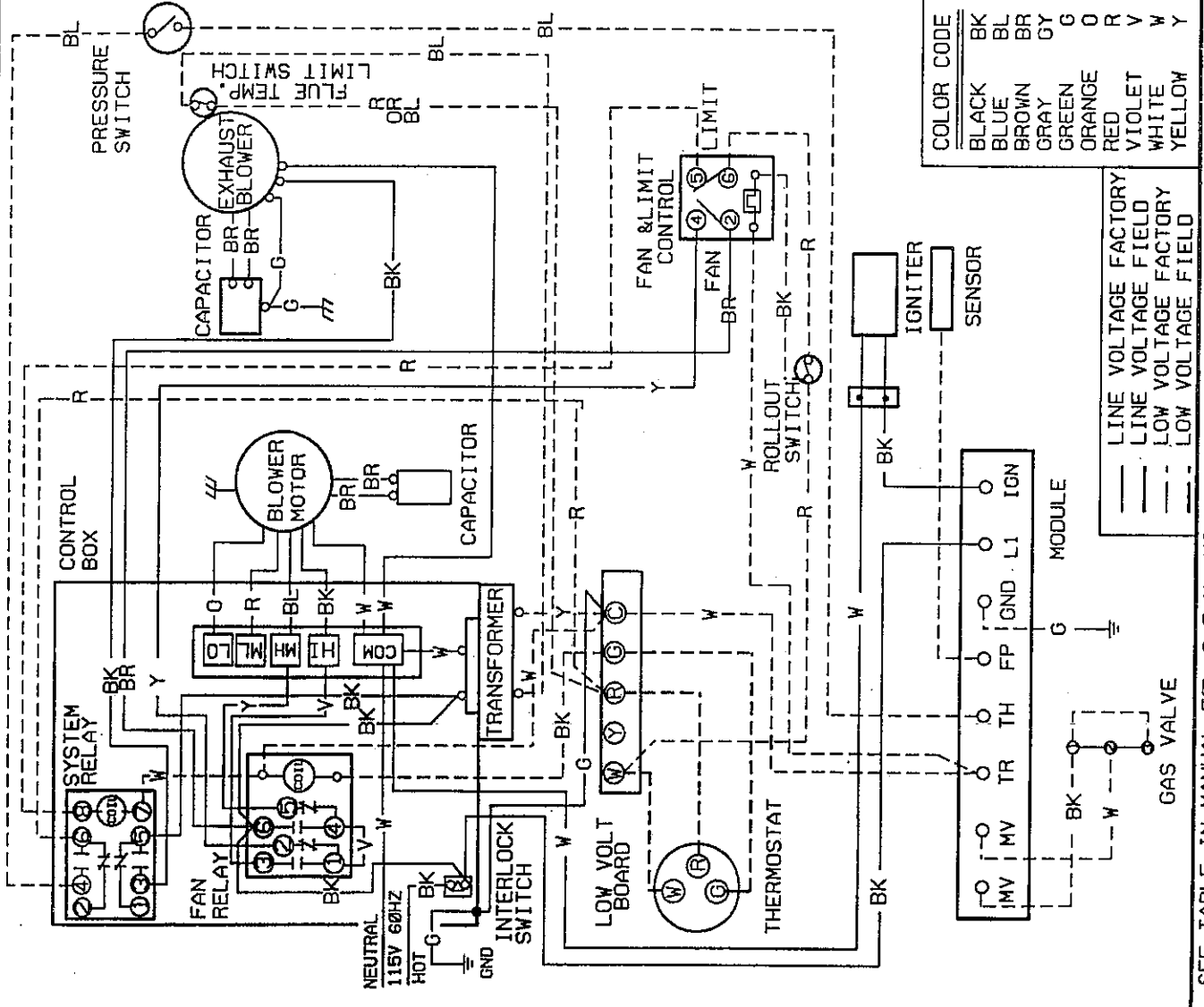
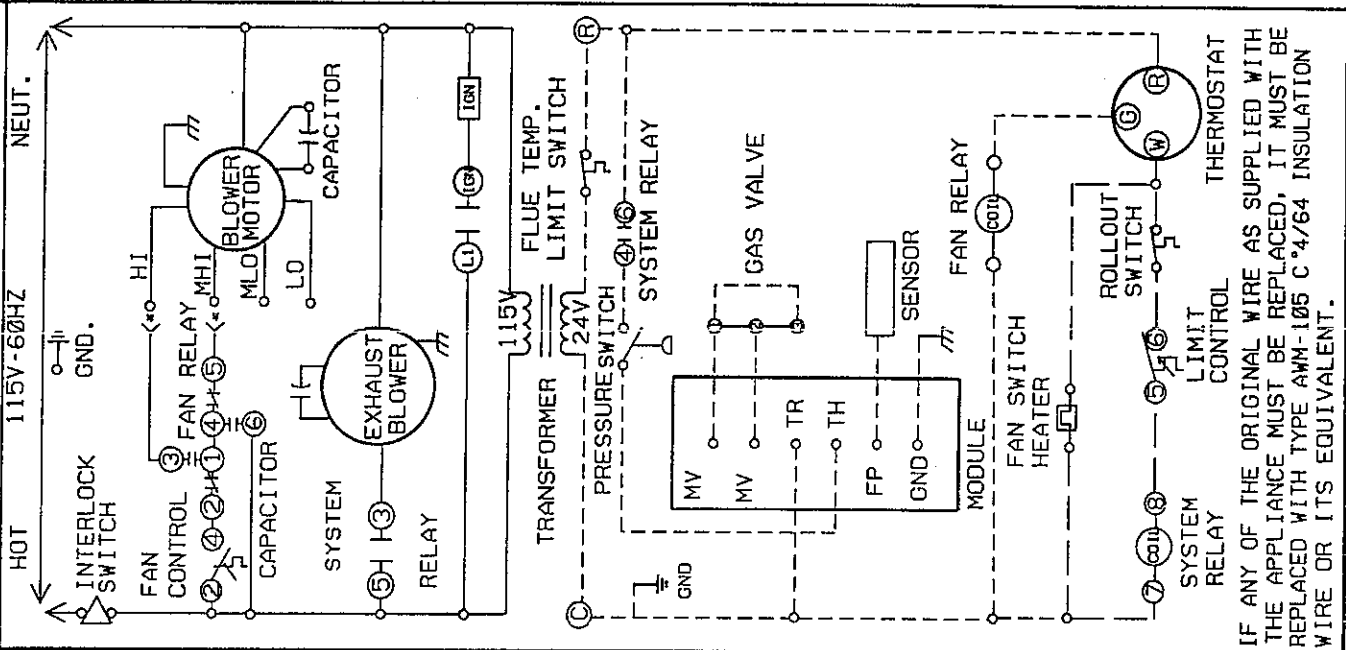
* SEE TABLE ON PAGE 3 FOR C.F.M. VS. E.S.P. TO DETERMINE PROPER HEATING AND COOLING SPEED CONNECTIONS.

1005212

CONNECTION DIAGRAM

LADDER DIAGRAM

DANGER: ELECTRICAL SHOCK HAZARD
DISCONNECT POWER BEFORE SERVICING



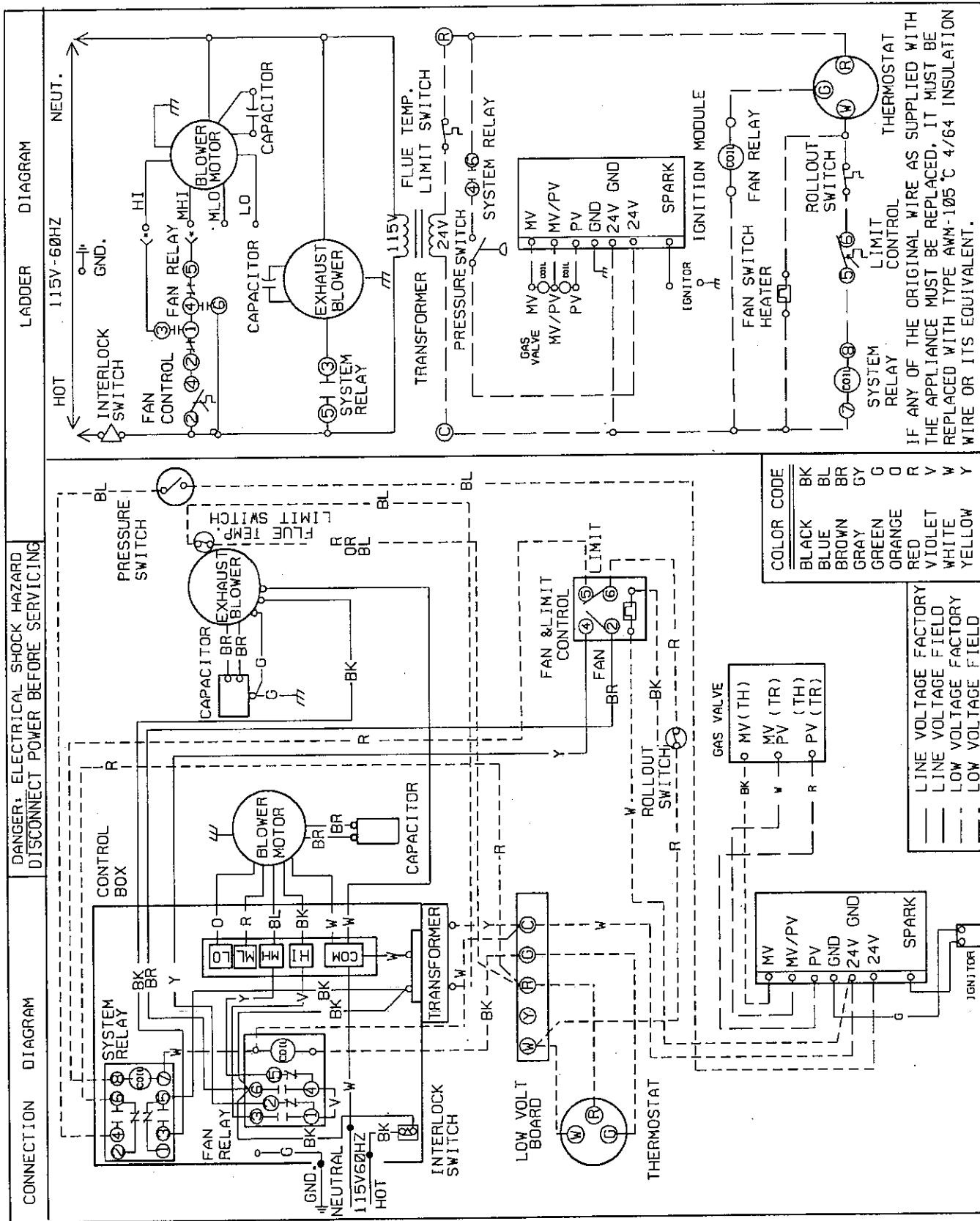
COLOR CODE

| | |
|----|--------|
| BK | BLACK |
| BL | BLUE |
| BR | BROWN |
| GY | GRAY |
| GR | GREEN |
| OR | ORANGE |
| RD | RED |
| VT | VIOLET |
| WH | WHITE |
| YL | YELLOW |

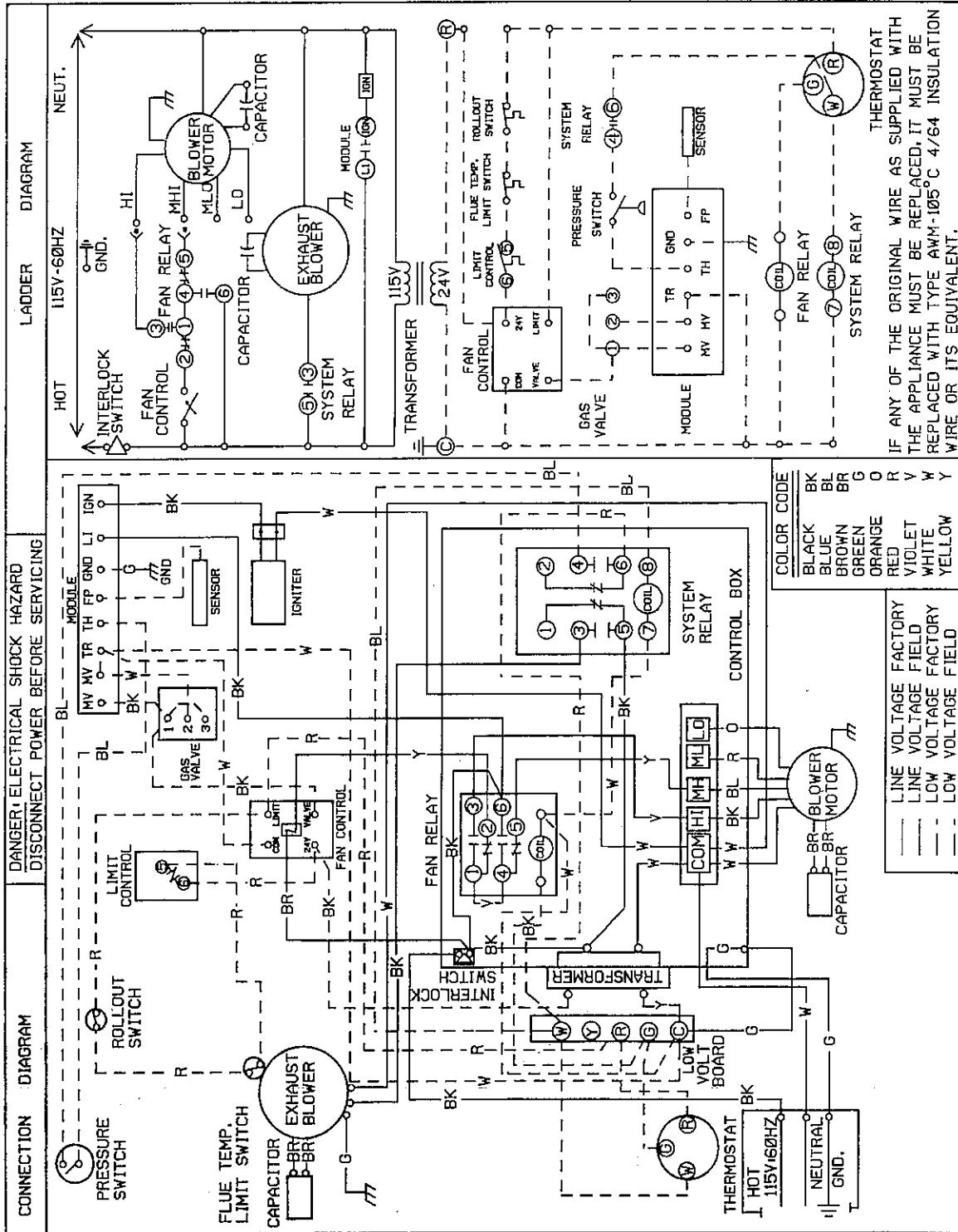
— LINE VOLTAGE FIELD
 - - - LINE VOLTAGE FIELD
 - - - LOW VOLTAGE FIELD
 - - - LOW VOLTAGE FIELD

IF ANY OF THE ORIGINAL WIRE AS SUPPLIED WITH THE APPLIANCE MUST BE REPLACED, IT MUST BE REPLACED WITH TYPE AWG-105 C *4/64 INSULATION WIRE OR ITS EQUIVALENT.

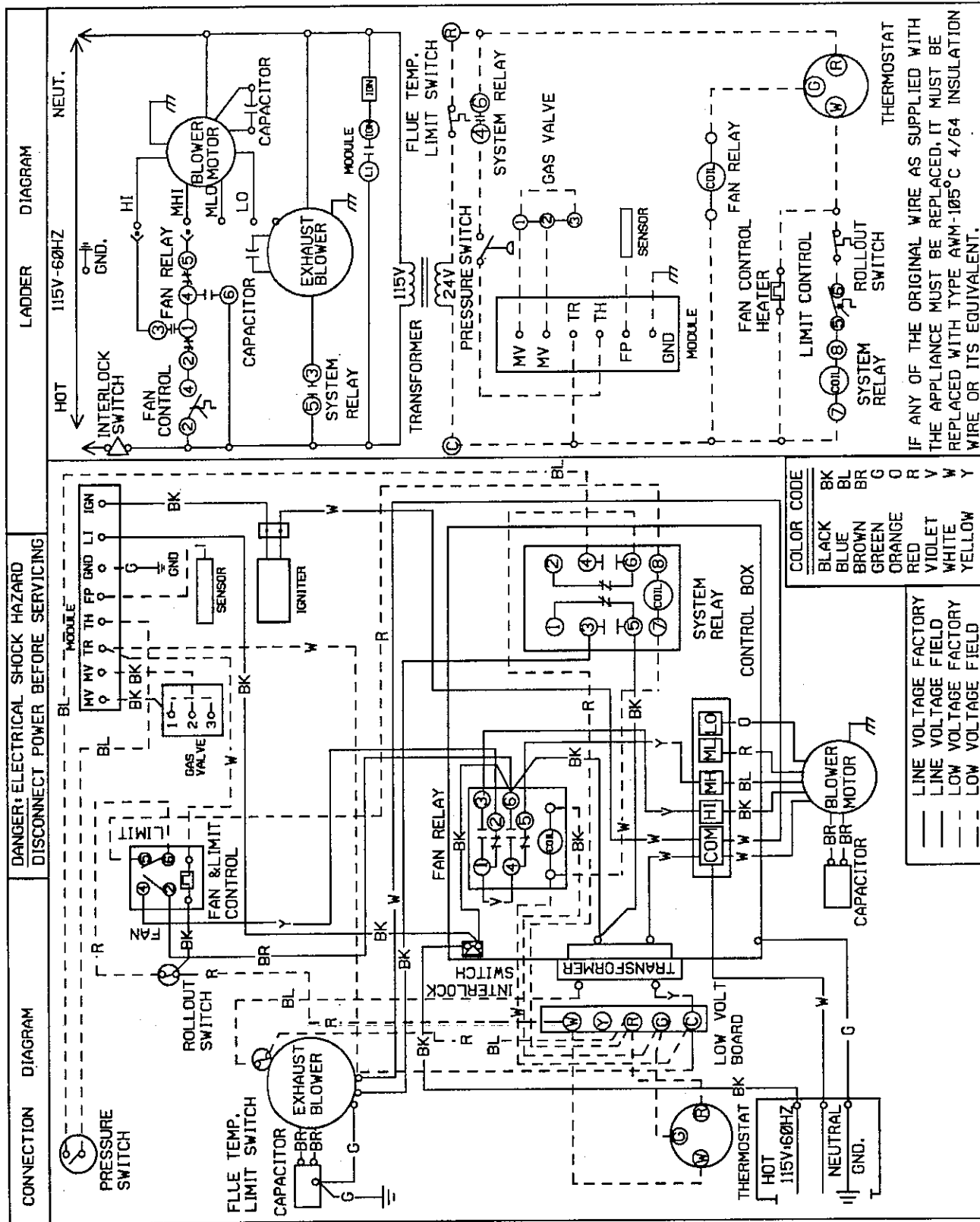
SEE TABLE IN MANUAL FOR C.F.M. VS. E.S.P. TO DETERMINE PROPER HEATING AND COOLING SPEED CONNECTIONS 1006000



*SEE TABLE IN MANUAL FOR C.F.M. VS. E.S.P. TO DETERMINE PROPER HEATING AND COOLING SPEED CONNECTIONS 1007537

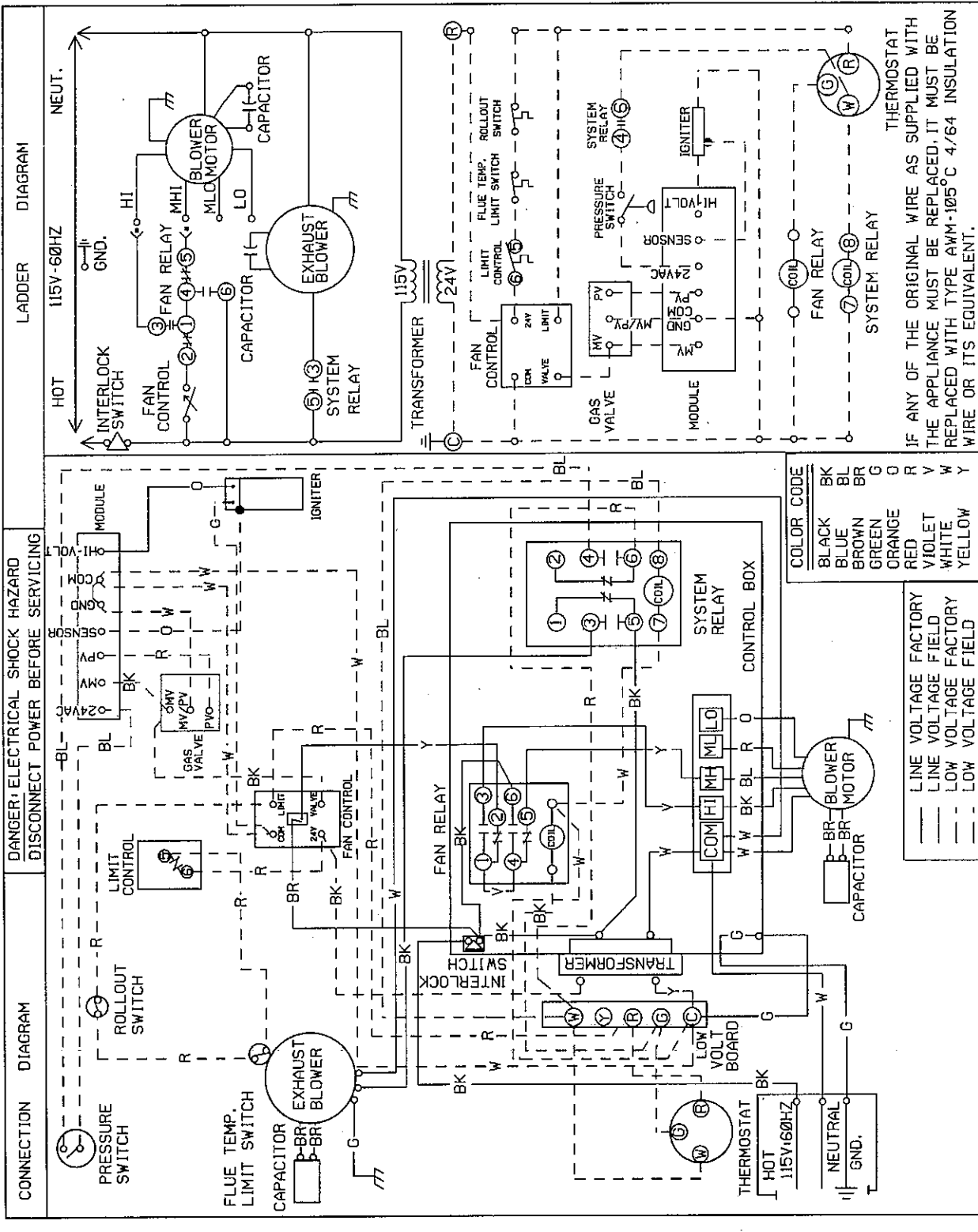


1005169



IF ANY OF THE ORIGINAL WIRE AS SUPPLIED WITH THE APPLIANCE MUST BE REPLACED, IT MUST BE REPLACED WITH TYPE AWG-105°C 4/64 INSULATION WIRE OR ITS EQUIVALENT.

SEE TABLE IN MANUAL FOR C.F.M. VS. E.S.P. TO DETERMINE PROPER HEATING AND COOLING SPEED CONNECTIONS. 1003888



IF ANY OF THE ORIGINAL WIRE AS SUPPLIED WITH THE APPLIANCE MUST BE REPLACED, IT MUST BE REPLACED WITH TYPE AW-M-105°C 4/64 INSULATION WIRE OR ITS EQUIVALENT.

COLOR CODE

| | |
|--------|----|
| BLACK | BK |
| BLUE | BL |
| BROWN | BR |
| GREEN | G |
| ORANGE | O |
| RED | R |
| VIOLET | V |
| WHITE | W |
| YELLOW | Y |

| | |
|-------|--------------------|
| — | LINE VOLTAGE FIELD |
| - - - | LINE VOLTAGE FIELD |
| --- | LOW VOLTAGE FIELD |
| --- | LOW VOLTAGE FIELD |

* SEE TABLE IN MANUAL FOR C.F.M. VS. E.S.P. TO DETERMINE PROPER HEATING AND COOLING SPEED CONNECTIONS. 1006043-B

INDEX TECHNICAL SUPPORT MANUALS

Manual Part Number 1005147

Natural Gas Models Upflow

| | |
|-------------|------------|
| NUGK040KF03 | 867.769452 |
| NUGK050MF03 | 867.769412 |
| NUGK050NF03 | 867.769462 |
| NUGK075DG03 | 867.769422 |
| NUGK075DG04 | 867.769423 |
| NUGK075KG03 | 867.769472 |
| NUGK100DH03 | 876.769432 |
| NUGK100DH04 | 876.769433 |
| NUGK100DH05 | 876.769434 |
| NUGK100KH03 | 867.769482 |
| NUGK100KH04 | 867.769483 |
| NUGK100KH05 | 867.769484 |
| NUGK125DK03 | 867.769442 |
| NUGK125KK03 | 867.769492 |

LP Models Upflow

| | |
|-------------|------------|
| NULK050MF03 | 867.779412 |
| NULK075DG03 | 867.779422 |
| NULK075DG04 | 867.779423 |
| NULK100DH03 | 867.779432 |
| NULK100DH04 | 867.779433 |
| NULK100DH05 | 867.779434 |
| NULK125DK03 | 867.779442 |

INDEX TECHNICAL SUPPORT MANUALS

Manual Part Number 1005218

Natural Gas Models Upflow

| | |
|-------------|------------|
| NUGK040KF04 | 867.769453 |
| NUGK040KF05 | 867.769454 |
| NUGK050MF04 | 867.769465 |
| NUGK050MF05 | 867.769426 |
| NUGK050NF04 | 867.769475 |
| NUGK050NF05 | 867.769437 |
| NUGK075DG05 | 867.769487 |
| NUGK075DG06 | 867.769445 |
| NUGK075KG04 | 867.769495 |
| NUGK075KG05 | 867.769474 |
| NUGK100DH06 | 867.769435 |
| NUGK100DH07 | 867.769436 |
| NUGK100KH06 | 867.769485 |
| NUGK100KH07 | 867.769486 |
| NUGK125DK04 | 867.769443 |
| NUGK125DK05 | 867.769444 |
| NUGK125KK04 | 867.769493 |
| NUGK125KK05 | 867.769494 |

LP Models Upflow

| | |
|-------------|------------|
| NULK050MF03 | 867.779412 |
| NULK050MF04 | 867.779413 |
| NULK075DG03 | 867.779422 |
| NULK075DG04 | 867.779423 |
| NULK100DH03 | 867.779432 |
| NULK100DH05 | 867.779434 |
| NULK125DK03 | 867.779442 |
| NULK125DK04 | 867.779443 |

INDEX TECHNICAL SUPPORT MANUALS

Manual Part Number 1005997

Natural Gas Models Upflow

| | |
|-------------|------------|
| NUGK040KF06 | 867.769455 |
| NUGK050MF06 | 867.769415 |
| NUGK050NF06 | 867.769465 |
| NUGK075DG07 | 867.769426 |
| NUGK075KG06 | 867.769475 |
| NUGK100DH08 | 867.769437 |
| NUGK100KH08 | 867.769487 |
| NUGK125DK06 | 867.769445 |
| NUGK125KK06 | 867.769495 |

LP Models Upflow

| | |
|-------------|------------|
| NULK050MF05 | 867.779414 |
| NULK075DG05 | 867.779424 |
| NULK100DH06 | 867.779435 |
| NULK125DK05 | 867.779444 |

Manual Part Number 1006034

Natural Gas Models Upflow

| | |
|-------------|------------|
| NUGS050AF01 | 867.769050 |
| NUGS075AG01 | 867.769060 |
| NUGS100AH01 | 867.769070 |
| NUGS125AK01 | 867.769080 |

LP Models Upflow

| | |
|-------------|------------|
| NULS050AF01 | 867.779050 |
| NULS075AG01 | 867.779060 |
| NULS100AH01 | 867.779070 |
| NULS125AK01 | 867.779080 |

INDEX TECHNICAL SUPPORT MANUALS

Manual Part Number 1006412

Natural Gas Models Upflow

| | |
|-------------|------------|
| NUGS050AF01 | 867.769050 |
| NUGS075BG01 | 867.769061 |
| NUGS100BH01 | 876.769071 |
| NUGS125AK01 | 867.769080 |

LP Models Upflow

| | |
|-------------|------------|
| NULS050AF01 | 867.779050 |
| NULS075BG01 | 867.779061 |
| NULS100BH01 | 867.779071 |
| NULS125AK01 | 867.779080 |

Manual Part Number 1007200

Natural Gas Models Upflow

| | |
|-------------|------------|
| NUGK040KF06 | 867.769455 |
| NUGK050MF06 | 867.769415 |
| NUGK050NF06 | 867.769465 |
| NUGK075DG07 | 867.769426 |
| NUGK075KG06 | 867.769475 |
| NUGK100DH09 | 867.769438 |
| NUGK100KH09 | 867.769488 |
| NUGK125DK07 | 867.769446 |
| NUGK125KK07 | 867.769496 |

LP Models Upflow

| | |
|-------------|------------|
| NULK050MF05 | 867.779414 |
| NULK075DG05 | 867.779424 |
| NULK100DH06 | 867.779435 |
| NULK125DK06 | 867.779445 |

Manual Part Number 1007213

Natural Gas Models Upflow

| | |
|-------------|------------|
| NUGS050AF02 | 867.769051 |
| NUGS075BG02 | 867.769062 |
| NUGS100BH02 | 867.769072 |
| NUGS125AK02 | 867.769081 |

LP Models Upflow

| | |
|-------------|------------|
| NULS050AF02 | 867.779051 |
| NULS075BG02 | 867.779062 |
| NULS100BH02 | 867.779072 |
| NULS125AK02 | 867.779081 |

INDEX TECHNICAL SUPPORT MANUALS

Manual Part Number 1007516

Natural Gas Models Upflow

NUGK040KF07
NUGK050MF07
NUGK050NF07
NUGK075DG08
NUGK075KG07
NUGK100DH11
NUGK100KH11
NUGK125DK08
NUGK125KK08

LP Models Upflow

NULK050MF06
NULK075DG06
NULK100DH07
NULK125DK07

Manual Part Number 1007567

Natural Gas Models Upflow

NUGS050AF03
NUGS075BG03
NUGS100BH03
NUGS125AK03

LP Models Upflow

NULS050AF03
NULS075BG03
NULS100BH03
NULS125AK03

INDEX TECHNICAL SUPPORT MANUALS

Manual Part Number 1004542

Natural Gas Models Counterflow

| | | |
|-------------|-------|------------|
| NDGK040KF03 | ..... | 867.769502 |
| NDGK050DF03 | ..... | 867.769167 |
| NDGK050KF03 | ..... | 867.769512 |
| NDGK075DF03 | ..... | 867.769177 |
| NDGK075KF03 | ..... | 867.769522 |
| NDGK100DG03 | ..... | 867.769182 |
| NDGK100KG03 | ..... | 867.769532 |
| NDGK125DK03 | ..... | 867.769192 |
| NDGK125KK03 | ..... | 867.769542 |

LP Models Counterflow

| | | |
|-------------|-------|------------|
| NDLK050DF03 | ..... | 867.779512 |
| NDLK075DF03 | ..... | 867.779522 |
| NDLK100DG03 | ..... | 867.779532 |
| NDLK125DK03 | ..... | 867.779542 |

Manual Part Number 1005332

Natural Gas Models Counterflow

| | | |
|-------------|-------|------------|
| NDGK040KF04 | ..... | 867.769503 |
| NDGK050DF04 | ..... | 867.769168 |
| NDGK050KF04 | ..... | 867.769513 |
| NDGK075DF04 | ..... | 867.769178 |
| NDGK075KF04 | ..... | 867.769523 |
| NDGK100DG04 | ..... | 867.769183 |
| NDGK100KG04 | ..... | 867.769533 |
| NDGK125DK04 | ..... | 867.769193 |
| NDGK125KK04 | ..... | 867.769543 |

LP Models Counterflow

| | | |
|-------------|-------|------------|
| NDLK075DF04 | ..... | 867.779513 |
| NDLK075DF04 | ..... | 867.779523 |
| NDLK100DG04 | ..... | 867.779533 |
| NDLK125DK04 | ..... | 867.779543 |

INDEX TECHNICAL SUPPORT MANUALS

Manual Part Number 1005998

Natural Gas Models Counterflow

| | | |
|-------------|-------|------------|
| NDGK040KF05 | ..... | 867.769504 |
| NDGK050DF05 | ..... | 867.769169 |
| NDGK050KF05 | ..... | 867.769514 |
| NDGK075DF05 | ..... | 867.769179 |
| NDGK075KF05 | ..... | 867.769524 |
| NDGK100DG05 | ..... | 867.769184 |
| NDGK100KG05 | ..... | 867.769534 |
| NDGK125DK04 | ..... | 867.769193 |
| NDGK125KK04 | ..... | 867.769543 |

LP Models Counterflow

| | | |
|-------------|-------|------------|
| NDLK050DF05 | ..... | 867.779514 |
| NDLK075DF05 | ..... | 867.779524 |
| NDLK100DG05 | ..... | 867.779534 |
| NDLK125DK04 | ..... | 867.779543 |

Manual Part Number 1006984

Natural Gas Models Counterflow

| | | |
|-------------|-------|------------|
| NDGK040KF05 | ..... | 867.769504 |
| NDGK050DF05 | ..... | 867.769169 |
| NDGK050KF05 | ..... | 867.769514 |
| NDGK075DF05 | ..... | 867.769179 |
| NDGK075KF05 | ..... | 867.769524 |
| NDGK100DG05 | ..... | 867.769184 |
| NDGK100KG05 | ..... | 867.769534 |
| NDGK125DK04 | ..... | 867.769193 |
| NDGK125KK04 | ..... | 867.769543 |

LP Models Counterflow

| | | |
|-------------|-------|------------|
| NDLK050DF05 | ..... | 867.779514 |
| NDLK075DF05 | ..... | 867.779524 |
| NDLK100DG05 | ..... | 867.779534 |
| NDLK125DK04 | ..... | 867.779543 |

INDEX TECHNICAL SUPPORT MANUALS

Manual Part Number 1007190

Natural Gas Models Counterflow

| | | |
|-------------|-------|------------|
| NDGK040KF05 | ..... | 867.769504 |
| NDGK050DF05 | ..... | 867.769169 |
| NDGK050KF05 | ..... | 867.769514 |
| NDGK075DF06 | ..... | 867.769670 |
| NDGK075KF06 | ..... | 867.769525 |
| NDGK100DG05 | ..... | 867.769184 |
| NDGK100KG05 | ..... | 867.769534 |
| NDGK125DK04 | ..... | 867.769193 |
| NDGK125KK04 | ..... | 867.769543 |

LP Models Counterflow

| | | |
|-------------|-------|------------|
| NDLK050DF05 | ..... | 867.779514 |
| NDLK075DF06 | ..... | 867.779525 |
| NDLK100DG05 | ..... | 867.779534 |
| NDLK125DK04 | ..... | 867.779543 |

Manual Part Number 1007542

Natural Gas Models Counterflow

NDGK040KF06
NDGK050DF06
NDGK050KF06
NDGK075DF07
NDGK075KF07
NDGK100DG07
NDGK100KG06
NDGK125DK05
NDGK125KK05

LP Models Counterflow

NDLK050DF06
NDLK075DF07
NDLK100DG07
NDLK125DK05