

# 90-95% PLUS GAS FURNACES: GAS CONVERSION KIT INDEX NATURAL TO LP GAS RXGJ-

These instructions also contain information pertaining to the selection of L.P. orifices at altitude.

**▲ Recognize this symbol as an indication of Important Safety Information!**

## **▲ WARNING**

**FURNACES USED ON LP GAS MUST BE EQUIPPED WITH 100% SAFETY SHUT-OFF CONTROLS. CONVERSION WITH THE CORRECT KIT WILL MEET THIS SAFETY REQUIREMENT. FAILURE TO USE THE PROPER KIT CAN CAUSE IMPROPER FURNACE OPERATION RESULTING IN FIRE, EXPLOSION, PERSONAL INJURY OR DEATH.**

The conversion of the Air Conditioning Division furnaces must be made by a qualified service professional. Use the following conversion kits only on the furnace model and gas control systems for which they are shown. If you do not find your exact furnace model number and Gas Code in the kit selection chart, contact your distributor or manufacturer for help in verifying the correct kit selection for your equipment. **Do not substitute** kits or kit components.

## **HOW TO IDENTIFY THE CONTROL SYSTEM CODE ON THE FURNACE TO BE CONVERTED**

The model number and the control system code on the furnace to be converted are required to select the proper conversion kit. This information is located on the rating plate of the furnace in the upper right corner just below the date of manufacture. The control system code also referred to the gas code designates the control system as applied by the manufacturer and the type gas it was manufactured to burn.

Control system codes outlined below represent the gas valve, control board, and igniter for each 2 character gas code.

## **CONTROL SYSTEMS**

- JC) HONEYWELL VR8215T (60-104158-01) UTEC ELECTRONIC CONTROLS 1194-200 (62-104058-02), PSC DIRECT SPARK IGNITOR (62-24141-05)
- JD) WHITE-RODGERS 36S56-504 (60-101921-05) UTEC ELECTRONIC CONTROLS 1195-300 (62-104059-01), PSC DIRECT SPARK IGNITOR (62-24141-05)
- JE) WHITE-RODGERS 36J56-504 (60-101921-05) HONEYWELL S9233F2019 (62-104061-01), PSC DIRECT SPARK IGNITOR (62-24141-05)
- JR) WHITE-RODGERS 36J23-502 (60-103901-01), UTEC ELECTRONIC CONTROLS 1194-200 (62-104058-02), PSC DIRECT SPARK IGNITOR (62-24141-05)
- KA) WHITE-RODGERS 36J23-502 (60-103901-01), UTEC ELECTRONIC CONTROLS 1194-250 (62-105217-01), RSE DIRECT SPARK IGNITOR (62-24141-05)
- KD) WHITE-RODGERS 36J56-504 (60-101921-05), UTEC ELECTRONIC CONTROLS 1095-300 (62-106321-01), DIRECT SPARK IGNITOR (62-24141-05)
- KG) WHITE-RODGERS 36J56-504 (60-101921-05), HONEYWELL S9233F2022 (62-104061-04), PSC DIRECT SPARK IGNITOR (62-24241-05)

## **EXAMPLE: CONTROL SYSTEM CODE**

The control system code is "JC" from the list above. The control system in the furnace contains a Honeywell VR8215T Valve manufactured to run natural gas.

With the model number from the rating plate, the control system code, and the type of gas it presently burns, the proper conversion kit can now be selected.

## **EXPLANATION: USING CONVERSION KIT CHART 1**

- STEP 1. Find the control system code letters in the Gas Code Column in the conversion kit chart.
- STEP 2. The type furnace and model number are listed on the left hand column. **IMPORTANT: Verifying the model number of the furnace is a necessity, since there are common control system codes which are used on the 80% & 90 Plus models.**
- STEP 3. By going down in the control system and across in the model number line, the proper kit number can be located.

### **EXAMPLE**

You wish to convert a natural gas furnace model (-)95PA060(-), TZ95MSP060(-), or FF060(-)PS95M from natural gas to LP gas.

Using the information from the first example, the control system code is "JC." Locate the control system code letters "JC" in the Gas Code Column of Chart 1: Conversion Kits - Natural gas to LP gas. Notice the abbreviated model number class in the first column on the left of the chart. Match your model number to the corresponding model class, and find that for U.S./Canadian models an FP38 conversion kit would be used.

## CHART 1: “90-95% MODELS” CONVERSION KITS - NATURAL GAS TO LP GAS

Furnace Model Number			Ignition Type	Stages	Valve Brand	Gas Code	Kit Number U.S./Canadian RXGJ-
(-)92P(-)M*A	TZ92MSP(-)	FF(-)PS92M	DSI	Single	WR, HW	JR, JC	FP38
(-)95P(-)M*A	TZ95MSP(-)	FF(-)PS95M	DSI	Single	HW, WR	JC, JR	FP38
(-)92T(-)M*A	TZ92MSP(-)	FF(-)TS92M	DSI	Single	WR, HW	KA	FP38
(-)95T(A/B)(-)M*A	TZ95MSX-A/B	-	DSI	Single	WR, HW	JC, JR	FP38
(-)95TC(-)M*A	TZ95MSX-C	FF(-)TS95M	DSI	Single	WR, HW	KA	FP38
(-)96P(-)M*A	TZ96MDP(-)	FF(-)PT96M	DSI	Two	WR	JD	FP34
(-)96V(-)M*A	TZ96MDV(-)	FF(-)LT96M	DSI	Two	WR	JE, KG	FP34
(-)96T(-)M*A	TZ96MDX(-)	FF(-)TT96M	DSI	Two	WR	KD	FP34

## BURNER ORIFICE SIZES – LP GAS

LP Gas is a manufactured gas that has consistent heating value across most regions. The NFGC guidelines are used with the following exception: The recommended LP Gas high altitude orifice selections differ slightly in that the NFGC LP orifice chart, as they are not accurate for Rheem products. The National Fuel Gas Code LP orifices are based on an 11" of water column pressure at the orifice, which differs from Rheem products that use 10" of water column at the orifice. This difference requires a deviation from the NFGC orifice size recommendations. The Sea Level input should still be reduced by 4% per thousand ft. and the orifice size must be selected based on the reduced input selection chart below.

**Orifice Ordering Information: Orifice sizes are selected by adding the 2-digit drill size required in the orifice part number. Drill sizes available are 39 through 64; metric size available 1.10mm (-90): Orifice Part Number 62-22175-(drill size).**

**Example 1: #60 drill size required – Part # 62-22175-60 Example 2: 1.10mm drill size orifice required – Part # 62-22175-90**

For U.S. and Canada L.P. Gas Orifice Drill Size (4% per 1000 ft. De-Rate) 90 Plus Burner Input (per burner) 14,000 BTU @ Sea Level		
Altitude	Input (per burner) 14000	Orifice Size
0 to 2000 ft.	14000	1.10 mm
2001 to 3000	12880	#57
3001 to 4000	12320	#58
4001 to 5000	11760	#59
5001 to 6000	11200	#60
6001 to 7000	10640	#61
7001 to 8000	10080	#62
8001 to 9000	9525	#63
9001 to 10000	8960	#64