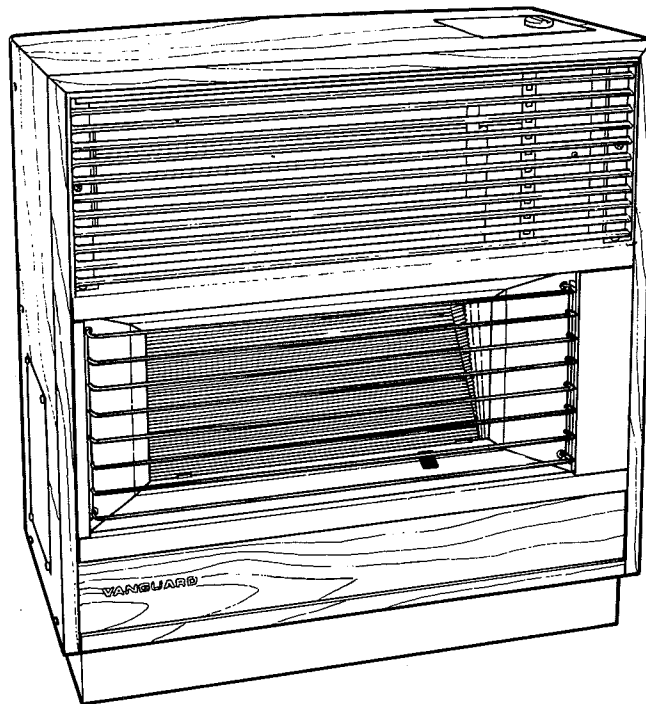


# Service Manual

Unvented Gas Space Heater

NV2500A  
LV2500A



## WARNING

- Installation and repair should be done by a qualified service person.  
The room heater should be inspected before use and at least annually by a professional service person.
- If you smell gas;
  1. Open windows.
  2. Turn off main gas supply.
  3. DO NOT touch electrical switch.
  4. Extinguish any open flame.
  5. Immediately call your gas supplier.

## INSTALLATION

This installation must conform with local codes. In the absence of local codes, the installation must conform with American National Standard, National Gas Fuel Code, ANSI Z223. 1. 1980

# FEATURES

## SAFETY DEVICES

This heater is equipped with an Oxygen Depletion Safety Shutoff system usually called ODS, combined with a pilot safety shutoff valve. The system is a federally required feature for unvented space heaters that turns off the heater if not enough fresh air is available. Should the ODS pilot burner become extinguished, the main burners as well as the pilot burner gas valve will automatically be turned off at the safety shutoff valve.

## INFRA-RED RAY RADIANT HEAT

This heater utilizes an unique metallic burner design which operates at approximately 1,550 degree F. The design generates infra-red radiant light. The infra-red light heats objects through atmospheric air so that you have an instant warmth when the heater is operating.

## PIEZO ELECTRIC IGNITION SYSTEM

For lighting purpose, piezo electric ignition system is incorporated in this heater which requires no matches, batteries or other combustion sources.

## 2 STEP HEAT CONTROL

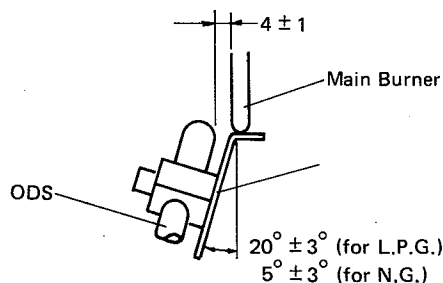
This heater has 2 heat settings, which allow you to select the heat level you desire.

# SPECIFICATIONS

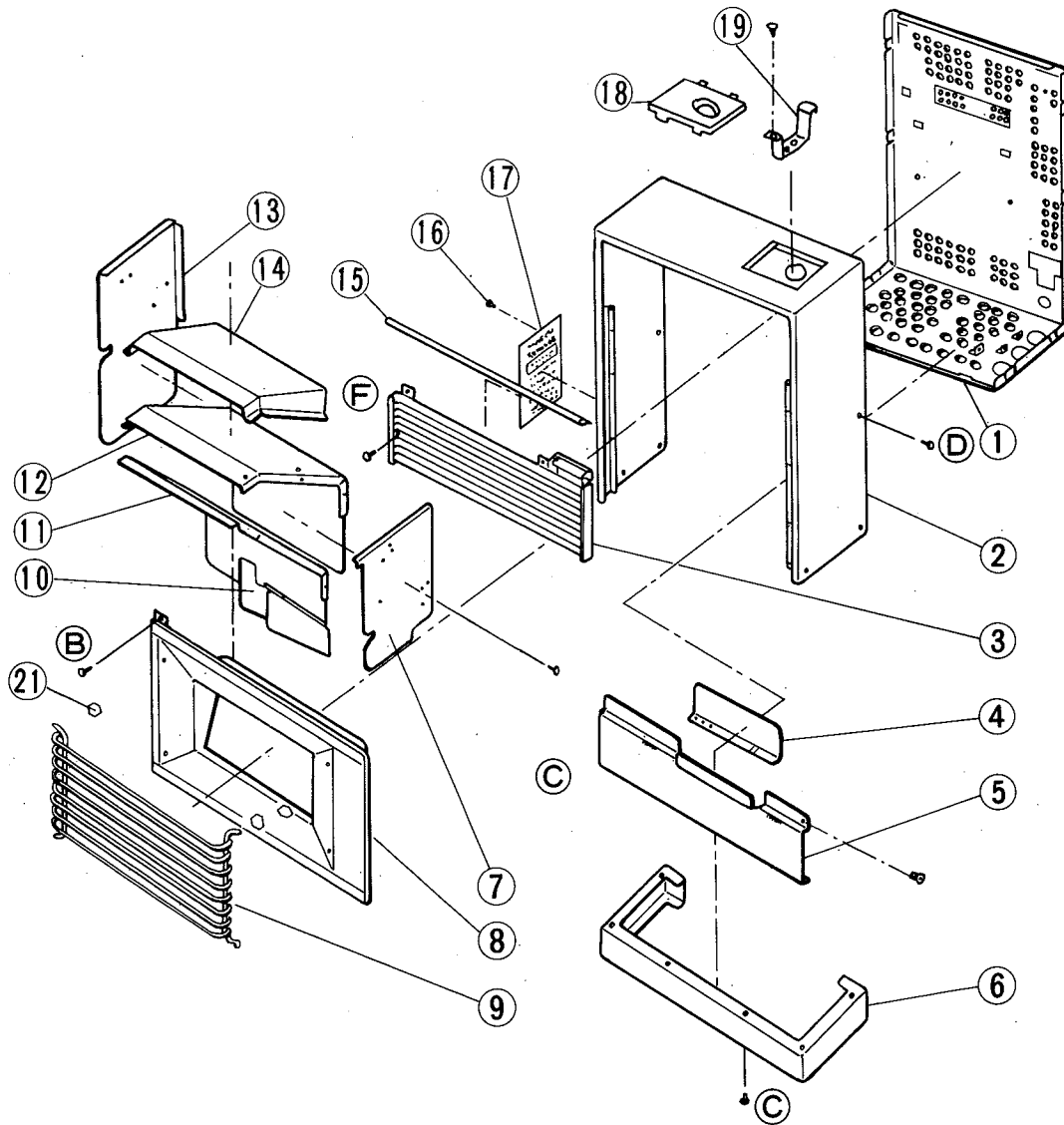
MODEL		NV2500A	LV2500A
Gas Type		Natural Gas	L.P. Gas
Heat Output	High	25000 Btu/h	25000 Btu/h
	Low	14500 Btu/h	14500 Btu/h
Jet Orifice of Main Burner	Upper	ø1.75	ø1.05
	Lower	ø1.95	ø1.25
Gas Regulator (factory set pressure) *		3.0" W.C.	8.0" W.C.
Aeration Control (factory setting)*		1	3
Inlet Gas Pressure(maximum)		7.0" W.C.	14.0" W.C.
Inlet Gas Pressure (Minimum)		5.0" W.C.	9.0" W.C.
Manifold pressure Tap		1/8 N.P.T.	
Ignition System		Piezo-electric	
Heat Control		2 Heat setting	
Gas Connection Inlet		1/2-N.P.T. (Secondary pressure detection port 1/8-N.P.T.)	
Overall Dimensions (H x W x D)		22" x 21.7" x 8.3"	
Weight		30lbs.	

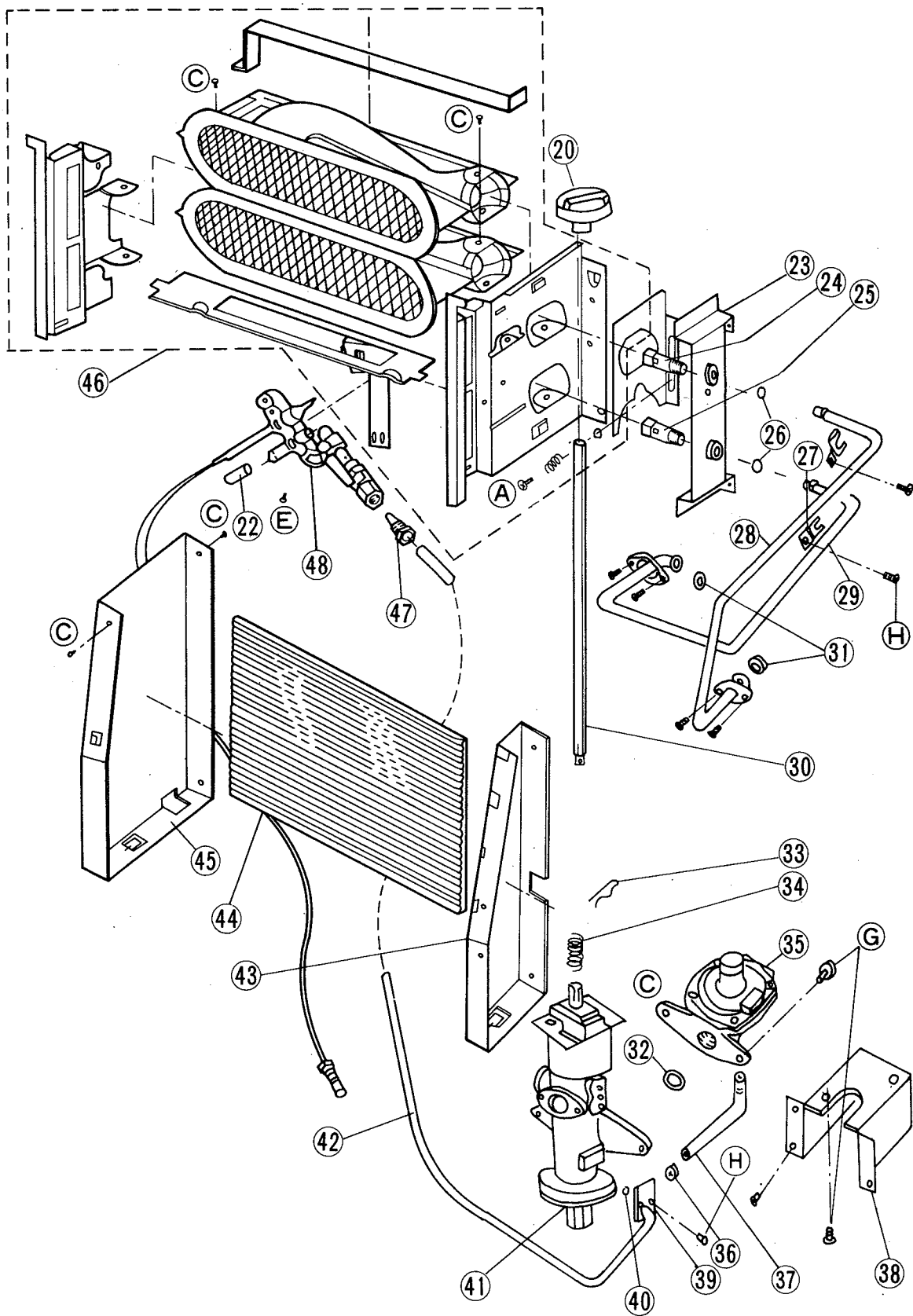
\*Do not attempt adjustments

## ODS Setting Position



# REPAIR PARTS LIST





## PARTS LIST

Ref. No.	Parts name	Parts No.	Pcs/set		Remarks
			NV2500A	LV2500A	
1	Case back	KGS5013Z3PA1	1	1	
2	Cabinet	KGS5010Z3PA1	1	1	
3	Exhaust port complete	KGS507Z-3FA0	1	1	
4	Front shield	KGS5201Z3PA1	1	1	
5	Front panel	KGS5012Z3PA1	1	—	
6	Base	KGS5016Z3PA1	1	1	
7	Hood(R)	KGS531Z-3FA	1	1	
8	Reflection plate complete	KGS5011Z3PA1	1	1	
9	Dress guard	KGS513Z-3EB0	1	1	
10	Exhaust guide	KGS5512Z3PA1	1	1	
11	Back hood panel	KGS5511Z3PA1	1	1	
12	Upper hood panel	KGS528Z-3FA	1	1	
13	Hood(L)	KGS530Z-3FA	1	1	
14	Hood shield	KGS532Z-3EA	1	1	
15	Bar C	KGS508Z-3EA	1	1	
16	Rivet	KGF215P-04A2	2	2	
17	Warning plate	KGS557Z-3DB	1	1	
18	Instruction panel	KGS5100Z3PA1	1	1	
19	Shaft holder	KGS5015Z3PA1	1	1	
20	Control knob	KGS5101Z3PA1	1	1	
21	Push nut	KGS575Z-3FB	2	2	
22	Glass tube	KGS7510Z3PA1	1	1	
23	Orifice joint block	KGS7600Z3PA0	1	1	
24	Upper orifice	KGX1175-96C	1	—	
	Upper orifice	KGX1105-96A	—	1	

Ref. No.	Parts name	Parts No.	Pcs/set		Remarks
			NV2500A	LV2500A	
25	Lower orifice	KGX1195-96C	1	—	
	Lower orifice	KGX1125-96B	—	1	
26	O-ring(p8)	KGX508P-25A	2	2	
27	Pipe panel	KGS7506Z3PA1	2	2	
28	Main pipe(B)	KGS7503Z3PA0	1	1	
29	Main pipe	KGS7501Z3PA0	1	1	
30	Knob shaft	KGS5102Z3PA1	1	1	
31	Gasket	KGS702P-15A	2	2	
32	O-ring (p17)	KGS517P-25A	1	1	
33	Snap pin	KGS312P-49A	1	1	
34	Spring	KGX171X-42A	1	1	
35	Gas regulator	KGS7300Z3PA0	—	1	
	Gas regulator	KGS7310Z3PA0	1	—	
36	Hexagon socket screw	KGS330Z-3DA	1	1	
37	Manifold pressure tap	KGS7701Z3PA0	1	1	
38	Valve support	KGS5014Z3PA1	1	1	
39	ODS pipe panel	KGS7509Z3PA1	1	1	
40	O-ring 3/16	AN6227B3	1	1	
41	Gas valve	KGS7100Z3PA0	1	1	
42	ODS pipe	KGS7508Z3PA1	1	1	
43	Burner support(R)	KGS524Z-3DB	1	1	
44	Glass	KGS304Z-3EA	1	1	
45	Burner support(L)	KGS5017Z3PA1	1	1	
46	Main burner assembly	KGS348Z-3FA0	—	1	
	Main burner assembly	KGS349Z-3FA0	1	—	
47	ODS nut(B)	KGS205Z-2JA	1	1	
48	ODS assembly(N)	KGS272Z-3DA0	1	—	
	ODS assembly (P)	KGS250Z-3DA0	—	1	

Ref. No.	Parts name	Parts No.	Pcs/set		Remarks
			NV2500A	LV2500A	
A	⊕4×12 screw	XTW4+12E	1	1	
B	⊕4×8 screw	XTN4+8BFZ	3	3	
C	⊕4×8 screw	XTN4+8J	18	18	
D	⊕4×10 screw	XTC4+10BFZ	8	8	
E	⊕M4×14 screw	XYN4+C14	1	1	
F	⊕3×8 screw	XTW3+8DFZ	2	2	
G	⊕5×10 screw	XSC5+8J	4	4	
H	⊕M4×8 screw	XYN4+C8	8	8	

## REPLACEMENT PARTS

**NOTE:** In order for customer to receive credit for parts replaced under warranty, only original replacement parts must be used.

- 1. In Warranty** — Contact authorized dealers of this product. If they are unable to supply original replacement part(s), call DESA International at 1-800-323-5190. Be prepared to indicate name, address, model number, how heater was malfunctioning, type of gas used and purchase date. In most cases, the defective part will be requested to be returned to the factory.
- 2. Non-warranty** — Contact authorized dealers of this product. If they are unable to supply original replacement part(s), call DESA International at 1-502-781-9600. Be prepared to indicate model number and replacement part number.