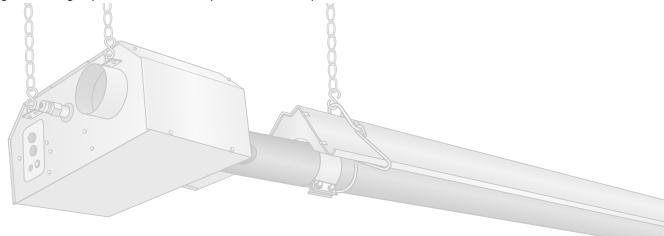
Tube Heater Packing List

Heaters & Accessories

Effective 09-01-16

mm-dd-yy

All orders are subject to acceptance by Brant Radiant Heaters Limited, Paris, Ontario at prices in effect at date of shipment. All prices are F.O.B. Paris, Ontario. All Province, Federal, or Municipal taxes in effect at the time of shipment or imposed at any future time on our products shall be the responsibility of the customer. We reserve the right to change specifications on our products without prior notice to the customer.



Gas-Fired, Low Intensity, Infrared Tube Heaters

15% restocking charge on returned items, within 30 days from day of sale.

34 Scott Ave., Paris, Ontatio N3L 3R1 Phone: 519-442-7823 • Fax: 519-442-7321 www.brantradiant.com • sales@brantradiant.com

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Replacement parts information is available online at www.reverberray.com/parts and in the product manual.

The following key symbols (found within) designate the following:

SYMBOL	DESCRIPTION
<u>Underlined Item</u>	New item or price, from prior accessory guide, or heater price sheet.
Part No. in BOLD	An item that has further technical information available, ex.: spec sheet, instructions, etc.

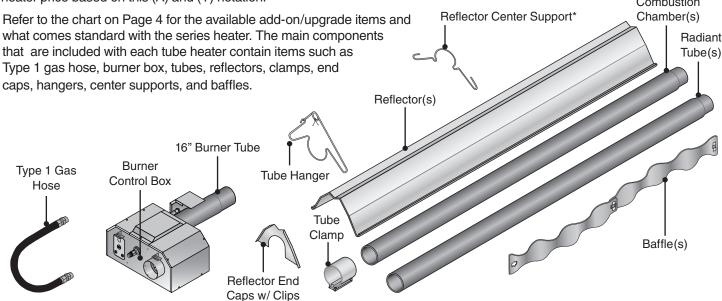
Note: Add-ons must be ordered as a separate line item and tagged to the appropriate heater.

BULK PACK ORDERS Please TAG: Job Name on purchase order to help us be made aware that an order can be bulk packed to destination. 10' skid, charge \$35.00 available on request.

HELPFUL STEPS WHEN PRICING LOW INTENSITY TUBE HEATERS

Step 1: Heater Selection (Pages 3-4)

Refer to the chart on Page 3 for available model heaters based on series, tube length, BTU and gas type. Gas type MUST be indicated on all orders. The Available Models chart denotes each heater model column with a letter (A) or (T) which indicates the combustion chamber tube material for that model. (A) indicates an aluminized combustion tube and (T) indicates a titanium stabilized combustion tube. NOTE: This does not apply for stainless steel model heaters. Be sure to use the correct tube heater price based on this (A) and (T) notation.



Step 2: Accessory Selection (Pages 5-6)

Chain sets (P/N: THCS) or gripple cables (P/N: THGH10) are typically necessary for hanging each heater (refer to page 6 for required quantities). Additional accessories such as 90° elbows, "U" fittings, protective guards, side shields and decorative grills may be used. There are also options to upgrade certain features to stainless steel. Refer to the descriptions of each accessory for further details.

Step 3: Controls Selection (Page 7-8)

Single-stage, two-stage, advanced controls and modulating controls are available. When heaters are common vented or common intake, they MUST be controlled by the same thermostat.

Single-stage heaters are built standard for 120V controls but have options for 24V controls. The most common option is the use of one relay transformer (P/N: R8285B) per 24V thermostat as there are no heater modifications necessary with this option. Another option is to specify the 24-volt add-on (P/N: 24VAO) per heater at time of ordering.

Two-stage heaters are built standard for 24V controls. When using a single heater to a single thermostat on the HL Series and the LD2 Series models, there is no need for additional components because the internal 24V of the heater can power the thermostat. When installing more than one heater onto the same thermostat, one HLRP(B) relay add-on is necessary per heater. Scenarios that have the relays installed will also need one external transformer (P/N: 4000-01V) per thermostat. If the relay add-ons are forgotten or not known at the time of order, there are external panels (refer to page 7) that can be purchased that will allow for multiple heaters to be controlled by the same 24V thermostat.

Modulating heaters have control options for specific needs. Refer to the MP controls section (page 8) and consult the factory if further support is needed.

Step 4: Venting Selection (Page 10)

Sidewall venting accessories include 3", 4", or 6" options. Basic applications should include a sidewall vent kit. When common venting two or more heaters together refer to the dual vent material options.

Step 5: Extended Warranties (Page 10)

All limited warranties are defined in the product insert manual for the particular series of heaters. We have additional extended warranties available on page 11. Please note, extended warranties cover manufacture defects. If you have special circumstances when bidding a job, please contact the factory for pricing support.

LOW INTENSITY TUBE HEATERS

Commercial & Industrial Heaters

SERIES	20 FT.	25 FT.	30 FT.	40 FT. (A)	40 FT. (T)	50 FT. (A)	50 FT. (T)	60 FT.	70 FT.	80 FT.
MP	N/A									N/A
HL2 / HL3		N/A								N/A
DX2 / DX3		N/A								
ST2 / DET3		N/A							N/A	N/A
SE2 / DES3		N/A								N/A

NOTE: See Available Models chart below for combustion chamber tube construction. (A) Aluminized or (T) Titanium.

	AVAILABLE MODELS																																					
MODEL FT-BTU-GAS	20-50 N or P	20-60 N or P	20-65 N or P	20-75 N or P	20-80 N or P	20-100 N or P	25-80 N or P	30-50 N or P*	30-60 N or P	30-65 N or P	30-75 N or P	30-80 N or P	30-100 N or P	30-115 N or P	30-125 N or P	40-50 N or P	40-60 N or P	40-65 N or P	40-75 N or P	40-80 N or P	40-100 N or P	40-115 N or P	40-125 N or P	40-150 N or P	40-175 N or P	50-100 N or P	50-115 N or P	50-125 N or P	50-150 N or P	50-175 N or P	50-200 N or P	60-125 N or P	60-150 N or P	60-175 N or P	60-200 N or P	70-175 N or P	70-200 N or P	80-200 N or P
Comb. Tube	Α	Α	Α	Α	Α	Α	Α	Α	Α	Α	Α	Α	Α	Α	Α	Α	Α	Α	Α	Α	Α	Α	Α	Т	Т	Α	Α	Α	Т	Т	Т	Α	Т	Т	Т	Т	Т	Т
MP							•					•		•						•		•		•			•		•		•		•		•		•	
HL2			•	•	•	•				•	•	•	•		•			•	•	•	•		•	•	•	•		•	•	•	•		•	•	•	•	•	\Box
DX2	•	•		•	•	•		•	•		•	•	•		•	•	•		•	•	•		•	•	•	•		•	•	•	•	•	•	•	•	•	•	•
HL3			•	•						•	•		•		•			•	•		•		•	•	•			•	•	•	•		•	•	•	•	•	Ш
DX3	•	•		•				•	•		•		•		•	•	•		•		•		•	•	•	•		•	•	•	•	•	•	•	•	•	•	•
ST			•	•		•				•	•		•					•	•		•		•	•				•	•	•	•		•	•	•			\square
SE	•	•		•				•	•		•		•		•	•	•		•		•		•	•	•	•		•	•	•	•	•	•	•	•	•	•	•
DET3			•	•						•	•		•					•	•		•		•	•				•	•	•	•		•	•	•			Ш
DES3	•	•		•				•	•		•		•		•	•	•		•		•		•	•	•	•		•	•	•	•	•	•	•	•	•	•	

Stainless Steel Commercial & Industrial Heaters (Harsh Enviroments)

SERIES	20 FT.	30 FT.	40 FT.	50 FT.	60 FT.
HL2-SS					
DX2-SS					

NOTE: See Available Models in chart for combustion chamber tube construction. (3) 304 Stainless Steel or (4) 409 Stainless Steel.

AVAILABLE MODELS												
MODEL FT-BTU-GAS	20-75 N or P	30-75 N or P	30-100 N or P	40-75 N or P	40-100 N or P	40-125 N or P	40-150 N or P	50-100 N or P	50-125 N or P	50-150 N or P	60-125 N or P	60-150 N or P
Comb. Tube	3	3	3	3	3	3	4	3	3	4	3	4
HL2-SS**	•	•	•	•	•	•	•		•	•		•
DX2-SS**	•	•	•	•	•	•	•	•	•	•	•	•

Low BTU/Select Residential Heaters

SERIES	10 FT.	15 FT.	20 FT.	30 FT.
LD2	N/A			
LS2				

* Denotes CSA Residentially Certified LD2 and LS2 Series heaters.

 $\textbf{NOTE} : See \ Available \ Models \ in \ chart \ for \ combustion \ chamber \ tube \ construction. \ (T) \ Titanium.$

	A'	VAIL	AB	LE N	/OD	ELS	}		
MODEL FT-BTU-GAS	10-25 N or P*	10-30 N or P*	10-40 N or P	15-25 N or P*	15-30 N or P*	15-40 N or P*	20-40 N or P*	20-50 N or P	30-50 N or P*
Comb. Tube	Т	Т	Т	Т	Т	Т	Т	Т	Т
LD2						•	•	•	•
LS2	•	•		•	•	•	•	•	•

Low Clearance Heaters

SERIES	30 FT.	40 FT.	50 FT.	60 FT.
CL				
СХ				

NOTE: See Available Models in chart for combustion chamber tube construction. (3) 304 Stainless Steel un coated.

		A	VAI	LA	BLI	ΞМ	OD	EL	s			
MODEL FT-BTU-GAS	30-50 N or P*	30-60 N or P	30-65 N or P	40-50 N or P	40-60 N or P	40-65 N or P	40-75 N or P	40-80 N or P	50-75 N or P	50-80 N or P	50-100 N or P	60-100 N or P
Comb. Tube	3	3	3	3	3	3	3	3	3	3	3	3
CL			•			•	•	•	•	•	•	•
СХ	•	•		•	•		•	•	•	•	•	•

Shipping/Boxing

All models are shipped with 1) 30 in. Type 1 Rubber Hose **RH-1/2 or RH-3/4** and reflector center supports **TP-82** (BR-4IH) for each 10 ft. section. All hangers **TP-19B**(BR-4HGR) are included for 10 ft. center mounts clamps are located directly on pipes **TP-21B** (TP-21). Also a pair of End Cap Relfectors with (8) clips **TP-105** (BR-ECR) and a user manual.

						ΑC	D-O	N / UI
PART NO.		D	ESCR	IPTIO	N		Qua	ntity
SILSEAL	attachi T-stat v to prot site co applica	ol box is ments a wire, po ect the intamina ations. F tandard	ons (i.e eal is painst ces					
OD-KIT	SE2, L when a	.S2, LD: applying	2, CL ar heater	or HL2, nd CX S s outdoo cap. (W	eries. F or. Inclu	or use		
ALUM-AO	black of maxim recom moistu	coated 1 lum effic mended ire lader	l 6ga. alı ciency a d in any n enviro	eel radia uminized nd longd contami nment. I s mode	d steel for evity. His inated on DET3/S	or ighly r T2		
	Requ							
MODEL	10'	20'	30'	40'	50'	60'	70'	80'
STRAIGHT	N/A	5*	6*	7*				

PGF	RADE ITEMS		
	PART NO.	DESCRIPTION	Quantity
]	For 3" Models DB-5EA-SUB	This option substitutes one 10' tube & reflector for two 5' sections. One clamp	
	For 4" Models	and one hanger packed with pipes is	
	5EA-SUB	added to existing accessories supplied. This is ideal for making "U" heaters from	
	"DES/DET" Series CR-5EA-SUB	30', 50' & 70' models. Maximum one per unit, add-on option only.	
_	24-VAO	24V controls for DX/DES3/SE2/LS2/ CX series heaters. Internal relay and transformer for ease of operation to a stand-alone unit.	
-	<u>24-VAOX</u>	Internal 24V relay and connection installed at assembly for DX/DES3/SE2/LS2/CX series for multiple units controlled on one t-stat. External transformer required, see wiring diagram.	
	HLRB	Optional internal relay for HL2 Series heaters. See page 7 for details.	
	HLRP	Optional internal dual relays for HL3 Series heaters. See page 7 for details.	
-	CNG	Models: ≤65,000 Btu-NG and 50,000 Btu-LP. Specify the heater for CNG use and marked on rating plate. Heater is supplied with TP-26K combustion sleeve.	

 $^{^{*}150,000-200,000}$ Btu/h models require one less ALUM-AO.

NOTE: Refer to chart below for add-on & upgrade option availability. See page 9 for stainless steel accessories.

								Α	VAIL	ABL	E OF	PTIO	NS									
MODEL	SILSEAL	OD-KIT	PC-36	24VAO	HLRB / HLRP	5EA-SUB	ALUM-AO	SSCBAO	SSTAO	SSTAO-5	SSRAO	SSRAO-5	SSTRAO	SSTRAO-5	SSC-##	SSB-##	SSE-SS	CWO	EWO	VPWO	Type 1 Hose	GC-50 "Valve"
HL2	0	0	S	S	0	0	S	0	Χ	Х	0	0	Х	Х	0	0	0	0	0	N	S	0
DX2	0	0	S	0	N	0	S	0	Х	X	0	0	X	X	0	0	0	0	0	N	S	0
HL3	N	N	S	S	0	0	S	N	Χ	Χ	0	0	Х	Х	0	0	0	0	0	N	S	0
DX3	N	N	S	0	N	0	S	N	Χ	Х	0	0	X	X	0	0	0	0	0	N	S	0
ST2	0	0	S	S	0	0	0	0	Х	Х	0	0	Х	Х	0	0	0	0	0	N	S	0
SE2	0	0	S	0	N	0	0	0	Х	Х	0	0	Х	Х	0	0	0	0	0	N	S	0
DET3	N	N	S	S	0	0	0	N	Χ	Х	0	0	Х	Х	0	0	0	0	0	N	S	0
DES3	N	N	S	0	N	0	0	N	Х	Х	0	0	Х	Х	0	0	0	0	0	N	S	0
LD2 LS2	0	0	S	S	O N	0	S	0	N N	N N	0	0	N N	N N	N N	N N	0	0	0	N N	S	0
CL	0	0	S	S	0	0	S	0	N	Х	0	0	Х	0	0	0	0	0	0	N	S	0
СХ	0	0	S	0	N	0	S	0	N	Х	0	0	Х	0	0	0	0	0	0	N	S	0
HLV-2	0	N	0	S	S	0	0	0	Х	Х	0	0	Х	Х	0	0	0	0	0	0	S	0
sv	0	N	0	0	N	0	S	0	Х	Х	0	0	X	X	0	0	0	0	0	N	S	0
HL2-SS	S	0	S	S	0	0	N	S	Х	Х	S	0	Х	Х	S	S	0	0	0	N	S	0
DX2-SS	S	0	S	0	N	0	N	S	Χ	Х	S	0	Х	Х	S	S	0	0	0	N	S	0
MP	N	N	S	N	N	0	S	N	Х	Х	0	0	Х	Х	0	0	0	0	0	N	S	0

	OPTIONS KEY
0	Option Available.
N	Option Not Available.
S	Standard Feature.
Х	Available in BTU Range of 75,000-150,000 Only.

IMPORTANT: Specify add-on item at time of order. **Be sure to tag appropriate heater for add-on.**

	EX	TENSION
PART NO.	DESCRIPTION	Quantity
10EA	10 ft. heater extension assembly pack includes ten foot, 4" diameter, 16 gauge, aluminized steel tube with high temperature black coating, ten foot reflector, 4" reflector center support, 4" tube clamp and one 4" hanger.	
20EA	2) 10EAs in one box.	
30EA	3) 10EAs in one box.	
TR-60	5 ft. heater extension assembly. See 10EA for contents and specs. No reflector center support hanger.	
TR-C	Titanium Extention Assembly, ten foot titanium tube ten foot reflector, 4" reflector center support, 4" S.S tube clamp and one 4" hanger.	
A20H	(1) 10EA and (1) TR-C in one box.	
V 3UP	(2) 10EA and (1) TR-C in one box.	

AC	CESSORIES		
	PART NO.	DESCRIPTION	Quantity
	10HRE	10 ft. heater extension assembly pack includes ten foot, 4" diameter, 16 gauge, hot rolled steel tube with blackened appearance, ten foot reflector, 4" reflector center support, 4" tube clamp and one 4" hanger.	
	20HRE	2) 10HREs in one box.	
	30HRE	3) 10HREs in one box.	
	HRE-60	5ft. heater extension assembly. See 10HRE for contents and specs. No reflector center support hanger.	
	R20L	(1) 10EA and (1) 10HRE in one box.	
	R30L	(1) 10EA and (2) 10HRE in one box.	
	R30H	(1) 10EA, (1) TR-C and (1) 10HRE in one box.	
	3" Kits	Consult Factory	

	MISCELLANEOUS HARI	DWARE AC	CESSORIES 4	-INC	1 TUI	BE M	ODE	LS
PART NO.	DESCRIPTION	Quantity	PART NO.		D	ESCR	RIPTIO	N
	Elbow - 6" radius, 90° bend, 4" diameter 16 gauge aluminized steel with black coating, one tube clamp, one hanger. Consult IOM for minimum distance from burner. Sq. dimension 15" x 15."		U	make a alumini temper 1 tube	a U sha ized ste rature b clamp,	shaped ped cor eel, 4" d black coa 1 wire h	nfigurati ia. fitting ating. Al nanger,	ion. 16 g, with Iso ind 1 cent
	Reflector Elbow - 90° bend, with polished, one side bright reflector elbow, 2 reflector brackets and screws. Designed to fit atop one elbow (not included). Sq. dimension		TF1B	unit len Manua	ngth, ce Il for mil	er, 1 SM enter to on nimum on to cover	center 1 distance	16". Co
REP	27" x 27." Field assembly required. Reflector and elbow package - One RE and one E6. Consult IOM for minimum distance to burner. No end caps or clips included.		RU	attachr the end one sid bracker	ment to d of a "l de brigh ts and s	. 180° b standa U" confiç nt alumir screws.	rd reflect guration num, 4 r Reflect	ctors c n. Polis reflect ors ca
45E	45° elbow assembly 4-1/2" radius, 16 gauge aluminized steel with high temperature black coating. 4" diameter, one tube clamp, one hanger. Consult IOM for minimum distance from burner.			J rotated after installation of Reflector and "U" bend parter TF1B and one RU. Consuminimum distance to burn		d packa	age - (Manua	
PHS	Protective Heat Shield. For use on 0° mounted reflectors only. 30" x 12" 304 grade stainless steel. For attachment below reflector in heat sensitive areas.		RUP	Single r configu	ired hea ne suspe	oracket fo aters. Bra ension p	acket allo ooint, as	ows in
	62" long x 10-1/2" wide. Side shield extension polished one side bright, used to direct infrared rays downward - away from sidewalls and combustibles with two 0° mounting brackets, 8 screws and 2		SMB	betwee quantity bracket required	en oppos y neede t (2) Eye d to mo	so assur sing tube ed. Inclu e e bolt N eunt burn	es. See o ded: (1) IOTE: Tw ner contr	chart b Single wo (2) rol box
	brackets. NOTE: Two (2) SSE required to		REQUIRE Model Length	D SINGL	_E MOU 20'	UNT BR	40'	T (SME 50'
,	span each 10-ft reflector section. Maintain published clearances when using this		w/TF1B ("U")	N/A	2	3*	3	4*
SSE	accessory.		* Model requires 5EA-SU	B accessory	package w	hen installir	ng in a U-sh	naped cor

PART NO.		DESCRIPTION Quantity 80° bend (U) shaped fitting, used to								
U TF1B	make a alumin tempe 1 tube suppor unit ler	end (U) a U sha ized ste rature b clamp, rt hange ngth, ce al for mi								
RU	(not in attaching the endone side bracke	tor "U" t cluded) ment to d of a "l de brigh ts and s d after ir								
RUP	TF1B	Reflector and "U" bend package - One TF1B and one RU. Consult Manual for minimum distance to burner.								
SMB										
REQUIRE										
Model Length		10' 20' 30' 40' 50' 60' 70' 8								

	ACCESSORIES U	USED ON	LY C	ON 3-INCH T	UBE MODELS
PART NO.	DESCRIPTION	Quantity		PART NO.	DESCRI
U	180° bend (U) shaped fitting, used to make heater into a U shaped configuration. 16 gauge aluminized steel, 3 in. O.D, with high temperature black coating. Also included: 1 tube clamp, 1 wire hanger, 1 speader bar. For			DB-E6	Elbow package - 90° ben 16 gauge aluminized stee temperature black coating clamp, 1) 3" hanger.
	use on a 3 in20 ft. model. Reflector and 3" O.D. 180° U-bend package. One DB-TF1B and one RU reflector cover. Polished one side bright. Reflectors cannot be rotated after installation of this accessory. Field assembly required.			DB-REP	Reflector and elbow pack in., 16 gauge aluminized high temperature black of one side bright reflector of clamp, and one hanger.

PART NO.	DESCRIPTION	Quantity
DB-E6	Elbow package - 90° bend, 3 in diameter, 16 gauge aluminized steel elbow with high temperature black coating. Includes 1) 3" tube clamp, 1) 3" hanger.	
DB-REP	Reflector and elbow package - 90° bend, 3 in., 16 gauge aluminized steel elbow with high temperature black coating and polished, one side bright reflector elbow, one 3 in. tube clamp, and one hanger.	

	MISCELLANEOUS HAI													
PART NO.		D	ESCR	IPTIO	N		Quai	ntity						
THGH10	foot le	Gripple tube heater hanging cables. 10 foot length of looped cable with a locking fastener per assembly. Working load limit of 100 lbs. with 5:1 load safety ratio.												
THCS	for har	Five foot chain set with 2 "S" hooks used for hanging heater. Bulldog coil chain, trade size #1, wire gauge 12, and a working load limit of 155 lbs. each.												
RVA-CS	1 – ch	8" Chain mounting set with 2 – "S" hook, 1 – chain, and 1 – 3" open eye screw to secure to structure. 12" structure spacing.												
REQUIRE					_			001						
Model Length STRAIGHT*	10' 4	15-20 °	25-30 °	35-40°	45-50 °	55-60 °	65-70 '	80 '						
w/TF1B ("U")	N/A	6	8	8	10	10	12	12						
S-HOOK	*Straig configu THCS f one (1)	1												

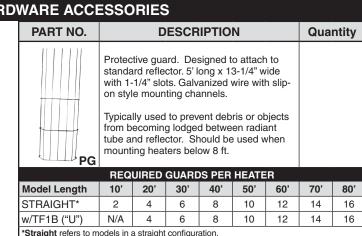
BK

"Brass Knuckles." Reflector mounting bracket that allows for mounting the reflector on specified angles. Attaches to TP19B wire hanger. Preset bends allow for a 15, 30, or 45 degree mounting angle. See chart below for quantity needed. BK attaches to standard hangers.

ا	REQUIRED BK FITTINGS PER HEATER											
Model Length	10'	20'	30'	40'	50'	60'	70'	80'				
STRAIGHT*	2	3	4	5	6	7	8	9				
w/TF1B ("U")	3	4	5	6	7	8	9	10				



Decorative Grill designed to encase radiant tubes. Attaches to reflector - use side clearance data. Mounts at 0-45 degrees. Finished in a highly polished aluminum casing and eggcrate bottom surface. 60" x 18" x 4.5". Field assembly required. Use DCSP chart for quantity BRDG required. Not for 'U' tubes



*Straight refers to models in a straight configuration.
PG for HLV series: Two (2) for each 10 ft. tube section.



Drop ceiling side panels. Polished one side bright. Used to direct infrared rays away from ceiling tiles. 62" in length, mounts with 2 zip screws to the heaters reflector. Shipped in sets of 2 pieces.

DCSP

F	REQUIR	ED BR	-CRP P	ER HE	ATER (S	ETS)		
Model Length	10'	20'	30'	40'	50'	60'	70'	80'
STRAIGHT	2	4	6	8	10	12	14	16



Aluminum Egg Crate - 24" x 48". Designed to fit into a standard 2' x 4' ceiling tile opening. Crate has 1/2" x 1/2" openings and is 1/2" thick. Mounts 1-1/2" below the bottom of the tube. See chart below for quantity needed. Used in conjunction with DCSP (see above).

EC

REQU	REQUIRED ALUMINUM EGG CRATES PER HEATER												
Model Length	10'	20'	30'	40'	50'	60'	70'	80'					
STRAIGHT	3	6	9	12	15	18	21	24					

		OTHER AC
PART NO.	DESCRIPTION	Quantity
GC-50	CSA Design Certified ball valve, 2 PSI maximum pressure, 1/2" x 1/2" FPT, with 1/8" NPT side pressure tap.	
CLEARANCE SAFETY LIMIT WARNING MANITAN CLEARANCE FROM TUBE HEARER TO VEHICLES AND COMBUSTIBLE MATERIALS. TOTAL COMBUSTIBLE OF THE MEANING THE THE	Clearance Saftey Limit Sign. 8.5" x 11". Sign is designed to be hung or adhere at clearance to combustables limit. Repeats clearance warnings.	

CCE	CESSORIES				
	PART NO.	DESCRIPTION	Quantity		
	RH-1	30 in. (1/2" I.D.) rubber hose connector for low intensity heaters applied in Canada (25 - 125 MBH).			
	RH-3	30 in. (3/4" I.D.) rubber hose connector for low intensity heaters applied in Canada (150 - 200 MBH).			

		AIR COM
PART NO.	DESCRIPTION	Quantity
WIV-4	Wall inlet cap, 4" O.D. with bird screen. For use with outside air option. Bird screen insures open air flow to unit. Used for 0-20' of 4" intake.(Common on all models)	

/IPC	DNENTS		
	PART NO.	DESCRIPTION	Quantity
		4" flexible air inlet rubber hose with DWV adapter affixed. Mates to 4" DWV pipe. Clear color for visibility. Includes 4" DWV adapter and worm clamp. 18" in length.	
	AIRH		

	CURRENT	SINGLE
PART NO.	DESCRIPTION	Quantity
WR-S	White Rogers thermostat. 4,4° to 26,6°C range. White plastic cover, 24-277 VAC, 22.0 amps. May be used to switch either 24V or 120V. Consult amp rating unit for proper sizing.	
	Thermostat with rain tight enclosure and 40° to 100°F range. Rugged weatherproof control for use in agricultural, industrial and commercial environments with heavy moisture atmospheres. 16.0 FLA, 25.0 amps resistive at 120V. Watertight NEMA 4X when used with watertight connections (24, 120 or 220V). Consult amp rating of unit for proper sizing.	
TH-115		

STA	TAGE THERMOSTATS			
	PART NO.	DESCRIPTION	Quantity	
	TH-PSPLV	LuxPro 120V programmable line voltage thermostat. No relay transformer required. 5/2-day(4-period) operation. 45°-90°F range. Single stage operation, 16 Amp@ 120V (3 tube heaters max.) single pull. Features include °C/°F display, easy programming, timers, wall plate included and more. 120V only.		

TWO-STAGE CONTROLS

Hi-Low Relay Panels / Boards

Relay panels or boards must be used anytime two or more HL2, HL3, or AG2, heaters are operating on the same thermostat (or common vented). Relay boards (HLRB/HLRP) are (at the time of production) internally mounted into the burner box. This must be specified at the time of order. One board is needed per heater. An external transformer is needed to power the control. Relay Boards (HLRB/HLRP) are preferred over panels. **Specify the HLRP for HL3 models only.**

PART NO.	DESCRIPTION	Quantity	
ET5MS	Columbus Electric two-stage, double throw, low or line voltage thermostat. 50°F to 90°F range (24V-120V). Non-adjustable, preset 2° high/low fire differential. UL Listed and CSA Certified.		
TH-BRTS	Braeburn non-programmable 24V two- stage heat/1 cool thermostat. 1 Amp per terminal (3 Amp max. load) allows operation of up to 8 two-stage heaters w/ HLRB/ HLRP boards and transformer. 45° to 90°F (7°-32°C) heat/cool range. Operates on either constant 24VAC or two (2) AA alkaline batteries. Digital display, adjustable differential.		
TH-BR52	Braeburn two-stage or single-stage control with flexible programming for residential and commercial applications. 7 Day, 5-2 Day or Non-Programmable. 45°-90°F control range. Indoor or outdoor remote sensing capable. Multi-Level keypad lockout. Bright blue backlight. Hardwire or battery powered. Meets California Title 24 guidelines.		
RS-BR53	Indoor sensor for use with TH-BR52 thermostat. Mounts up to 200 ft. away. Sense range of 40°-99°F depending on thermostat. Contemporary design for any decor.		

HLRB in burner box	HLRP in burner box	2 boards inside NEMA (1) box	4 boards inside NEMA (1) box	6 boards inside NEMA (1) box	10 boards inside NEMA (1) box
		()	()		
HLRB	HLRP	HLPNL-2	HLPNL-4	HLPNL-6	HLPNL-10
RELAY BOARD 1919-1918 HE 1918-1918 HE 1948-1918-1918 HE 1918-1918-1918	Pine SCHOOL STATE OF THE S	NOTE: When placing an ord to specify which models will the HLRB/P. Replacement p TP-825/1325.		vill receive	

PART NO.	DESCRIPTION	Quantity
WM\TH-109	Two-stage t-stat with rain tight enclosure. 40° to 100°F range. Rugged weatherproof control for use in agricultural, industrial, and commercial environments with heavy moisture atmospheres. Consult amp rating of unit for proper sizing. 24, 120, 208, 240 and 277 VAC.	
PSP-722	Lux Pro programmable thermostat with large lighted one touch display. Operates on millivolt, 24V or two AA alkaline batteries. 2 or 4 selectable periods per day and vacation hold. 40°-90°F range. 2 amps at 24V AC. (20 heaters w/HLRP and 4000-01V). Single or dual stage operation. Adjustable temperature differential (.25-2.25). Features include °C/°F display, easy programming, vacation and timers.	
RS-BR54	Outdoor sensor for use with TH-BR52 thermostat. Mounts outdoors up to 200 ft. away. Sense range capability of -40°-99°F depending on thermostat. Contemporary design for any decor. NOTE: Cannot be used in place of the indoor sensor.	
RS-BR53BB	2 pc. black box to house the RS-BR53. Use for radiant sensing applications.	

	MP S	ERIES CO
PART NO.	DESCRIPTION	Quantity
MP Series United Antibulation United Antibulation	This advanced microprocessor based controller, loaded with powerful and custom features, is a smart logic controller that offers optimal performance out of your MP Series heater. Allows heater(s) to modulate will full PID controller that considers various inputs and outputs, utilizes the current set temperature (based on an on-board thermistor or an externally connected zone sensor), mode selected, and other variables to determine the rate of modulation. Optional integration with remote sensors (sold separately).	

ТИС	NTROL OPTIONS			
	PART NO.	DESCRIPTION	Quantity	
	MP-P	Potentiometer. Used to control MP Series heater(s) in outdoor or spot heating environments to allows the user to manually control the heater's firing rate based on the dial position.		
	MP-T	Thermistor option for when using a single stage controller.		
	MP-T-OD	Outdoor Sensor Option.		

	ELECTRICAL COMPONEN	NTS AND I
PART NO.	DESCRIPTION	Quantity
	40 VA transformer 120-24V. AC primary & secondary. Mounted on 4 x 4 base plate. Can be used for all 24V heaters or controls manufactured or provided by Detroit Radiant Products.	
4000-01V		
	Weatherproof enclosure package with 4-hour timer and on-off control. Ideal for use in outdoor heating applications where timer control is desired. Package for two-stage scenarios. Can operate up to 120V-20 amp. Can also be used for 24V switching. Field assembly and wiring required.	
WEP-TS		

MIS	MISCELLANEOUS CONTROL DEVICES					
	PART NO.	DESCRIPTION	Quantity			
	ERK	The External Relay Kit accessory can be used on HL3, HL2, LS3 & LD3 models that require multiple heaters on one thermostat. This can mount on or near the heater. One ERK is needed per heater. Used in standard environments.				
	ERK-HE	Similar to ERK but utilizes a very rugged Nema 6P rated enclosure for use in wet and corrosive environments.				
	R8285B	Combination relay transformer, dual pole 15 resistive amps each pole. For controlling 120V units with 24V thermostats. 120V power in, 24V power out. For DX/DES3 24V control option.				

	ADV	ANCED CO	וכ
PART NO.	DESCRIPTION	Quantity	
	Remote 1097 ohm outdoor air temperature sensor for use with TH-HWC2 (probe mounted in weather-proof case).		
RS-ODS			
RS-SIS	Remote 1097 ohm indoor air temperature sensor (probe only). For use with TH-HWC2.		
	Wall mount remote 1097 OHM air sensor for use with TH-HWC2 (probe mounted in case).		
RS-WRS			

ТИС	ONTROL OPTIONS						
	PART NO.	DESCRIPTION	Quantity				
	PCOXS-RS	Deluxe wall mount 24V remote temperature sensor. 14°F to 158°F temperature range. Delivers a 4-20mA signal to controller up to 300 ft. 10Kohm.					
	PCOXS- ODRS	Outdoor deluxe wall mount 24V remote temperature sensor. 14°F to 158°F temperature range. Delivers a 4-20mA signal to controller up to 300 ft. 10Kohm. *Works with THBR-52 in wet locations.					
	BBS-AO	Black bulb sensor add-on. Upgrade remote sensor to be enclosed in a black bulb for jobs that require radiant temperature sensing inside a black bulb. This is compatible with controls that have temperature probes that can fit inside of the bulb casing. Contact factory for guidance.					

STAINLESS S							EEL	ADD
PART NO.		D		Qua	ntity			
SSTAO	existing alumin steel to AG2 o	Stainless steel tube add-on upgrades existing radiant exchangers from titanium/ aluminized to 16 ga., 304 grade stainless steel tubes. HL2, DX2, HL3, DX3, AG1 & AG2 only. One needed per 10 ft. of tube. Sold as an add-on to an order.						
SSTAO-5		de a 5 ft stainles	t. alumin s steel.	ized tub	e to 304	4		
SSRAO	add-or existing highly reflecte order.	Specifying the stainless steel reflector add-on to your order upgrades the existing .025", aluminum reflectors to highly polished, 304 grade stainless steel reflectors. Only sold as an add-on to an order. One SSRAO is needed per 10 ft. of reflector. For use on all models.						
SSRAO-5		de a 5 ft stainles	t. alumin s steel.	ized ref	lector to	304		
SSTRAO	upgrad stainle <u>must</u> I	Stainless steel tube & reflector add-on upgrades existing tubes and reflectors to stainless steel. Sold as an add-on and must be specified at the time of order. HL2, DX2, HL3, DX3, AG2 & AG1 Series only.						
SSTRAO-5		Upgrade a 5 ft. aluminized tube & reflector to 304 grade stainless steel.						
SSREC	(2) Sta	(2) Stainless steel Reflector end caps.						
REQUIRED	STAIN	NLESS	STEE	EL AD	D-ONS	S PER	HEAT	ER
MODEL	10 Ft.	20 Ft.	30 Ft.	40 Ft.	50 Ft.	60 Ft.	70 Ft.	80 Ft.
STRAIGHT	1	2	3	4	5	6	7	8

ON	OP1	rions	& UP(GRADE	ES					
	PAR	T NO.		DESC	CRIPTION	N .		Quantity		
	SS	СВАО	stainless s PC-36 ad are water- power cor	Upgrade control box housing to 304 grade stainless steel. Control box is silicone sealed, PC-36 added and electrical attachments are water-tight connections (i.e. T-Stat wire, power connection) For HL2, DX2, AG2, AG1 models only.				, k		
	SST	AO-16	purchase		ld-ons. For	ess without HL2, DX2,				
	s	SC-##	standard 4			ograde tube clamps	8	;	\$ See below	
	-10 N/A	-20	-30	-40	-50	-60		-70	-80	
	s	SB-##	standard (TP-19B) steel. Price	galvanized and 4 in. F	I steel 4 in. RCS (TP-82 below are p	ets. Upgrade wire hanger t) to stainles per heater.		:	\$ See below	
	-10 N/A	-20	-30	-40	-50	-60		-70	-80	
	TP-19C Stainless steel 4 in. wire hangers.									
		TP-829	Stainles	s steel 4 ir	n. reflector	center supp	ort			

IMPORTANT NOTES

- SSCBAO is only available for the HL2, DX2, CL and CX Series.
- Upgrading tubes (SSTAO or SSTRAO) is available for HL2, DX2, HL3,DX3, SE2, ST2 AG2, and AG2 series only. Only available on 75,000 -150,000 BTU/H
- Upgrading reflectors (SSRAO) is available for all models.

When placing orders, please specify which heaters are to be upgraded. \\

	STAIN	LESS STEE	L ACCESSOF	RIES
PART NO.	DESCRIPTION	Quantity	PART NO.	
TP-26D	304 grade stainless steel radiant tube. 16 gauge, 4 in. x 10 ft., high temperature black coated.			304 gr 90° be
TP-26E	409 stainless steel combustion tube. 16 gauge, 4 in. x 10 ft., high temperature black coated. (Limited stock)		RE-SS	include 27 in. s
SSR	120 in. 304 grade, polished stainless steel reflector.		RU-SS	304 gr cover a assem
SST-60	60 in. 304 grade stainless steel tube. 16 gauge, stainless steel. High temperature black coated.		SSR-60	60 in. 3
	This option will substitute one 10' piece of radiant tubing & reflector with two 5' pieces. One clamp and one hanger is included (4" accessories pending model # with 5EA-SUB-SS). This is ideal for making "U" heaters from 30', 50' & 70' models.		E6-SS	304 gr
5EA-SUB-SS	Maximum one 5EA-SUB-SS per heater. This is an add-on option only.			extens downw
TF1B-SS	4 in. 304 grade stainless steel 180° U-shaped fitting, with high temp black coating See TF1B on page 4. Includes (1) stainless steel clamp,(1) TP-19C hanger, and (2) stainless steel reflector end caps with clips, galvanized speader bar.		SSE-SS BK-SS	Stainle mount allowir 15, 30
RUP-SS	Reflector and "U" bend package - One TF1B-SS and one RU-SS.		BIX 00	304 gr
THCS-SS	30 in. stainless steel chain set with two "S" hooks. See THCS on page 5 for quantity required per heater.		REP-SS	packag Consu burner (Speci

PART NO.	DESCRIPTION	Quantity
RE-SS	304 grade stainless steel reflector elbow 90° bend to cover an elbow (E6) fitting (not included). Field assembly required. 27 in. x 27 in. square. (Specify 45° assembly)	
RU-SS	304 grade stainless steel reflector "U" to cover a TF1B "U" fitting (not included). Field assembly required. 27 in. x 27 in. square.	
SSR-60	60 in. 304 grade, polished stainless steel reflector.	
E6-SS	304 grade stainless steel elbow. 6" radius, 90° bend, 4" diameter, 16 gauge stainless steel with black coating. Includes (1) stainless steel tube clamp, and (1) stainless steel hanger.	
SSE-SS	304 grade stainless steel side shield extension. Used to direct infrared rays downward away from sidewalls and combustibles with (2) 0° mounting brackets, (8) screws. 62 in. long x 10.5 in. wide.	
BK-SS	Stainless steel "Brass Knuckles." Reflector mounting bracket attaches to wire hanger allowing the reflector to be mounted on a 15, 30 or 45 angle. See BK on page 5 for	
REP-SS	304 grade stainless reflector and elbow package - One RE-SS and one E6-SS. Consult IOM for minimum distance to burner. No end caps or clips included. (Specify 45° assembly)	

	ACCESSOF	RIES USEI
PART NO.	DESCRIPTION	Quantity
WVE-3	3 in. O.D. galvanized steel vent outlet cap with flapper. Flapper insures proper static pressure for proper unit operation. Must be used in unvented applications. Not for use in residential applications (all residential heaters must be externally vented).	
DB-208	3 in. Duravent vent cap. Used for sidewall venting of the 3 in. Series models. Diameter is 7-3/4 in.	
DB-209 60 in. DB-BVP	3 in. x 18 in. (60 in.) doublewall B-vent. Used for penetrations through combustible walls or roofs while venting 3 in. models.	
O DR CC	3 in. storm collar. For use with 3 in. venting through the roof. Prevents rain from entering flashing. Galvanized steel construction.	

DNLY ON 3-IN		
PART NO.	DESCRIPTION	Quantity
DB-YSM	Dual exhaust assembly, "Y" shaped, 26 gauge galvanized steel, 3 in. O.D. x 4 in. O.D. x 3 in. O.D. Units connect at a 90° angle to the 3 in. leg. 4 in. vent connection is crimped for ease of vent hook-up. Adjustable elbows are not included. Heaters must share a common thermostat.	
DB-210	3 in. wall thimble. Used in conjunction with B-vent for penetrations through combustible walls and/or roofs	
DB-211	3 in. Duravent B to C adapter. This union is used to join C-vent with B-vent.	
DB-DSK-48	3 in. vent package. Includes: 1)DB-208, 1) DB-209, 1)DB-210, 1)DB-211, 1)DB-SC. 30 in. assembled length. For the DB-DSK-48 sub the DB-208 for a DB-BVP 48 in. assembled length	

	4	INCH VE
PART NO.	DESCRIPTION	Quantity
WVE-GALV	Galvanized steel vent outlet cap 4 in. O.D. with flapper. Flapper insures proper static pressure for proper unit operation. Must be used with unvented units.	
SWD-4	4" Duravent sidewall vent cap. All aluminum construction. Diameter is 8-3/4 in.	
WT-4	4 in. wall thimble. Protection for venting through a sidewall application. Measures 8.5 in. outer diameter, 6.5 in. inner diameter. Adjustible 4 in. to 6 in. depth.	
SK4	Field Controls 4 in. vent terminal with internal screen. For use when side wall venting. V2 200,000 Btu/h models only . Diameter is 10.25 in.	
SK4-VK	V2 200,000 Btu/h model vent kit. same as 4-DSK, substitute SK4 for SWD-4.	
18BV-4	4 in. Doublewall B-vent. Used for penetrating through combustible wall and/or roofs. 18 in. long.	
BR-36-BV	4 in. Doublewall B-vent. Used for penetrating through combustible wall and/or roofs. 36 in. long.	
BR-48-BV	4 in. Doublewall B-vent. Used for penetrating through combustible wall and/or roofs. 48 in. long.	
BVP-4	4 in. Doublewall "B" type vent. Used for penetrating through combustible wall and/or roofs. 60 in. long.	

IATERIALS		
PART NO.	DESCRIPTION	Quantity
DHC-4	4 in. drafthood connector. B-C adapter for connecting vent pieces.	
SC-4	4 in. storm collar. For use with 4 in. venting through the roof. Galvanized steel. Prevents rain from entering flashing.	
TF-9	4 in. side wall vent terminal with screen. 16 gauge aluminized steel construction, 18 in. long, one 4 in. clamp,.Bird screen on exhaust end. Not approved on 200,000 Btu/h models.	
	4 in. Duravent sidewall vent kit with all items for sidewall venting. Includes: SWD-4, WT-4, 18BV-4, DHC-4,SC-4. No vent pipe material is included. 29 in. long when fully assembled. NOT APPROVED FOR V2 200,000 Btu/h	
4-DSK BR-4-VK-36	MODELS. 4 in. Duravent vent kit with all items for sidewall venting. Includes: SWD-4, WT-4, BR-36-BV, BV-4, DHC-4,SC-4. No vent pipe material is included. 47 in. long when fully assembled.	
BR-4-VK-48	4 in. Duravent vent kit with all items for sidewall venting. Includes: SWD-4, WT-4, BR-48-BV, DHC-4,SC-4. No vent pipe material is included. 59 in. long when fully assembled.	
BR-4-VK-60	4 in. Duravent vent kit with all items for sidewall venting. Includes: SWD-4, WT-4, BR-60-BV, DHC-4,SC-4. No vent pipe material is included. 71 in. long when fully assembled.	

	6 INCH VENT N	MATERIAL	5
PART NO.	DESCRIPTION	Quantity	
SK-6	Field Controls 6 in. vent terminal with internal screen. Can only be used for dual side wall venting of V2 200,000 Btu/h models only. Diameter is 12.5 in.		
YSM	Dual exhaust assembly, Y-shaped, 26 gauge galvanized steel with baffle. 4 in. O.D. x 6 in. O.D. x 4 in. O.D. Two adjustable elbows included to ease installation. For use when common venting two heaters. Heaters must share a common thermostat. Dimensions - 14 in. left-right, 13 in. high.		

. s - I	S - DUAL VENT MATERIALS				
	PART NO.	DESCRIPTION	Quantity		
		Dual exhaust assembly, Y-shaped, 16 gauge aluminized steel. 4 in. O.D. x 6 in. O.D. x 4 in. O.D. Two tube clamps included. For use when common venting two heaters. Heaters must share a common thermostat. Dimensions - 21.5 in. left-right, 13 in. high.			
	RT	Dual exhaust assembly, r-shaped, 16 gauge aluminized steel with high temperature black coating 4 in. O.D. x 6 in. O.D. x 4 in. O.D. Two tube clamps included. For use when common venting two heaters that meet at a 90° angle. Heaters must share a common thermostat.			

BURNER PRICING*			
PART NO.	DESCRIPTION	Quantity	
BRN-FT-BTU-GAS-MP	MP Brn, (1) Hgr, Hose & Baffle		
BRN-FT-BTU-GAS-HL2	HL2 Brn, (1) Hgr, Hose & Baffle		
BRN-FT-BTU-GAS-HL3	HL3 Brn, (1) Hgr, Hose & Baffle		
BRN-FT-BTU-GAS-DX2	DX2 Brn, (1) Hgr, Hose & Baffle		
BRN-FT-BTU-GAS-DX3	DX3 Brn, (1) Hgr, Hose & Baffle		
BRN-FT-BTU-GAS-ST2	ST2 Brn, (1) Hgr, Hose & Baffle		
BRN-FT-BTU-GAS-SE2	SE2 Brn, (1) Hgr, Hose & Baffle		
BRN-FT-BTU-GAS-DET3	DET3 Brn, (1) Hgr, Hose & Baffle		
BRN-FT-BTU-GAS-DES3	DES3 Brn, (1) Hgr, Hose & Baffle		
BRN-FT-BTU-GAS-LD2	LD2 Brn, (1) Hgr, Hose & Baffle		
BRN-FT-BTU-GAS-LS2	LS2 Brn, (1) Hgr, Hose & Baffle		

* Must state	Lanath I	RTII and	Gae Tyne	whon	ranlacina	hurnar

NOTE: CL, CX Series burners are not sold separately.

ADDITIONAL KIT PRICING			
PART NO.	DESCRIPTION	Quantity	
DB-10Kit	10 Ft. Full 3" Mounting Kit		
DB-20Kit	20 Ft. Full 3" Mounting Kit		
DB-30Kit	30 Ft. Full 3" Mounting Kit		
10-Kit	10 Ft. Full 4" Mounting Kit		
20-Kit	20 Ft. Full 4" Mounting Kit		
30-Kit	30 Ft. Full 4" Mounting Kit		
40-Kit	40 Ft. Full 4" Mounting Kit		
50-Kit	50 Ft. Full 4" Mounting Kit		
60-Kit	60 Ft. Full 4" Mounting Kit		
70-Kit	70 Ft. Full 4" Mounting Kit		
80-Kit	80 Ft. Full 4" Mounting Kit		

Additional Mounting Kit includes applicable hangers, clamps and center supports. Also included is (1) RH-1 or RH-3, (2) reflector end caps, and (8) clips. **Note**: Kits for 150-200 MBH models receive one stainless steel tube clamp.

LIMITED WARRANTY GUIDELINES AND OPTIONS****

All limited warranties, are defined in the product insert manual for the particular series of heaters. Please contact the factory for further information on the terms and conditions.

STANDARD WARRANTY	BURNER BOX COMPONENTS	TUBES/ EXCHANGERS	BURNER
DX2, DX3, CL, CX	1 YEAR	5 YEARS	10 YEARS
LD2, LS2, SV	1 YEAR	3 YEARS	5 YEARS
DET3, DES3	1 YEAR	2 YEARS	3 YEARS
HLV***	1 YEAR	5 YEARS	10 YEARS
HL2, HL3	3 YEARS	5 YEARS	10 YEARS
AG1	1 YEAR	5 YEARS	10 YEARS
AG2	3 YEARS	5 YEARS	10 YEARS

EXTENDED WARRANTY OPTIONS****			
cwo	Control Extended Warranty Option. (Max. 4 year extension) (net) per year, per heater.		
EWO	Exchanger Extended Warranty Option. (Max. 10 year total or 5 year extension) (net) per year, per tube.		
VPWO:	HLV Vacuum Pump Extended Warranty Option. (Max. 5 year total or 4 year extension) (net) per year, per pump.		

^{****} Prior approval from the factory is required when quoting extended warranties.

^{***} Vacuum pump - 1 year.

	IN HOUSE GAS CONVERSIONS			
PART NO.	DESCRIPTION	Quantity		
S1-CONV.	Converting a single stage heater from LP to Natural Gas or Natural Gas to LP. Kit includes 1 gas valve, 1 burner orifice, 1 air collar and 1 new rating label. Model and serial number must be specified. Conversion can be made depending on age and condition of heater. Conversions are not available on DTHS models.			
	Converting a two stage heater from LP to Natural Gas or Natural Gas to LP. Kit includes 1 gas valve, 1 burner orifice, 1 air collar and 1 new rating label. Model and serial number must be specified. Conversion can be made depending on age and condition of heater.			
S2-CONV.				