

TUBE HEATER PRICE LIST 2008

PRICES IN EFFECT MAY 1, 2008

RELEASE 1B

Tube Heaters: This Section, Pages T-1 to T-52

General Information: Terms; Return Policy; Contact Info; Freight Zones;

SPQ Form; Design Form; Warranty Summary - Pages G-1 to G-11

Luminous Heaters (High Intensity): Section 2, Pages L-1 to L-16

Construction Heaters: Section 4, Page P-11

Outdoor & patioSchwank: Section 4, Pages P-1 to P-33

Schwank Group

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As of the effective date, these price sheets supercede all previous price sheets





All Schwank heaters are certified by CSA International

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PATIO HEATERS	Section 4: Refer to Index page P-3				

Please order tube heaters using burner kit & tube kit part number. Tube heaters are shipped & invoiced as burner kits & tube kit.

These price sheets supercede all other price sheets

Schwank reserves the right to make changes in products and pricing without notice.

F.O.B. Mississauga, Ontario or Waynesboro GA All Applicable Taxes Extra Terms: Net 30 Days 1 $^{1}/_{2}\%$ Monthly Interest On Overdue Accounts Prices subject to change without notice



What's New in Tubes for 2008?

NEW In Release 1A & 1B - May 1, 2008

Please update your sales information and database with these New Models & Numbers!



SPW-JZ tube model now supplied with Fresh Air Adapter and Wall Cap

USA Flexible Gas Connectors for Tube Heaters



Note: Minimum length for tube heater flexible connector is 24 inches.

- √ Revisions to the Gas Code/Standards for Flexible Connectors are anticipated for Fall 2008.
- ✓ A bulletin will be issued when the Standard revisions are finalized.



40 foot <u>Secondary</u> Tube Kits now available

- √ Create 70 ft heater attaches to 30 foot Primary kit instead of previous two 20 ft tube kits
- ✓ Lower 70 ft heater cost
- ✓ Lower shipping cost



S' Hooks for heater suspension

- √ Convenient package of 25 x 'S' hooks
- ✓ Large size $(1^{7}/_{8}")$ easy to work with
- √ Strong secure suspension of heater
- ✓ Part # JL-0798-SH
- ✓ Quantity required for tube heaters: Allow two 'S' hooks for each suspension chain See notes in "Accessories" sections for calculation of quantities of chain & hooks

Revisions in prior release 1A:

Page T-28 SET Two Stage Gas Conversion Kits: Updated Part Numbers

Page T-52 SET Two Stage Gas Conversion Kits: Updated Part Numbers

100,000 Btuh x 20 ft heaters (STS-JZ & S-100 Models) are available in Natural Gas ONLY

Items deleted in this release - no longer available:

180° Elbow Kit for builderSchwank S100 & WhisperJet SET models JS-0513-SM
Use Two x 90° Elbow Kit for these models 2 x JS-0508-SM

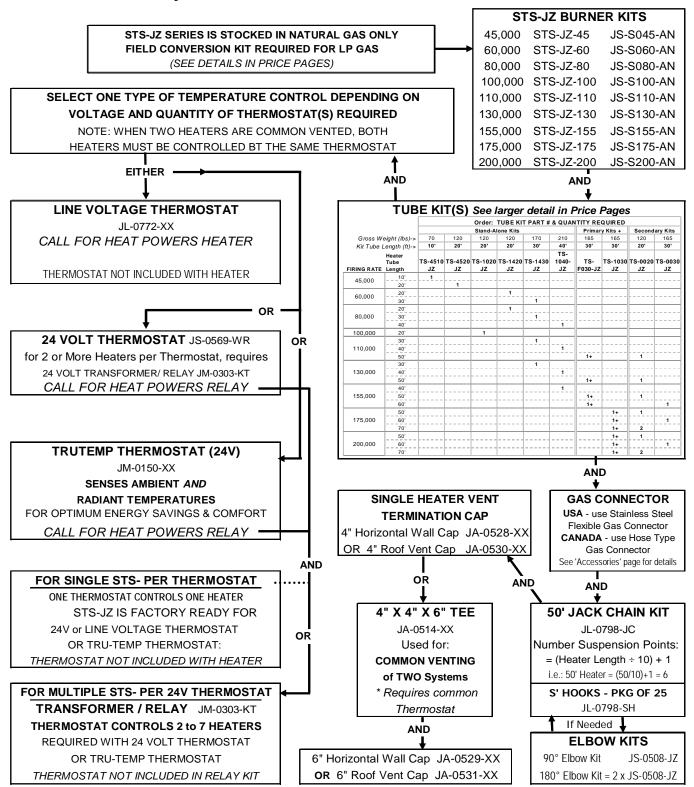
Note: These models are available with "U"-Tube Kits: S100U, SETU

www.SchwankGroup.com - Get current Published Info for all products



premierSchwank STS-JZ Series

Heater & Accessory Selection Guide





premierSchwank Tube Heaters STS-JZ Series

Straight Tube - emissive coated



COMPLETE SYSTEMS:

- Emissive Coated Radiant Tu	- E	AVAILABLE TUBE			
		LIST PRICE	LENGTH	<u>CAPACITY</u>	<u>MODEL</u>
Individual burner ki	le	\$ 1,228.00	10'	45,000 Btuh	STS-JZ 45
		1,348.00	20'	40,000 Bluii	010-02 40
are shipped to ass	·	1,348.00	20'	60,000 Btuh	STS-JZ 60
heater ord		1,538.00	30'	00,000 Bluii	313-32 00
		1,348.00	20'		
~ See next page t		1,538.00	30'	80,000 Btuh	STS-JZ 80
	*	1,728.00	40'		
* 40 ft heater price base		1,438.00	20'	100,000 Btuh	STS-JZ 100
1040-JZ tube	1	1,538.00	30'		
	*	1,728.00	40'	110,000 Btuh	STS-JZ 110
NOTE:		1,997.00	50'		
Standard burners are		1,538.00	30'		
natural gas fue	*	1,728.00	40'	130,000 Btuh	STS-JZ 130
Field conversion kits		1,997.00	50'		
for conversion to	*	1,728.00	40'		
refer to Burne		1,997.00	50'	155,000 Btuh	STS-JZ 155
on the page liste		2,187.00	60'		
		2,097.00	50'		
		2,287.00	60'	175,000 Btuh	STS-JZ 175
th New 40' seconary tube kit	Lower price with N	2,477.00	70'		

STS-JZ FEATURES SUMMARY:

- 24V or Line Voltage Thermostat Ready
- Status Indicator Lights
- Power Cord with Plug
- Birdscreened Combustion Air Collar 4"
- Swing-down Cabinet Service Access
- Whisper Quiet Ceramic Burner
- 'Focus Shield' Reflector & End Caps for Premier IR Heat Output
- Emissive Coated Radiant Tubes

Individual burner kits + tube kits are shipped to assemble tube heater orders.

~ See next page for details ~

40 ft heater price based on using TS 1040-JZ tube kit

NOTE:

Standard burners are stocked for natural gas fuel only. Field conversion kits are required for conversion to LP gas refer to Burner Kits on the page listed below

STS-JZ 200 200,000 Btuh 60' 2,287.00

PRICE INCLUDES BURNER KIT & REQUIRED TUBE KIT(S) FOR HEATER LENGTH:

50'

70'

BURNER KIT: ELECTRICAL CORD, STATUS INDICATOR LIGHTS, FACTORY MOUNTED IGNITER, FACTORY INSTALLED 24/120V RELAY SWITCH, DROP-DOWN SERVICE ACCESS, BIRDSCREENED AIR INTAKE WITH COLLAR ON BLOWER - WALL OR ROOF COMBUSTION AIR INTAKE CAP IS OPTIONAL.

2,097.00

TUBE KIT: PRIMARY TUBE(S), SECONDARY TUBE(S) WITH EMISSIVE COATING, FOCUS SHIELD REFLECTORS, TWO END PLATE HANGERS, WEBBED HANGERS FOR TUBES & REFLECTORS, TUBE COUPLER(S) AND TURBULATOR(S).

Burner Kits, and tube kits are packaged separately and clearly labelled for ease of assembling orders and shipping - Please order heater(s) by Burner Kit(s) + Tube Kit(s)

Field conversion kit required for LP fuel - standard burner stocked in NG -

- see page T-9 -

HEATER & ACCESSORY SELECTION: previous page BURNER & TUBE KIT CHART: next page STS-JZ BURNER KITS: page T-9 STS-JZ TUBE KITS: page T-10 **OPTIONAL ACCESSORIES: page T-14**

2,477.00 Lower price with New 40' seconary tube kit

premierSchwank Tube Heaters STS-JZ Series

BURNER & TUBE KIT ASSEMBLY CHART

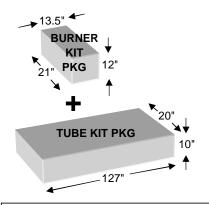
Which tube kits assemble with a burner kit?

Use the chart below to determine:

- √ Available tube length for each firing rate
- ✓ Available tube kit & quantities for each burner kit
- 1) Select HEATER MODEL / INPUT
- 2) Order BURNER KIT
- 3) Order Quantity(s) of TUBE KIT(s)

Stand-Alone tube kits require no additional tube kits.

Primary tube kits require at least one additional Secondary tube kit Secondary tube kit requires a Primary tube kit.



Chain: ((tube length/10)+ 2) x length at each suspension point 'S' hooks: (tube length/10) x 2+ 4

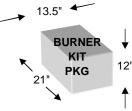
					Order: S	TS-JZ TU	BE KIT P	ART#&C	UANTITY	REQUIR	ED	
				Sta	and-Alone	Kits		Primar	y Kits +		Secondary K	its
Tul	be Kit Gross Weigh	t (lbs) —	70	120	120	170	210	165	165	120	165	210
	Nominal Tube Len	gth (ft) 🕕	. 10'	20'	20'	30'	40'	30'	30'	20'	30'	40'
MODEL	BURNER KIT Gross Wt = 30 lb	+	TS-4510- JZ	TS-1020- JZ	TS-1420- JZ	TS-1430- JZ	TS-1040- JZ	TS-F030- JZ	TS-1030- JZ	TS-0020- JZ	TS-0030- JZ	TS-0040- JZ
STS-JZ 45	JS-S045-AN	10'	1									
0.00= .0		20'			1							
STS-JZ 60	JS-S060-AN	20'			1							
010 02 00	00 0000 AIV	30'				1						
		20'			1							
STS-JZ 80	JS-S080-AN	30'				1						1
		40'					1					1
STS-JZ 100	JS-S100-AN	20'		1								
	JS-S110-AN	30'				1						
STS-JZ 110		40'					1					1
		50'						1+		1		1
	JS-S130-AN	30'				1						
STS-JZ 130		40'					1					1
		50'						1+	1	1		1
		40'					1					
STS-JZ 155	JS-S155-AN	50'						1+		1		1
		60'						1+			1	1
		50'							1+	1		
STS-JZ 175	JS-S175-AN	60'							1+		1	
		70'							1+			1
		50'							1+	1		
STS-JZ 200	JS-S200-AN	60'							1+		1	1
		70'							1+			1

STS-JZ BURNER KITS: next page STS-JZ TUBE KITS: page T-10 OPTIONAL ACCESSORIES: page T-14



premierSchwank Tube Heaters STS-JZ Series

BURNER KITS



BURNER KITS ARE STOCKED IN NATURAL GAS - FIELD CONVERSION KITS FOR LP ARE LISTED BELOW

BURNER INCLUDES: STATUS INDICATOR LIGHTS, ELECTRICAL CORD & PLUG, MOUNTED IGNITER, BIRDSCREENED 4" DIAMETER AIR INTAKE ADAPTER ON BLOWER.

	AVAILABLE			
<u>CAPACITY</u>	TUBE LENGTHS	<u>FUEL</u>	PART #	LIST PRICE*
45,000 Btuh	10', 20'	N.G.	JS-S045-AN	799.00
60,000 Btuh	20', 30'	N.G.	JS-S060-AN	799.00
80,000 Btuh	20', 30', 40'	N.G.	JS-S080-AN	799.00
100,000 Btuh	20'	N.G. ONLY	JS-S100-AN	799.00
110,000 Btuh	30', 40', 50'	N.G.	JS-S110-AN	799.00
130,000 Btuh	30', 40', 50'	N.G.	JS-S130-AN	799.00
155,000 Btuh	40', 50', 60'	N.G.	JS-S155-AN	799.00
175,000 Btuh	50', 60', 70'	N.G.	JS-S175-AN	829.00
200,000 Btuh	50', 60', 70'	N.G.	JS-S200-AN	829.00

Burner kit contains: Burner assembly, installation manual; the burner fastening nuts & bolts are packed inside the burner housing. All optional accessories are shipped in separate carton.

All burner assemblies operate on line voltage (120VAC).

Heaters are shipped and invoiced separately as burner kits and tube kits

Please order heaters as burner kits + tube kits

LPG FIELD CONVERSION KITS FOR STS-JZ BURNERS

Conversion Kits for LP to NG are listed on pages 72 & 73

<u>INPUT</u>		PART#	LIST F	PRICE*
45,000 Btuh	Field Conversion Kit NG to LP	JS-0556-XC	\$	45.00
60,000 Btuh	Field Conversion Kit NG to LP	JS-0557-XX		24.00
80,000 Btuh	Field Conversion Kit NG to LP	JS-0559-XX		24.00
100,000 Btuh	Available in NG ONLY			
110,000 Btuh	Field Conversion Kit NG to LP	JS-0561-XX		24.00
130,000 Btuh	Field Conversion Kit NG to LP	JS-0563-XX		24.00
155,000 Btuh	Field Conversion Kit NG to LP	JS-0565-XX		24.00
175,000 Btuh	Field Conversion Kit NG to LP	JS-0567-AA		24.00
200,000 Btuh	Field Conversion Kit NG to LP	JS-0567-CC		24.00

BURNER & TUBE KIT CHART: previous page

STS-JZ TUBE KITS: next page

OPTIONAL ACCESSORIES: page T-14



premierSchwank Tube Heaters STS-JZ Series

TUBE KITS (emissive coated)

FEATURES of the '-JZ' Tube System:

- Webbed hanger joins reflectors replaces wire and multi-piece plate hangers
- Fewer suspension points than 'wire hangers', and no plate hanger assembly
- 'Clean' reflector profile No extra-piece reflector 'slides' or joiners
- Modular 90° elbow kit with reflector cover ~ simply combine two 90's to make a 180

TUBE KIT PKG

127"

Stand-Alone tube kits require no additional tube kits. **Primary** tube kits require at least one additional Secondary tube kit. **Secondary** tube kit require a Primary tube kit.

Chain: ((tube length/10)+ 2) x length at each suspension point 'S' hooks: (tube length/10) x 2+ 4

Kits include Tubes, Reflectors, End Caps, Hangers, Tube Couplers and Turbulator(s) as required

Stand-Alone	(Each kit includes 'JZ' 116" Reflectors, WEBBED Hanger System, Couplers)	TUBE KIT #	LIST PRICE					
10' : 45,000 Btuh	Flanged/swaged emissive coated aluminized tube with no ports, one 5 ft turbulator	TS-4510-JZ \$	429.00					
20' : 45/60/80,000	Flanged/swaged aluminized tube with no ports, one emissive coated steel swaged tube, one 4 ft turbulator and one 10 ft turbulator	TS-1420-JZ	549.00					
20' : 100,000 ONLY	Flanged/swaged Aluminized emissive coated tube with no ports, one emissive coated steel swaged tube, one 10 ft S/S turbulator	TS-1020-JZ	639.00					
30' : 60/80/110/130,0	Flanged/swaged aluminized tube with no ports, two emissive coated steel swaged tubes, one 4 ft turbulator and one 10 ft turbulator	TS-1430-JZ	739.00					
40' : 80/110/130/155	Flanged/swaged aluminized tube with no ports, three emissive coated steel swaged tubes, and one 10 ft turbulator	TS-1040-JZ	929.00					
Primary Kits [re	quire a Secondary Kit to make (40'), 50', 60' & 70' heaters]							
30' : 110/130/155,00	Flanged/swaged aluminized tube with no ports, two emissive coated steel swaged tubes	TS-F030-JZ	729.00					
30' : 175/200,000	Flanged/swaged alumatherm tube with no ports, one aluminized swaged tube, one emissive coated steel swaged tube, one 10 ft turbulator	TS-1030-JZ	799.00					
Secondary Kits [add to above Primary Kits to make (40'), 50', 60' & 70' heaters]								
20'	wo emissive coated steel swaged tubes (makes 50' heater with 30' primary)	TS-0020-JZ	469.00					
30' 7	hree emissive coated steel swaged tubes (makes 60' heater with 30' primary)	TS-0030-JZ	659.00					
40' F	Four emissive coated steel swaged tubes (makes 70' heater with 30' primary)	TS-0040-JZ ₹ NEW	≥ 849.00					
10'	One emissive coated steel swaged tube, and one 10 ft turbulator	TS-1010-JZ	309.00					

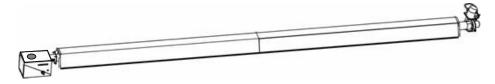
NOTE: Secondary tube kit TM-1010-SX can be used with TM-F030-SX to create a 40 ft kit.

Do not use this kit to extend heater length beyond the maximum length approved for any input.

BURNER & TUBE KIT CHART: page T-8 STS-JZ BURNER KITS: page T-9 OPTIONAL ACCESSORIES: page T-14

premierSchwank Tube Heaters STV-JZ Vacuum Series

(Single Tube - emissive coated)



COMPLETE SYSTEMS: AVAILABLE TUBE MODEL <u>Fuel</u> **LENGTHS** LIST PRICE 20' \$ 1,883.00 STV-JZ 60 NG 60,000 Btuh 30' 2,073.00 30' 2,073.00 STV-JZ 80 80,000 Btuh NG 40' 2,263.00 * 40' 2,263.00 * STV-JZ 110 110,000 Btuh 50' 2,532.00 2,263.00 * 40' STV-JZ 130 130,000 Btuh NG 50' 2,532.00 50' 2,532.00 STV-JZ 155 155,000 Btuh NG 60' 2,722.00

Burner kit + tube kit(s) + vacuum pump kit are shipped to assemble tube heater orders.

~ See next page for details ~

* 40 ft heater price based on TS-1040-JZ Tube Kit

NOTE:

Standard burners are stocked for natural gas fuel only. Field conversion kits are required for conversion to LP gas refer to **Burner Kits** on the page listed below

PRICE INCLUDES BURNER ASSEMBLY AND THE FOLLOWING COMPONENTS AS REQUIRED:

BURNER KIT: ELECTRICAL CORD, STATUS INDICATOR LIGHTS, FACTORY MOUNTED IGNITER, FACTORY INSTALLED 24/120V RELAY SWITCH, DROP-DOWN SERVICE ACCESS, BIRDSCREENED 4" DIAMETER AIR INTAKE ADAPTER ON BURNER.: VACUUM PUMP KIT;

TUBE KIT: PRIMARY TUBE(S), SECONDARY TUBE(S) WITH EMISSIVE COATING, TUBE COUPLER(S) AND TURBULATOR(S), FOCUS SHIELD REFLECTORS, TWO END PLATE HANGERS, WEBBED HANGERS FOR TUBES & REFLECTORS,

Burner with accessories, and the reflectors with tubes and accessories are packaged separately and clearly labelled for ease of filling orders and shipping

KIT ASSEMBLY CHART: next page STV-JZ BURNER KITS: next page VACUUM PUMPS: next page STV-JZ TUBE KITS: page T-13

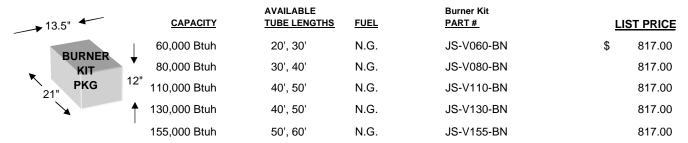
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premierSchwank Tube Heaters STV-JZ Vacuum Series

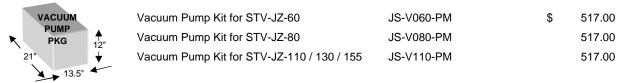
BURNER, TUBE & VACUUM PUMP

•	BLY CHART			STSV	JZ TUBE	KIT PAR	T # & QUA	ANTITY RI	EQUIRED
					Stand-Alon	е	Primary	+ Secor	ndary Kits
	Tube	Kit Gross Weight	(lbs)— →	120	170	210	165	120	165
		Nominal Leng	th (ft)	20'	30'	40'	30'	20'	30'
MODEL	Order BURNER KIT Gross Wt = 25 lb	Order VAC.	. 🗼	TS-1420- JZ	TS-1430- JZ	TS-1040- JZ	TS-F030- JZ	TS-0020- JZ	TS-0030- JZ
STV-JZ 60	JS-V060-BN	JS-V060-PM	20' 30'	1	1				
STV-JZ 80	JS-V080-BN	JS-V080-PM	30' 40'		1	1			
STV-JZ 110	JS-V110-BN	JS-V110-PM	40' 50'			1	1+	1	
STV-JZ 130	JS-V130-BN	JS-V110-PM	40'			1	1+	1	
STV-JZ 155	JS-V155-BN	JS-V110-PM	50'				1+	1	
			60'				1+		1

STV-JZ BURNER KITS: ALSO REQUIRES VACUUM PUMP KIT BELOW



STV-JZ VACUUM PUMP KITS



LPG FIELD CONVERSION KITS FOR STV-JZ BURNERS

<u>INPUT</u>		PART#	LIST PRICE*
60,000 Btuh	Field Conversion Kit NG to LP	JS-0557-XX	\$ 24.00
80,000 Btuh	Field Conversion Kit NG to LP	JS-0559-XX	24.00
110,000 Btuh	Field Conversion Kit NG to LP	JS-0561-XX	24.00
130,000 Btuh	Field Conversion Kit NG to LP	JS-0563-XX	24.00
155,000 Btuh	Field Conversion Kit NG to LP	JS-0565-XX	24.00

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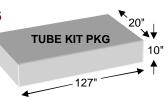
OPTIONAL ACCESSORIES: page T-14



premierSchwank Tube Heaters STV-JZ Vacuum Series

TUBE KITS (emissive coated)

Stand-Alone tube kits require no additional tube kits
Primary tube kits require at least one additional Secondary tube kit.
Secondary tube kit require a Primary tube kit.



Chain: ((tube length/10)+ 2) x length at each suspension point 'S' hooks: (tube length/10) x 2+ 4

Stand-Alone	'-JZ' Tube Kits include 116" reflectors webbed hangers, and tube couplers	TUBE KIT #	LIST PRICE*
20' : 60,000	Flanged/swaged aluminized tube with no ports, one emcoated steel swaged tube, one 4 ft turbulator and one 1 turbulator	15-14/0-3/	\$ 549.00
30' : 60/80,000	Flanged/swaged aluminized tube with no ports, two em coated steel swaged tubes, one 4 ft turbulator and one turbulator		739.00
40' : 80/110/130,000	Flanged/swaged aluminized tube with no ports, three e coated steel swaged tubes, and one 10 ft turbulator	missive TS-1040-JZ	929.00
Primary Kits [to make (40'), 50', 60' 6	& 70' heaters]		
30 ': 110/130/155,000	Flanged/swaged aluminized tube with no ports, two em coated steel swaged tubes	issive TS-F030-JZ	729.00
Secondary Kits [add to above Prima	ry Kits to make (40'), 50', 60' & 70' heaters]		
10'	One emissive coated steel swaged tube, and one 10 ft	turbulator TS-1010-JZ	309.00
20'	Two emissive coated steel swaged tubes	TS-0020-JZ	469.00
30'	Three emissive coated steel swaged tubes	TS-0030-JZ	659.00

COMPLETE STV-JZ SYSTEMS: page T-11
STV-JZ BURNER, VACUUM PUMP & TUBE
KIT ASSEMBLY CHART: previous page
OPTIONAL ACCESSORIES: next page



OPTIONAL ACCESSORIES - Page 1 of 3 STS-JZ, STV-JZ TUBE HEATERS

More Options: Next page. Thermostats: Page after next.

\$

Roof Cap

LIST PRICE 58.00

22.50

Hanging Chain - 50 ft box of #8 Jack Chain - 'S' hooks separate - see next item

quantity: ((tube length/10) + 2) x length at each suspension point

'S' Hooks - $1^{7}/_{8}$ " - Package of 25

quantity: ((tube length/10) x 2 + 4

JL-0798-JC

JL-0798-SH

Wall Hood

Combustion Air Intake Hood: Optional

Not all tube heater applications require outside air for combustion.

Schwank recommends outside combustion air for conditions:

■ A building under negative air condition

Dusty environment in the building

☐ Presence of chemical or process contaminants such as welding smoke

Sealed combustion is required or advised for the project

STS-JZ & STV-JZ models are shipped with a 4" diameter collar on top of the blower or burner for vent attachment.

Outside combustion air can be acquired from an outside wall or from the roof using 4" diameter vent pipe.

Please refer to the installation manual for complete details on venting and combustion air duct.

	PART #	LIST PRICE
4" Outside Air Intake Wall Vent Hood ~ birdscreened, flush mount	JS-0532-VC	\$ 25.90
4" Roof Cap - fits single wall vent/duct	JA-0530-XX	46.60

Vent Stuff:



Flue Vent Terminals:	PART#	LIST PRICE
4" horizontal (through wall)	JA-0528-XX	\$ 38.30
6" horizontal	JA-0529-XX	46.60

Use this termination cap by Schwank, or use the termination cap for double walled pipe as supplied by that manufacturer * Fits single wall vent pipe - field crimp required to fit to double wall pipe

Vent Tee 4" X 4" X 6" (Two couplers JA-0516-AA are optional)

Optional Couplers for Vent Tee:

4" x 8" Aluminized Steel Coupler with 2 x U-bolts



JA-0514-XX

191.00

JA-0516-AA

40.40

USA ONLY: Flexible Gas Connectors for Tube Heaters: Not for use with tube heaters in Canada

Note: Minimum length for tube heater flexible connector is 24 inches. Revisions to the Gas Code/Standards are anticipated for Fall 2008. A bulletin will be issued when the Standard revisions are finalized.

Flexible Gas Connector 1/2" x 24" - for 45 to 155 Mbh JL-0771-XX \$ 31.10 JL-0771-ZZ 100.00

Flexible Gas Connector 3/4" x 24" - for 175 to 200 Mbh

CANADA ONLY: Hose Type Gas Connectors for Tube Heaters: Not for use in USA

Hose type gas connectors are required only for tube heaters by B-149-2005 (Section 7.22.3) JL-0771-RC

Type 1 Hose Connector 1/2" x 36" - 1/2" MPT each End - for 45 to 155 Mbh \$ 32.10 Type 1 Hose Connector 3/4" x 36" - 1/2" MPT + 3/4" MPT - for 175 & 200 Mbh 75.00 JL-0771-RB

> SP-LTUB-FX-01B RD: MAY 2008 RL: 01B



OPTIONAL ACCESSORIES - Page 2 of 3 **STS-JZ, STV-JZ TUBE HEATERS**

Decorative 'Tuxedo' Grille Kit - Matte Black finish

Dress up your tube heater installations.

Ideal for:

Showrooms

□ Retail areas

☐ Any area requiring a more refined 'look'

Matte black grille & aluminized steel framing secures with tabs to 'JZ' Series heater reflectors. (Not for \$100 Series)

Decorative 'Tuxedo' Grille Kit - 10 ft - Matte Black Grille Each 10 foot section TG-0010-KT \$ 349.00

ST-JZ Elbow Kits:







ST-JZ 45° Aluminized Steel Elbow Kit - NO reflector cover: (Elbow can be installed rright or left hand: Includes coupler & end plate hanger)	JS-0528-JZ	\$ 188.00
ST-JZ 90° Aluminized Steel Elbow & Reflector Cover Kit: (Elbow can be installed right or left hand - Includes coupler, reflector cover, hanger plate)	JS-0508-JZ	155.00
ST-JZ 180° Elbow & Reflector Cover Kit: ORDER: TWO x 90° ELBOW KITS	JS-0508-JZ x 2	310.00

⇒ Reflector Angle Adapter - one required each juncture of angle change JS-0504-JZ \$ 15.10

NOTE: The elbow reflector cap must always be in the same plane as the elbow - cap cannot be angled independently The Reflector Angle Adapter is required for angle mounting a reflector section before or after an elbow *Or* for mounting of a reflector section at an independent angle relative to the other reflectors in the system.

Other Optional Accessories:

Reflector Angle Adapter (see Note above) This item is required for changing angle of a reflector section before or after an elbow or other	JS-0504-JZ er section of reflector	\$ 15.10
Side Reflector Extension (- All models - 10" deep x 116" long c/w 'S' hooks)	JS-0509-KT	45.60
#8 Hanging Chain - (box of 50' Jack Chain - 'S' hooks separate - see next item)	JL-0798-JC	58.00
'S' Hooks - 1 7 / $_{8}$ " - Package of 25	JL-0798-SH	22.50
High Temp, Touch Up Paint -369g aerosol can	JA-0587-XX	25.90
STS 5 ft length Tube Protection Screen (1/2" x 1/2" galvanized screen) (custom order: longer lead time)	JA-0780-XX	58.00

THERMOSTATS & CONTROL OPTIONS on next page



OPTIONAL ACCESSORIES - Page 3 of 3 STS-JZ & STV-JZ THERMOSTATS & CONTROLS

STS-JZ, STV-JZ, STW-JZ & SPW-JZ tube heaters are "factory ready" for line voltage or 24V thermostat; Multiple heaters per 24 volt thermostat require option JM-0303-KT (see below) Heaters manufactured prior to May 1, 2006 require 24V Field Mounted Kit for 24V control

> Line Voltage Thermostat (°F & °C Scales)



JL-0772-XX \$ 38.30

Low Voltage (24V) Digital Thermostat (°F / °C Selectable)



JS-0569-WR 72.00

TruTemp Infrared Setback Thermostat (°F & °C scales) (see more info on the TruTemp on page T-50)



JM-0150-XX 206.00

Moisture Proof Thermostat (NEMA 4X enclosure)



JS-0570-XX 331.00

Honeywell Farm-O-Stat

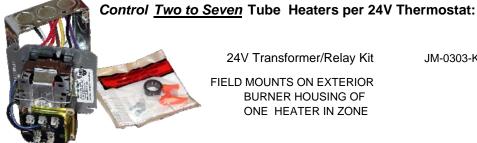


JB-0772-XX 206.00

60 Minute Timer JL-0774-US 97.00

24 VOLT CONTROL OPTIONS:

(Required for multiple heaters per TruTemp or 24V thermostat) Refer to guigelines page T-51



FIELD MOUNTS ON EXTERIOR **BURNER HOUSING OF** ONE HEATER IN ZONE

24V Transformer/Relay Kit

JM-0303-KT 103.00

ST- Series Burners prior to May 1, 2006:

For control of heaters manufactured prior to May 1, 2006, the ST-series 24V Field Mounted Kit is required for 24V thermostat control:

For <u>Single</u> <u>STS-JZ</u>: ST-series 24V <u>Field Mounted</u> Kit (see note in line above) (Single heater per thermostat)



JS-0568-KT

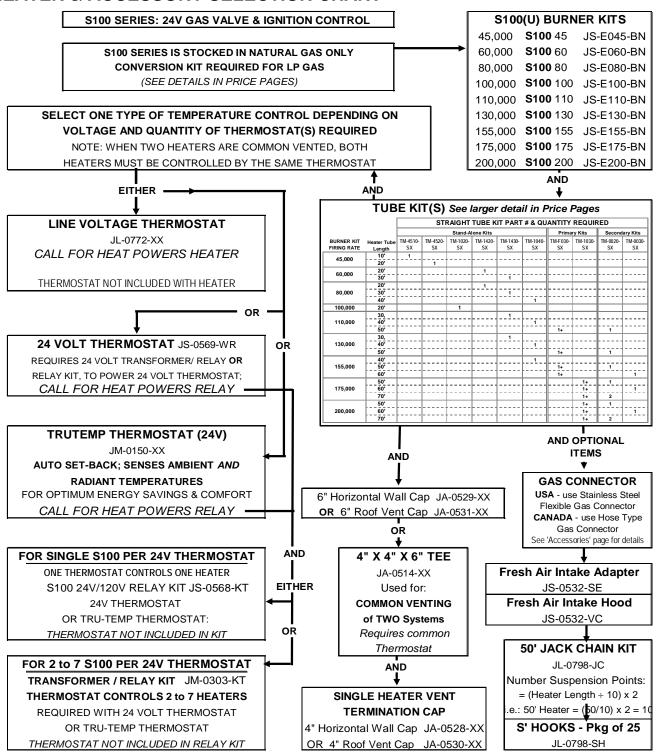
SP-LTUB-FX-01B RD: MAY 2008 RL: 01B

MAY 1, 2008 T-16



builderSchwank Tube Heaters \$100 & \$100U Series

HEATER & ACCESSORY SELECTION CHART





builderSchwank Tube Heaters \$100 & \$100U Series

(Single Straight Tube - NOT emissive coated)

(Tube kits for \$100-45-10' & \$100-100-20' have emissive coating)



S100 FEATURES SUMMARY:

- Line voltage thermostat ready
- Simple relay option for 24V thermostat
- Reflector & end caps improve IR heat output
- Swing-down cabinet service access
- Whisper quiet ceramic burner

COMPLETE SYSTEMS:

MODEL S100 45	CAPACITY 45,000 Btuh		ILABLE TUB <u>LENGTH</u> 10' 20'	_	LIST PRICE 1,107.00 1,159.00	Individual burner kits + tube kits are shipped to assemble tube
S100 60	60,000 Btuh	NG	20' 30'		1,159.00 1,293.00	heater orders.
S100 80	80,000 Btuh	NG	20' 30' 40'		1,159.00 1,293.00 1,428.00	~ See next page for details ~
S100 100	100,000 Btuh	NG Only	20'		1,293.00	* 40 ft heater price based on TM-1040-SX Tube Kit
S100 110	110,000 Btuh	NG	30' 40' 50'		1,293.00 1,428.00 1,665.00	* NOTE:
S100 130	130,000 Btuh	NG	30' 40' 50'		1,293.00 1,428.00 1,665.00	Standard burners are stocked for natural gas fuel only. Field conversion kits are required
\$100 155	155,000 Btuh	NG	40' 50' 60'		1,428.00 1,665.00 1,808.00	for conversion to LP gas - refer to Burner Kits on the page listed below
S100 175	175,000 Btuh	NG	50' 60' 70'		1,789.00 1,932.00 2,076.00	Lower price with New 40 ft secondary tube kit
\$100 200	200,000 Btuh	NG	50' 60' 70'		1,789.00 1,932.00 2,076.00	Lower price with New 40 ft secondary tube kit

PRICES INCLUDE BURNER ASSEMBLY AND THE FOLLOWING COMPONENTS AS REQUIRED:

TUBE KIT: PRIMARY & SECONDARY TUBE(S), REFLECTORS, TWO REFLECTOR END CAPS, WIRE REFLECTOR/TUBE HANGERS, TUBE COUPLER(S), AND TURBULATOR(S)

BURNER BIRDSCREEN ON BLOWER, IGNITER (FIELD MOUNTS IN 1st TUBE). **OPTIONAL:** FRESH AIR INTAKE ADAPTER & HOOD Burner with accessories, and the reflectors, tubes and accessories are packaged separately and clearly labelled for ease of filling orders and shipping

All optional accessories are shipped in a separate carton.

Please Order Heaters as burner kits +tube kit(s)
Heaters are shipped and invoiced as burner kits and tube kits

Heater & Accessory Selection Chart: Previous Page

BURNER & TUBE KIT CHART: Next Page

S100 BURNER KITS: Page 30 S100 TUBE KITS: Page 29

OPTIONAL ACCESSORIES: Page 39



builderSchwank Tube Heaters \$100 Series

BURNER & TUBE KIT* ASSEMBLY CHART

Which tube kits assemble with a burner kit?

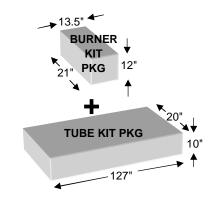
Use the chart below to determine:

- ✓ Available tube length for each firing rate
- ✓ Available tube kit & quantities for each burner kit
- 1) Select HEATER MODEL
- 2) Order BURNER KIT
- 3) Order Quantity(s) of TUBE KIT(s)

Stand-Alone tube kits require no additional tube kits.

Primary tube kits require at least one additional Secondary tube kit

Secondary tube kit require a Primary tube kit.



Chain: ((tube length/10) x 2+ 1) x length at each suspension point 'S' hooks: (tube length/10) x 4+ 2

					S100	TUBE K	IT PART #	# & QUAN	TITY REC	UIRED		
				Sta	nd-Alone I	Kits		Prima	ry Kits	+ 5	Secondary K	lits
	Tube Kit Gross Weigh	t (lbs) —	80	120	120	170	210	165	165	120	165	210
	Nominal Tube Len	gth (ft)	10'	20'	20'	30'	40'	30'	30'	20'	30'	40'
MODEL S100 INPUTS (Btuh)	Order BURNER KIT Gross Wt = 30 lbs		TM-4510- SX	TM-1020- SX	TM-1420- SX	TM-1430- SX	TM-1040- SX	TM-F030-	TM-1030- SX	TM-0020-	TM-0030- SX	TM-0040- SX
45,000	JS-E045-BN	10'	1									
45,000	J3-E045-BIN	20'			1							
60,000	JS-E060-BN	20'			1							
60,000	J3-E000-BIN	30'				1						
		20'			1							
80,000),000 JS-E080-BN	30'				1						
		40'					1					
100,000	JS-E100-BN	20'		1								
		30'				1						
110,000	JS-E110-BN	40'					1					1
		50'						1+		1		1
		30'				1						
130,000	JS-E130-BN	40'					1					
		50'						1+		1		
		40'					1					
155,000	JS-E155-BN	50'						1+		1		
		60'						1+			1	
		50'							1+	1]]
175,000	JS-E175-BN	60'							1+		1]]
		70'							1+			1
		50'							1+	1]
200,000	JS-E200-BN	60'							1+		1	
		70'							1+			1

*NOTE: S100 Series tubes are NOT emissive coated(except 10' x 45,000 & 20' x 100,000 Btuh tubes are emissive coated)

COMPLETE SYSTEMS: previous page

S100 TUBE KITS: next page S100 BURNER KITS: page T-20

OPTIONAL ACCESSORIES: page T-32

builderSchwank Tube Heaters \$100 Series

BURNER KITS



BURNER KITS ARE STOCKED IN NATURAL GAS - FIELD CONVERSION KITS FOR LP ARE LISTED BELOW

	AVAILABLE			
<u>INPUT</u>	TUBE LENGTHS	<u>FUEL</u>	PART#	LIST PRICE*
45,000 Btuh	10', 20'	N.G.	JS-E045-BN	683.00
60,000 Btuh	20', 30', 10'U	N.G.	JS-E060-BN	683.00
80,000 Btuh	20', 30', 40', 10'U	N.G.	JS-E080-BN	683.00
100,000 Btuh	20'	N.G. ONLY	JS-E100-BN	683.00
110,000 Btuh	30', 40', 50', 15'U, 20'U	N.G.	JS-E110-BN	683.00
130,000 Btuh	30', 40', 50', 15'U, 20'U	N.G.	JS-E130-BN	683.00
155,000 Btuh	40', 50', 60', 20'U, 30'U	N.G.	JS-E155-BN	683.00
175,000 Btuh	50', 60', 70', 30'U	N.G.	JS-E175-BN	714.00
200,000 Btuh	50', 60', 70', 30'U	N.G.	JS-E200-BN	714.00

The following items are packed inside the burner assembly carton: Burner fastening nuts, igniter, installation manual.

All S100 series burner assemblies operate on line voltage (120VAC).

For 24V control of S100 Series Heaters, see Optional Accessories and refer to ' 24V Guidelines' page T-51

Please order heaters as burner kits +tube kit(s)

Heaters are shipped and invoiced as burner kits and tube kits

LPG FIELD CONVERSION KITS FOR S100 BURNERS

Conversion Kits for LP to NG are listed on page T-52

<u>INPUT</u>		PART#	LIST PRICE*
45,000 Btuh	Field Conversion Kit NG to LP	JS-0556-XE	######
60,000 Btuh	Field Conversion Kit NG to LP	JS-0557-XX	24.00
80,000 Btuh	Field Conversion Kit NG to LP	JS-0559-XX	24.00
100,000 Btuh	Available in NG ONLY		
110,000 Btuh	Field Conversion Kit NG to LP	JS-0561-XX	24.00
130,000 Btuh	Field Conversion Kit NG to LP	JS-0563-XX	24.00
155,000 Btuh	Field Conversion Kit NG to LP	JS-0565-XX	24.00
175,000 Btuh	Field Conversion Kit NG to LP	JS-0567-AA	24.00
200,000 Btuh	Field Conversion Kit NG to LP	JS-0567-CC	24.00

S100 SYSTEMS: page T-18

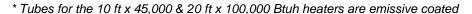
S100 KIT ASSEMBLY CHART: page T-19

S100U SYSTEMS: next page

S100U KIT ASSEMBLY CHART: page T-23
OPTIONAL ACCESSORIES: page T-32

builderSchwank Tube Heaters S100 Series

TUBE KITS (NOT emissive coated*) for STRAIGHT RUN TUBE HEATERS



Stand-Alone tube kits require no additional tube kits. **Primary** tube kits require at least one additional Secondary tube kit.

Secondary tube kit require a Primary tube kit.

Kits include Tubes, Reflectors, End Caps, Hangers, and Tube Couplers

Chain: ((tube length/10) x 2+ 1) x length at each suspension point 'S' hooks: (tube length/10) x 4+ 2

TUBE KIT PKG

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Stand-Alone	<u>Description</u>	TUBE KIT #		LIST PRICE
10 ' : 45,000 ONLY	Flanged/swaged aluminized emissive coated tube with sight glass and igniter ports, and one 5 ft turbulator	TM-4510-SX	\$	424.00
20 ' : 45/60/80,000	Flanged/swaged aluminized tube with sight glass and igniter ports, one steel swaged tube, one 4 ft turbulator and one 10 ft turbulator	TM-1420-SX		476.00
20 ' : 100,000 ONLY	Flanged/swaged aluminized emissive coated tube with sight glass and igniter ports, one steel swaged emissive coated tube, and one 10 ft S/S turbulator	TM-1020-SX		610.00
30 ': 60/80/110/130,000	Flanged/swaged aluminized tube with sight glass and igniter port, two steel swaged tubes, one 4 ft turbulator and one 10 ft turbulator	TM-1430-SX		610.00
40 ': 80/110/130/155,000	Flanged/swaged aluminized tube with sight glass and igniter port, three steel swaged tubes, one 10 ft turbulator	TM-1040-SX		745.00
Primary Kits [to make (40')	, 50', 60' & 70' heaters]			
30 ': 110/130/155,000	Flanged/swaged aluminized tube with sight glass and igniter port, two steel swaged tubes	TM-F030-SX		600.00
30 ' : 175/200,000	Flanged/swaged alumatherm tube with sight glass and igniter port, one aluminized swaged tube, one steel swaged tube, one 10 ft turbulator	TM-1030-SX		693.00
Secondary Kits [add to about	ove Primary Kits to make (40'), 50', 60' & 70' heaters]			
20' Four	steel swaged tubes (makes 70' heater with 30' primary)	TM-0020-SX		382.00
30' Four	steel swaged tubes (makes 70' heater with 30' primary)	TM-0030-SX		525.00
40' Four	steel swaged tubes (makes 70' heater with 30' primary)	TM-0040-SX		669.00
10' One	steel swaged tube, and one 10 ft turbulator	TM-1010-SX		258.00
	ondary tube kit TM-1010-SX can be used with TM-F030-SX to create a 4 ot use this kit to extend heater length beyond the maximum length appro		ıt.	

KIT ASSEMBLY CHART: previous page

S100 BURNER KITS: next page

S100 COMPLETE SYSTEMS: page T-18
OPTIONAL ACCESSORIES: page T-32



builderSchwank Tube Heaters \$100U Series

(Side-by-Side 'U' Tube - NOT emissive coated)



S100 FEATURES SUMMARY:

- Line voltage thermostat ready
- Simple relay option for 24V thermostat
- Double-wide reflector covers both tubes
- Swing-down cabinet service access
- Whisper quiet ceramic burner

COMPLETE SYSTEMS:

		A\	/AILABLE TUBE	
MODEL	CAPACITY	<u>Fuel</u>	<u>LENGTH</u>	LIST PRICE
S100U 60	60,000 Btuh	NG	2 x 10' \$	1,303.00
S100U 80	80,000 Btuh	NG	2 x 10' 2 x 15'	1,303.00 1,531.00
S100U 110	110,000 Btuh	NG	2 x 15' 2 x 20'	1,531.00 1,583.00
S100U 130	130,000 Btuh	NG	2 x 15' 2 x 20'	1,531.00 1,583.00
S100U 155	155,000 Btuh	NG	2 x 20' 2 x 30'	1,583.00 1,944.00
S100U 175	175,000 Btuh	NG	2 x 30'	2,099.00
S100U 200	200,000 Btuh	NG	2 x 30'	2,099.00

Individual burner kits + tube kits are shipped to assemble tube heater orders.

~ See next page for details ~

NOTE:

Standard burners are stocked for natural gas fuel only. Field conversion kits are required for conversion to LP gas refer to **Burner Kits** on the page listed below

PRICES INCLUDE BURNER ASSEMBLY AND THE FOLLOWING COMPONENTS AS REQUIRED:

TUBE KIT: PRIMARY & SECONDARY TUBE(S), TURN BOX, DOUBLE REFLECTORS, TWO REFLECTOR END CAPS, REFLECTOR/TUBE HANGERS, TUBE COUPLER(S), AND TURBULATOR(S).

BURNER BIRDSCREEN ON BLOWER, IGNITER (FIELD MOUNTS IN 1st TUBE). OPTIONAL: FRESH AIR INTAKE ADAPTER & HOOD

All optional accessories are shipped in a separate carton.

All S100 series burner assemblies operate on line voltage (120VAC).

For 24V control of S100 Series heaters, see Optional Accessories and refer to '24V Guidelines' page T-51

Please order heaters as burner kits +tube kit(s)
Heaters are shipped and invoiced as burner kits and tube kits

S100U BURNER KITS: previous page

S100U BURNER & TUBE KIT CHART: page T-23

S100U TUBE KITS: page T-25

OPTIONAL ACCESSORIES: page T-32

→13.5"

BURNER

PKG

TUBE KIT PKG

builderSchwank Tube Heaters \$100U Series

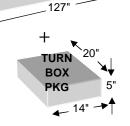
BURNER & 'U'-TUBE KIT* ASSEMBLY CHART

Which tube kits assemble with a burner kit?

Use the chart below to determine:

- ✓ Available tube length for each firing rate
- ✓ Available tube kit & quantities for each burner kit
- 1) Select HEATER MODEL
- 2) Order BURNER KIT
- 3) Order Quantity(s) of TUBE KIT(s)

Chain: ((tube length/10) x 4+ 1) x length at each suspension point 'S' hooks: (tube length/10) x 8+ 2 "Stand-Alone" & "Primary" tube kits include Turn Box JS-0513-BU packed and shipped in a separate carton



10"

			St	tand-Alone	**	Prima	2ndary	
	Tube Kit Gross We	ight (lbs) ->	100	145	170	170	170	65
	Side-by-Side Tubes	s Length ->	10'	15'	20'	20'	20'	10'
HEATER MODEL	Order BURNER KIT Gross Wt = 30 lbs		TM-1410- SU	TM-1415- SU	TM-1020- SU	TM-0020- SU	TM-A120	TM-0010-
S100U 60	JS-E060-BN	2 x 10'	1					
S100U 80	JS-E080-BN	2 x 10'	1					
31000 60	J3-EU0U-DIN	2 x 15'		1				
S100U 110	JS-E110-BN	2 x 15'		1				
31000 110	30-E110-DIN	2 x 20'			1			
S100U 130	JS-E130-BN	2 x 15'		1				
01000 130	30-E 130-BIV	2 x 20'			1			
S100U 155	JS-E155-BN	2 x 20'			1			
01000 100	00 E 100-DIV	2 x 30'				1+		1
S100U 175	JS-E175-BN	2 x 30'					1+	1
S100U 200	JS-E200-BN	2 x 30'					1+	1

^{*}NOTE: S100U series tubes are NOT emissive coated

Stand-Alone tube kits require no additional tube kits.

Primary tube kits require at least one additional Secondary tube kit.

Secondary tube kit require a Primary tube kit.

S100U Complete Systems: previous page

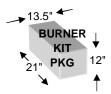
S100U Burner Kits: page T-24 S100U Tube Kits: next page

^{**} These kits include Turn Box JS-0513-BU packed and shipped in a separate carton



builderSchwank Tube Heaters \$100U Series

BURNER KITS



BURNER KITS ARE STOCKED IN NATURAL GAS - FIELD CONVERSION KITS FOR LP ARE LISTED BELOW

	AVAILABLE			
INPUT	TUBE LENGTHS	<u>FUEL</u>	PART#	LIST PRICE*
45,000 Btuh	10', 20'	N.G.	JS-E045-BN	\$ 683.00
60,000 Btuh	10'U, 20', 30'	N.G.	JS-E060-BN	683.00
80,000 Btuh	10'U, 20', 30', 40'	N.G.	JS-E080-BN	683.00
110,000 Btuh	15'U, 20'U, 30', 40', 50'	N.G.	JS-E110-BN	683.00
130,000 Btuh	15'U, 20'U, 30', 40', 50'	N.G.	JS-E130-BN	683.00
155,000 Btuh	20'U, 30'U, 40', 50', 60'	N.G.	JS-E155-BN	683.00
175,000 Btuh	30'U, 50', 60', 70'	N.G.	JS-E175-BN	714.00
200,000 Btuh	30'U, 50', 60', 70'	N.G.	JS-E200-BN	714.00

The following items are packed inside the burner assembly carton: Burner fastening nuts, igniter, installation manual.

All S100 series burner assemblies operate on line voltage (120VAC).

For 24V control of S100 Series heaters, see Optional Accessories and refer to '24V Guidelines' page T-51

Please order heaters as burner kits +tube kit(s)

Heaters are shipped and invoiced as burner kits and tube kits

LPG FIELD CONVERSION KITS FOR S100 BURNERS

Conversion Kits for LP to NG are listed on Pages 72 & 73

<u>INPUT</u>		PART#	<u>L</u>	IST PRICE*
45,000 Btuh	Field Conversion Kit NG to LP	JS-0556-XE	\$	35.00
60,000 Btuh	Field Conversion Kit NG to LP	JS-0557-XX		24.00
80,000 Btuh	Field Conversion Kit NG to LP	JS-0559-XX		24.00
100,000 Btuh	Available in NG ONLY			
110,000 Btuh	Field Conversion Kit NG to LP	JS-0561-XX		24.00
130,000 Btuh	Field Conversion Kit NG to LP	JS-0563-XX		24.00
155,000 Btuh	Field Conversion Kit NG to LP	JS-0565-XX		24.00
175,000 Btuh	Field Conversion Kit NG to LP	JS-0567-AA		24.00
200,000 Btuh	Field Conversion Kit NG to LP	JS-0567-CC		24.00

S100U SYSTEMS: page T-23

S100U KIT ASSEMBLY CHART: page T-24

S100 SYSTEMS: page T-18

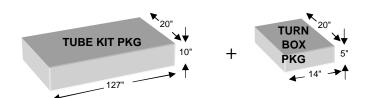
S100 KIT ASSEMBLY CHART: page T-19
OPTIONAL ACCESSORIES: page T-32

^{*} Burner & tube kit prices represent the component prices in conjunction with purchasing a complete system.



builderSchwank Tube Heaters \$100U Series

TUBE KITS (NOT emissive coated)



"Stand-Alone" & "Primary" tube kits include Turn Box JS-0513-BU packed and shipped in a separate carton

LICT DDICE*

Stand-Alone tube kits require no additional tube kits. **Primary** tube kits require at least one additional Secondary tube kit. **Secondary** tube kit require a Primary tube kit.

Chain: ((tube length/10) x 4+ 1) x length at each suspension point 'S' hooks: (tube length/10) x 8+ 2

Kit includes Tubes, Reflectors, End Caps, Hangers, Tube Couplers

Stand-Alone	<u>Description</u>	TUBE KIT #	LIST PRICE*
10'U : 60/80,000	Flanged/swaged aluminized tube with sight glass and igniter port, one steel swaged tube, one 4 ft turbulator and one 10 ft turbulator	TM-1410-SU	\$ 620.00
15'U : 80/110/130,000	Flanged/swaged aluminized tube with sight glass and igniter port, one 10' steel swaged tube, two 5' steel swaged tubes, on 4 ft turbulator and one 10 ft turbulator	TM-1415-SU e	848.00
20'U : 110/130/155,000	Flanged/swaged aluminized tube with sight glass and igniter port, three steel swaged tubes, one 10 ft turbulator	TM-1020-SU	900.00
Primary Kits [to make 30'U-Tuk	be heaters - requires Primary + Secondary kit below]		
20'U : 155,000	Flanged/swaged aluminized tube with sight glass and igniter port, three steel swaged tubes	TM-0020-SU	879.00
20'U : 175/200,000	Flanged/swaged alumatherm tube with sight glass and igniter port, one aluminized swaged tube, two steel swaged tube, one 10 ft turbulator		1,003.00
Included with each of the	above tube kits is one turn box; packed and shipped in a separ carton (price is included in tube kit price		
Secondary Kits (add to above Prim	ary Kit to make 30' U-Tube heaters)		
2 x 10'	Two steel swaged tubes	TM-0010-SU	382.00

Please order heaters as burner kits + tube kit(s)
Heaters are shipped and invoiced as burner kits and tube kits

S100U COMPLETE SYSTEMS: page T-22 S100 & S100U BURNER KITS: page T-24 S100 OPTIONAL ACCESSORIES: page T-32

WhisperJet TUBE HEATERS SET SERIES - TWO STAGE



SET FEATURES SUMMARY: - 2 Stage burner operation

- Status indicator lights
- Straight tube or 'U'-tube configuration
- Swing-down cabinet service access
- Whisper quiet ceramic burner

COMPLETE SYSTEMS:

MODEL	CAPACITY High/Low Btuh	AV <u>Fuel</u>	AILABLE TUE	BE <u>LIST PRICE</u>
SET 80/60	80.000/60.000	NG	20'	\$ 1,407.00
021 00/00	00,000,000,000		30'	1,541.00
SET 110/75	110,000/75,000	NG	30'	1,541.00
GE1 110/70	110,000/13,000		40'	1,676.00 *
SET 130/90	130.000/90.000	NG	30'	1,541.00
GE1 100/00	100,000/00,000		40'	1,676.00 *
SET 155/110	155.000/110.000	NG	40'	1,676.00 *
GET 100/110	133,000/110,000		50'	1,913.00
SET 175/125	175.000/125.000	NG	50'	2,037.00 *
021 170/120	173,000/123,000		60'	2,180.00
SET 200/140	200.000/140.000	NG	50'	2,037.00 *
321 200/140	200,000,140,000	.,.0	60'	2,180.00

Individual burner kits + tube kits are shipped to assemble tube heater orders.

~ See next page for details ~

* 40 ft heater price based on TM-1040-SX Tube Kit

NOTE:

Standard burners are stocked for natural gas fuel only. Field conversion kits are required for conversion to LP gas refer to **Burner Kits** on the page listed below

PRICES INCLUDE THE FOLLOWING COMPONENTS AS REQUIRED:

BURNER KIT: STATUS INDICATOR LIGHTS. ELECTRICAL CORD & PLUG. FACTORY INSTALLED 24V/120V RELAY FOR 24V TWO-STAGE THERMOSTAT (THERMOSTAT EXTRA), BIRDSCREENED AIR INTAKE TO BLOWER. OPTIONAL: FRESH AIR INTAKE ADAPTER & HOOD

TUBE KIT: PRIMARY & SECONDARY TUBE(S), REFLECTORS, TWO REFLECTOR END CAPS, WIRE REFLECTOR/TUBE HANGERS, TUBE COUPLER(S), AND TURBULATOR(S). HOT ROLLED STEEL TUBES ARE NOT EMISSIVE COATED

Burner with accessories, and the reflectors, tubes and accessories are packaged separately and clearly labelled for ease of filling orders and shipping

All optional accessories are shipped in a separate carton.

SET TUBE KITS: next page SET BURNER KITS: page T-28

SET KIT ASSEMBLY CHART: next page **OPTIONAL ACCESSORIES: page T-32**



WhisperJet TUBE HEATERS SET SERIES - TWO STAGE

SET			•	SET' TUB	E KIT PA	RT#&QU	JANTITY I	REQUIRE	D	40 = 1
			Sta	and-Alone I	Kits	Prima	ry Kits	Second	lary Kits	13.5"
	Tube Kit Shipping Wei	ight (lbs) —	120	170	210	165	165	120	165	BURNER
	Nominal Le	ength (ft)	20'	30'	40'	30'	30'	20'	30'	KIT
HEATER MODEL	BURNER KIT Gross Wt = 30 lbs		TM-1420- SX	TM-1430- SX	TM-1040- SX	TM-F030-	TM-1030- SX	TM-0020- SX	TM-0030-	21"
SET 80/60	JS-080T-BN	20'	1							T
SET 80/00	J3-0601-BIN	30'		1						20"
SET 110/75	JS-110T-BN	30'		1					TUBE	KIT PKG
3E1 110/73	J3-1101-BN	40'			1					
SET 130/90	JS-130T-BN	30'		1						—
SET 130/90	J3-1301-BIN	40'			1				4	127"
SET 155/110	JS-155T-BN	40'			1					
SET 155/110	JO-1001-DIN	50'		[1+		1	1	
SET 175/125	JS-175T-BN	50'					1+	1		
SEI 1/3/125	JO-1/01-BIN	60'					1+		1	
SET 200/140	JS-200T-BN	50'					1+	1		
SET 200/140	JO-2001-BIN	60'		[1+		1	

Please order heaters as burner kits + tube kit(s)
Heaters are shipped and invoiced as burner kits and tube kits

TUBE KITS (Not emissive coated)

Stand-Alone tube kits require no additional tube kits.

Primary tube kits require at least one additional Secondary tube kit.

Secondary tube kit require a Primary tube kit.

Kits include Tubes, Reflectors, Hangers, Tube Couplers

Chain: ((tube length/10) x 2+ 1) x length at each suspension point 'S' hooks: (tube length/10) x 4+ 2

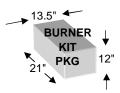
Stand-Alone	<u>Description</u>	TUBE KIT#	LIST PRICE*
20 ' : 80/60	Flanged/swaged aluminized tube with sight glass and igniter ports, one steel swaged tube, one 4 ft turbulator and one 10 ft turbulator	TM-1420-SX	\$ 476.00
30 ': 80/60, 110/75, 130/90	Flanged/swaged aluminized tube with sight glass and igniter port, two steel swaged tubes, one 4 ft turbulator and one 10 ft turbulator	TM-1430-SX	610.00
40 ': 110/75, 130/90, 155/110	Flanged/swaged aluminized tube with sight glass and igniter port, three steel swaged tubes, one 10 ft turbulator	TM-1040-SX	745.00
Primary Kits [to make (40'), 50', 60'	& 70' heaters]		
30 ': 155/110	Flanged/swaged aluminized tube with sight glass and igniter port, two steel swaged tubes	TM-F030-SX	600.00
30 ' : 175/125, 200/140	Flanged/swaged alumatherm tube with sight glass and igniter port, one aluminized swaged tube, one steel swaged tube, one 10 ft turbulator	TM-1030-SX	693.00
Secondary Kits [add to above Prime	ary Kits to make 50' & 60' heaters]		
20'	Two steel swaged tubes, reflectors, hangers, couplers	TM-0020-SX	382.00
30'	Three steel swaged tubes, reflectors, hangers, couplers	TM-0030-SX	525.00

SET BURNER KITS: next page
SET COMPLETE SYSTEMS: previous page
SET KIT ASSEMBLY CHART: above
OPTIONAL ACCESSORIES: page T-32



WhisperJet TUBE HEATERS SET SERIES - TWO STAGE

'TWO STAGE' BURNER KITS



Based on the reliable STS-JZ burner with indicator lights, electrical cord, and *Two Stage* firing rate

BURNER INCLUDES STATUS INDICATOR LIGHTS, ELECTRICAL CORD & PLUG, FACTORY INSTALLED 24V/120V RELAY FOR 24V TWO-STAGE THERMOSTAT, BIRDSCREENEDAIR INTAKE ON BLOWER.

				AVAILABLE	
LIST PRICE*	<u>L</u>	PART #	<u>FUEL</u>	TUBE LENGTHS	CAPACITY
931.00	\$	JS-080T-BN	N.G.	20', 30'	80,000 / 60,000 Btuh
931.00		JS-110T-BN	N.G.	30', 40'	110,000 / 75,000 Btuh
931.00		JS-130T-BN	N.G.	30', 40'	130,000 / 90,000 Btuh
931.00		JS-155T-BN	N.G.	40', 50'	155,000 / 110,000 Btuh
962.00		JS-175T-BN	N.G.	50', 60'	175,000 / 125,000 Btuh
962.00		JS-200T-BN	N.G.	50', 60'	200,000 /140,000 Btuh

The following items are packed inside the burner assembly carton: Installation manual; igniter and the burner fastening nuts & bolts are packed inside the burner housing.

All optional accessories are shipped in separate carton.

Burner kit part number includes the fuel suffix **N** (natural gas)

All burner assemblies require line voltage (120VAC) supply - Two stage thermostat is 24V.

LPG FIELD CONVERSION KITS FOR SET BURNERS

	<u>INPUT</u>		PART#	<u>L</u>	<u>IST PRICE</u> *
Conversion Kits	80,000/60,000 Btuh	Field Conversion Kit NG to LP	JS-0555-TC	\$	41.00
for LP to NG are listed on	110,000/75,000 Btuh	Field Conversion Kit NG to LP	JS-0555-TG		41.00
pages 72 & 73	130,000/90,000 Btuh	Field Conversion Kit NG to LP	JS-0555-TK		41.00
	155,000/110,000 Btuh	Field Conversion Kit NG to LP	JS-0555-TO		41.00
	175.000 & 200.000 Btuh	Not convertible to LP			

THERMOSTAT CONTROL FOR 'SET' TWO STAGE: PART # LIST PRICE* Two Stage 24V Digital Thermostat JS-0569-DT \$ 206.00

NOTE: A two stage thermostat can control only one single SET tube heater.

Heaters are shipped and invoiced separately as burner kits and tube kits

Please order heaters as burner kits + tube kits

SET BURNER & TUBE KIT ASSEMBLY CHART: page T-27

SET TUBE KITS: previous page
OPTIONAL ACCESSORIES: page T-32

WhisperJet 'U'-TUBE HEATERS SETU SERIES - TWO STAGE

(Double Tube - Not emissive coated)



COMPLETE SYSTEMS:

			AVAILABLE TUBE	
MODEL	CAPACITY		LENGTH	LIST PRICE
SETU 80/60	80,000/60,000	NG	2 x 10' \$	1,551.00
	,		2 x 15'	1,779.00
			0 451	4 770 00
SETU 110/75	110,00/75,0000	NG	2 x 15'	1,779.00
			2 x 20'	1,831.00
			0 45	4 770 00
SETU 130/90	130,000/90,000	NG	2 x 15'	1,779.00
	,		2 x 20'	1,831.00
SETU 155/110	155,000/110,000	NG	2 x 20'	1,831.00
	,		2 x 30'	2,192.00
SETU 175/125	175,000/125,000	NG	2 x 30'	2,347.00
SETU 200/140	200,000/140,000	NG	2 x 30'	2,347.00

SETU FEATURES SUMMARY:

- 2 Stage burner operation
- Status indicator lights
- Double-wide reflector over 'U'-tube
- Swing-down cabinet service access
- Whisper quiet ceramic burner

Individual burner kits + tube kits are shipped to assemble tube heater orders.

~ See next page for details ~

NOTE:

Standard burners are stocked for natural gas fuel only. Field conversion kits are required for conversion to LP gas refer to **Burner Kits** on the page listed below

PRICES INCLUDE THE FOLLOWING COMPONENTS AS REQUIRED:

BURNER KIT: STATUS INDICATOR LIGHTS, ELECTRICAL CORD & PLUG, FACTORY INSTALLED 24V/120V RELAY FOR 24V TWO-STAGE THERMOSTAT (THERMOSTAT EXTRA), BIRDSCREENED 4" DIAMETER AIR INTAKE ADAPTER ON BLOWER.

TUBE KIT: PRIMARY & SECONDARY TUBE(S), REFLECTORS, TWO REFLECTOR END CAPS, WIRE REFLECTOR/TUBE HANGERS, TUBE COUPLER(S), AND TURBULATOR(S).

Burner with accessories, and the reflectors, tubes and accessories are packaged separately and clearly labelled for ease of filling orders and shipping

All optional accessories are shipped in a separate carton.

Please order heaters as burner kits + tube kit(s)
Heaters are shipped and invoiced as burner kits and tube kits

THERMOSTAT CONTROL FOR 'SETU' Two Stage:

<u>PART #</u> <u>LIST PRICE</u>*

JS-0569-DT \$ 206.00

Two Stage 24V Digital Thermostat

NOTE: A two stage thermostat can control $\underline{\text{only one single}}\,\text{SET}$ tube heater.

SETU BURNER KITS: page T-28

SETU TUBE KITS & ASSEMBLY CHART: next page

OPTIONAL ACCESSORIES: page T-32



WhisperJet TUBE HEATERS SETU SERIES - TWO STAGE

SETU BURNER & TUBE KIT ASSEMBLY

Chain: ((tube length/10) x 4+ 1) x length at each suspension point 'S' hooks: (tube length/10) x 8+ 2

1) Soloat HEATE	D MODEL								
 Select HEATE Order BURNE 		5	SETU TUE	BE KIT PA	NRT # & Q	UANTITY	REQUIR	 ED	
3) Order Quantity	3) Order Quantity(s) of TUBE KIT(s)		Si	tand-Alone	**	Prim	ary **	2ndary	
	Tube Kit Gross Weigh	t (lbs) -	100	145	170	170	170	65	** These kits include
	Side-by-Side Tubes Leng	gth (ft) 🗡	10' x 2	15' x 2	20' x 2	20' x 2	20' x 2	10' x 2	Turn Box JS-0513-BU packed and shipped in a
HEATER MODEL	Order: BURNER KIT Gross Wt = 30 lbs		TM-1410- SU	· TM-1415- SU	TM-1020- SU	TM-0020- SU	- TM-A120- SU	TM-0010- SU	separate carton
SETU 80/60	JS-080T-BN	2 x 10'	1						
3L10 00/00	33-0001-DIV	2 x 15'		1					
SETU 110/75	JS-110T-BN	2 x 15'		1					
0210 110/70	OO TIOI BIV	2 x 20'			1				
SETU 130/90	JS-130T-BN	2 x 15'		1					
OE10 130/30	00-1001-DIV	2 x 20'			1				
SETU 155/110	JS-155T-BN	2 x 20'			1				
OL10 133/110	00-1001-DIV	2 x 30'				1+		1	
SETU 175/125	JS-175T-BN	2 x 30'					1+	1	
SETU 200/140	JS-200T-BN	2 x 30'					1+	1	

SETU (Double) TUBE KITS (Not emissive coated)

Stand-Alone Descrip	otion (kits include reflectors, end caps, hangers, couplers)	TUBE KIT#	LIST PRICE*
10'U : 80/60	Flanged/swaged aluminized tube with sight glass and igniter port, one steel swaged tube, one 4 ft turbulator and one 10 ft turbulator	TM-1410-SU	\$ 620.00
15'U : 80/60, 110/75	Flanged/swaged aluminized tube with sight glass and igniter port, one 10' steel swaged tube, two 5' steel swaged tubes, one 4 ft turbulator and one 10 ft turbulator	TM-1415-SU	848.00
20'U : 110/75, 130/90, 155/110	Flanged/swaged aluminized tube with sight glass and igniter port, three steel swaged tubes, one 10 ft turbulator	TM-1020-SU	900.00
Primary Kits [to make 30'U-to	ube heaters - requires Primary + Secondary kit below]		
20'U : 155/110	Flanged/swaged aluminized tube with sight glass and igniter port, three steel swaged tubes	TM-0020-SU	879.00
20'U : 175/125, 200/140	Flanged/swaged alumatherm tube with sight glass and igniter port, one aluminized swaged tube, two steel swaged tubes, one 10 ft turbulator	TM-A120-SU	1,003.00
Included with each of the	above tube kits is one turn box; packed and shipped in a separa carton (price is included in tube kit price)	JS-0513-BU	
Secondary Kit (add to above	Primary Kit to make 30' U-Tube heaters)		
2 x 10'	Two steel swaged tubes, hangers, couplers, reflector	TM-0010-SU	382.00

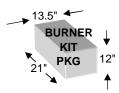
SETU COMPLETE SYSTEMS: previous page

SETU BURNER KITS: next page
OPTIONAL ACCESSORIES: page T-32



WhisperJet TUBE HEATERS SETU SERIES - TWO STAGE

'TWO STAGE' BURNER KITS



Based on the reliable STS-JZ burner with indicator lLights, electrical cord, and *Two Stage* firing rate

BURNER INCLUDES STATUS INDICATOR LIGHTS, ELECTRICAL CORD & PLUG, FACTORY INSTALLED 24V/120V RELAY FOR 24V TWO-STAGE THERMOSTAT, BIRDSCREENEDAIR INTAKE ON BLOWER.

	AVAILABLE			
CAPACITY	TUBE LENGTHS	<u>FUEL</u>	PART#	<u>LIST PRICE</u> *
80,000 / 60,000 Btuh	20', 30', 40'	N.G.	JS-080T-BN	\$ 931.00
110,000 / 75,000 Btuh	30', 40', 50'	N.G.	JS-110T-BN	931.00
130,000 / 90,000 Btuh	30', 40', 50'	N.G.	JS-130T-BN	931.00
155,000 / 110,000 Btuh	40', 50', 60'	N.G.	JS-155T-BN	931.00
175,000 / 125,000 Btuh	50', 60', 70'	N.G.	JS-175T-BN	962.00
200,000 /140,000 Btuh	50', 60', 70'	N.G.	JS-200T-BN	962.00

The following items are packed inside the burner assembly carton: Installation manual; igniter and the burner fastening nuts & bolts are packed inside the burner housing.

All optional accessories are shipped in separate carton.

Burner kit part number includes the fuel suffix **N** (natural gas)

All burner assemblies require line voltage (120VAC) supply - Two stage thermostat is 24V.

LPG FIELD CONVERSION KITS FOR SET BURNERS

		<u>INPUT</u>		PART#	<u> </u>	LIST PRICE*
	Conversion Kits	80,000/60,000 Btuh	Field Conversion Kit NG to LP	JS-0559-XX	\$	24.00
	for LP to NG are listed on	110,000/75,000 Btuh	Field Conversion Kit NG to LP	JS-0561-XX		24.00
	page T-52	130,000/90,000 Btuh	Field Conversion Kit NG to LP	JS-0563-XX		24.00
ı		155,000/110,000 Btuh	Field Conversion Kit NG to LP	JS-0565-XX		24.00
		175,000 & 200,000 Btuh	Not convertible to LP			

THERMOSTAT CONTROL FOR 'SET' TWO STAGE: PART # LIST PRICE* Two Stage 24V Digital Thermostat JS-0569-DT \$ 206.00

Heaters are shipped and invoiced separately as burner kits and tube kits

Please order heaters as burner kits + tube kits

SETU BURNER & TUBE KIT ASSEMBLY CHART: previous page

SETU TUBE KITS: previous page
OPTIONAL ACCESSORIES: page T-32

^{*} Burner & tube kit prices represent the component prices in conjunction with purchasing a complete system.



OPTIONAL ACCESSORIES - Page 1 of 3 S100(U) & SET(U) Series TUBE HEATERS

Hanging Chain - 50 ft box of #8 Jack Chain - 'S' hooks separate - see next item

JL-0798-JC

58.00

\$

S100 / SET: ((tube length/10) x 2 + 1) x length at each suspension point S100U / SETU: ((tube length/10) x 4 + 1) x length at each suspension point

'S' Hooks - $1^{7}/_{8}$ " - Package of 25

JL-0798-SH

22.50

S100 / SET: ((tube length/10) x 4 + 2 S100 / SET: ((tube length/10) x 8 + 2

Combustion Air Intake: Optional

Not all tube heater installations require outside air for combustion.

Schwank recommends outside combustion air when:

☐ A building is under negative air condition

Dusty environment in the building

☐ Chemical or process contaminants such as welding smoke present

☐ Sealed combustion is required or advised for the project



Please refer to the installation manual for complete details on venting and combustion air duct.





Wall Hood Roof Cap

	FARI#	LIST PRICE
Fresh Air Intake Adapter 4" (for S100[U] & SET[U] Series) Mounts to exterior top of burner cabinet	JS-0532-SE	\$ 39.00
Outside Air Intake Wall Vent Hood 4" ~ birdscreened, flush mount	JS-0532-VC	25.90
4" Roof Cap - fits single wall pipe	JA-0530-XX	46.60

Vent Stuff:



Flue Vent Terminals:	PART#	LIST PRICE
4" horizontal (through wall)	JA-0528-XX	\$ 38.30
6" horizontal	JA-0529-XX	46.60

Wall Terminal*

Use this termination cap by Schwank, or use the termination cap for double walled pipe as supplied by that manufacturer

* Fits single wall vent pipe - field modification required to fit to double wall pipe

Vent Tee 4" X 4" X 6"
(Two Couplers JA-0516-AA are optional)



JA-0514-XX 191.00

4" x 4" x 6" Vent Tee

4" x 8" Aluminized Steel Coupler with 2 x U-Bolts JA-0516-AA 40.40

<u>USA ONLY</u>: Flexible Gas Connectors for Tube Heaters: Not for use with <u>tube heaters</u> in Canada

Note: Minimum length for <u>tube heater</u> flexible connector is 24 inches. Revisions to the Gas Code/Standards are anticipated for Fall 2008. A bulletin will be issued when the Standard revisions are finalized.

Flexible Gas Connector 1/2" x 24" - for 45 to 155 Mbh JL-0771-XX \$ 31.10

Flexible Gas Connector 3/4" x 24" - for 175 to 200 Mbh JL-0771-ZZ 100.00

CANADA ONLY: Hose Type Gas Connectors for Tube Heaters: Not for use in USA

Hose Type Gas Connectors are required only for tube heaters by B-149-2005 (Section 7.22.3)

Type 1 Hose Connector 1/2" x 36" - 1/2" MPT each end - for 45 to 155 Mbh JL-0771-RC \$ 32.10

Type 1 Hose Connector 3/4" x 36" - 1/2" MPT + 3/4" MPT - for 175 & 200 Mbh JL-0771-RB 75.00



OPTIONAL ACCESSORIES - Page 2 of 3 S100(U) & SET(U) Series TUBE HEATERS

\$100 & SET Series Elbow Kits: (These models do NOT have a reflector cover on elbow)

S100 & SET 45° Aluminized Steel Elbow Kit***

JS-0528-SM

186.00

\$

S100 & SET 90° Aluminized Steel Elbow Kit***



JS-0508-SM 114.00

S100 & SET 180° Aluminized Steel Elbow Kit - Order TWO x JS-0508-SM

JS-0508-SM x 2



228.00

(***\$100 Kits include: one elbow, one 4" swaged tube coupler and two \$100 reflector end caps)

Other C	ptions:
---------	---------

•		
Side Reflector Extension (- All models - 10" deep x 116" long)	JS-0509-KT	\$ 45.60
#8 Hanging Chain - (box of 50' Jack Chain - 'S' hooks separate - see next item)	JL-0798-JC	58.00
'S' Hooks - 1 ⁷ / ₈ " - Package of 25	JL-0798-SH	22.50
High Temp, Touch Up Paint -369g aerosol can	JA-0587-XX	25.90
5 ft length Tube Protection Screen (custom order: longer lead time)	JA-0780-XS	58.00

THERMOSTATS & CONTROL OPTIONS on next page



OPTIONAL ACCESSORIES - Page 3 of 3 S100(U) & SET(U) Series TUBE HEATERS

THERMOSTAT CONTROL FOR 'SET' TWO STAGE:

Two Stage 24V Digital Thermostat

JS-0569-DT

\$ 206.00

NOTE: A two stage thermostat can control only one single SET tube heater.

THERMOSTATS & CONTROLS \$100 / \$100U Series:

LINE VOLTAGE:

Line Voltage Thermostat °F & °C Dual Scale S100 tube heaters are "factory ready" for line voltage thermostat



JL-0772-XX

\$ 38.30

24 VOLT:

Low Voltage (24V) Digital Thermostat °F & °C Scales (S100 requires one of 24V options below)



JS-0569-WR

\$ 72.00

TruTemp ENERGY MANAGEMENT:

TruTemp Thermostat

(S100 requires one of 24V options below) (see more info on the TruTemp on page T-50)



JM-0150-XX

206.00

MOISTURE PROOF:

Moisture Proof Thermostat (NEMA 4X enclosure)



JS-0570-XX

331.00

24 VOLT CONTROL OPTIONS: (Required for TruTemp or 24V thermostat) Refer to guidelines page T-51

Control a Single S100 Heater with a 24V Thermostat:



\$100 24V Thermostat Control Relay Kit JS-0568-KT

\$ 36.30

JS-0568-KT

FIELD MOUNT IN BURNER: 2 SCREWS MOUNTS TO CONTROL PLATE

Control

24V Transformer/Relay Kit

JM-0303-KT

FIELD MOUNTS ON EXTERIOR BURNER HOUSING OF ONE HEATER IN ZONE



JM-0303-KT

103.00

60 Minute Timer JL-0774-US 97.00

SP-LTUB-FX-01B RD: MAY 2008 RL: 01B

MAY 1, 2008 T-34

Residential Tube Heater STR-JZ Series

RESIDENTIAL GARAGE/SHOP HEATER



PRICES INCLUDE BURNER ASSEMBLY AND THE FOLLOWING COMPONENTS:

BURNER KIT: AIR INTAKE HOOD, 120V 3-PRONGED PLUG, AND 24V THERMOSTAT WITH 20 FT OF 18/2 WIRE;

TUBE KIT: PRIMARY TUBE, EMISSIVE COATED SECONDARY TUBE(S), TWO END PLATE HANGERS, WEBBED REFLECTOR/TUBE HANGERS, FOCUS SHIELD REFLECTORS, TUBE COUPLER(S), TURBULATOR(S),

COMPLETE SYSTEMS:

		AVAILABLE TUBE			
MODEL	CAPACITY		LENGTH		LIST PRICE
STR-JZ 45	45,000 Btuh	NG	10'	\$	1,278.00
			20'		1,398.00
STR-JZ 60	60,000 Btuh	NG	20'		1,398.00
			30'		1,588.00

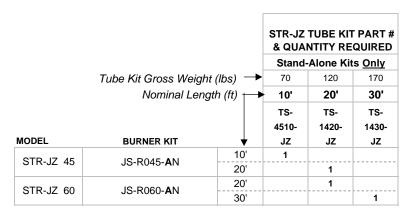
Individual burner kits + tube kits are shipped to assemble tube heater orders.

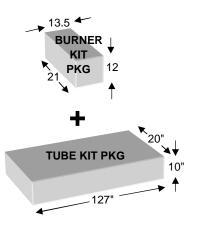
~ See next page for details ~

Burners are stocked in natural gas only - Field conversion kit required for LP - see next page ${\sf P}$

Heaters are shipped and invoiced as burner kits and tube kits. Please order kits.

STR-JZ BURNER & TUBE KIT ASSEMBLY CHART





Heaters are shipped and invoiced as burner kits and tube kits. Please order kits.

STR-JZ BURNER & TUBE KITS:next page STR-JZ ACCESSORIES:page T-37



Residential Tube Heater STR-JZ Series



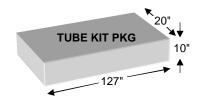
<u>CAPACITY</u>	TUBE LENGTHS	<u>FUEL</u>	PART#	LIST PRICE
45,000	10', 20'	N.G.	JS-R045-AN	\$ 849.00
60,000	20', 30'	N.G.	JS-R060-AN	849.00

The following items are packed inside the burner assembly carton: Burner fastening nuts & bolts, fresh air intake cap, 24V thermostat with 20 ft of 18/2 wire, installation manual.

LPG FIELD CONVERSION KITS FOR STR-JZ BURNERS

l	Conversion Kits	<u>INPUT</u>		PART#	<u>LI</u>	ST PRICE*
	for LP to NG are listed on	45,000 Btuh	Field Conversion Kit NG to LP	JS-0556-XC	\$	45.00
	page T-52	60,000 Btuh	Field Conversion Kit NG to LP	JS-0557-XX		24.00

TUBE KITS - STR-JZ



Chain: ((tube length/10)+ 2) x length at each suspension point 'S' hooks: (tube length/10) x 2+ 4

Tube kits include '-JZ' 116" reflectors, webbed hangers, end plate hangers, couplers, and tubes as listed below:

Stand-Alone	<u>Description</u> (includes Reflectors, Hangers, and Couplers)	PART#	LIST PRICE
10' : 45,000 Btuh	Flanged/swaged aluminized tube with no ports, one 5 ft turbulator	TS-4510-JZ	\$ 429.00
20' : 45,000/60,000	Flanged/swaged aluminized tube with no ports, one emissive coated steel swaged tube, one 4 ft turbulator and one 10 ft turbulator	TS-1420-JZ	549.00
30' : 60,000	Flanged/swaged aluminized tube with no ports, two emissive coated steel swaged tubes, one 4 ft turbulator and one 10 ft turbulator	TS-1430-JZ	739.00



OPTIONAL ACCESSORIESSTR-JZ Series

#8 Hanging Chain - (box of 50' Jack Chain - 'S' hooks separate - see next item)	JL-0798-JC	\$	58.00
'S' Hooks - 1 ⁷ / ₈ " - Package of 25	JL-0798-SH		22.50
INSTALLER CONVENIENCE KIT* (* Kit includes: 4" x 10' aluminum flexible duct, 4" wall flue terminal and 10' jack chain)	JS-0598-XX		98.00
4" Horizontal Wall Flue Terminal	JA-0528-XX		38.30
4" Roof Vent Cap	JA-0530-XX		46.60
USA ONLY: Flexible Gas Connectors for Tube Heaters: Not for	use with tube heater	s in Can	ada
Flexible Gas Connector 1/2" x 24" - for 45 to 155 Mbh	JL-0771-XX		31.10
CANADA ONLY: Hose Type Gas Connectors for TubeHeaters	S: Not for use in US	SA	
Hose Type Gas Connectors are required only for tube heaters by B-149-2005 (Se	ction 7.22.3)		
Type 1 Hose Connector 1/2" x 36" - 1/2" MPT each end - for 45 to 155 Mbh	JL-0771-RC	\$	32.10
Decorative 'Tuxedo' Grille Kit - Matte Black finish	2		
Decorative 'Tuxedo' Grille Kit - Matte Black Grille - 10 foot section	TG-0010-KT	\$	349.00
Matte black grille & aluminized steel framing dress up a tube heater installation - secures with	n tabs to 'JZ' Series he	eater	
STR-JZ Elbow Kits:			
ST-JZ 45° Aluminized Steel Elbow Kit - NO Reflector Cover: (Elbow can be installed right or left hand: includes coupler & end plate/hanger)	JS-0528-JZ	\$	188.00
ST-JZ 90° Aluminized Steel Elbow & Reflector Cover Kit**: (Elbow can be installed right or left hand - includes coupler, reflector cover, end plate/hanger)	JS-0508-JZ		155.00
ST-JZ 180° Elbow & Reflector Kit: ORDER: TWO x JS-0508-JZ 90° ELBOW KITS	JS-0508-JZ x 2		310.00
Side Reflector 10" deep x 116" long	JS-0509-KT	\$	45.60
High Temp, Touch Up Paint - 369g aerosol can	JA-0587-XX		25.90

STR-JZ COMPLETE SYSTEMS: page T-35 **STR-JZ BURNER & TUBE KITS:** previous page

CARWASH, HARSH ENVIRONMENT & OUTDOOR TUBE HEATERS



SPW-JZ Powder Coated Steel Burner Cabinet

- Patio heating
- Wash bay applications

STW-JZ Stainless Steel Burner Cabinet

- Harsh environment/power wash bays
- Food industry applications

Three Models to suit the application and environment:

SPW-JZ: Powder Coated Burner Cabinet



- Preferred model for covered and enclosed patio areas; most economical solution
- Fresh air adapter and cap for 'outside' combustion air
- ✓ Weather tight powder coated burner cabinet
- ✓ Moisture resistant spark ignition package
- ✓ Designer color blends with patio aesthetics
- ✓ Tough, durable finish
- ✓ Best choice for patios, outdoor, wash bays and damp environments
- ✓ Aluminized steel: reflectors and tubes

STW-JZ: Stainless Steel Burner Cabinet

- ✓ Preferred model for harsh environments
- ✓ Recommended for use in harsh environment applications: Car & truck power washes
- ✓ Weather tight stainless steel burner cabinet
- ✓ Fresh air adapter and cap for 'outside' combustion air
- ✓ Aluminized steel: reflectors and tubes
- ✓ Moisture resistant spark ignition package

STW-JZ2: ALL Stainless Model

- ✓ Use ONLY where 'Stainless' is a necessity -> in highly corrosive or food service applications
- ✓ Least infrared heat output of the harsh environment models
 - Stainless steel tubing has a low emissivity value -> does not exhange heat efficiently
 - Use the 'next size up heater' for infrared output equivalency to STW-JZ
- ✓ Least recommended model due to lower infrared output
- ✓ Stainless steel reflectors and stainless steel tubes
- ✓ Weather tight stainless steel burner cabinet
- ✓ Moisture resistant spark ignition package
- ✓ Fresh air adapter and cap for 'outside' combustion air



OUTDOOR TUBE HEATER SPW-JZ Series

PATIO*, OUTDOOR, WASH BAYS & DAMP ENVIRONMENT



Powder Coated Steel Burner Cabinet - Aluminized Steel Reflectors & Tubes SPW-JZ is supplied complete with Fresh Air Intake Adapter and Intake Wall Hood (birdsgreened).

* RECOMMENDED PATIO HEATER SIZES ARE HIGHLIGHTED INBOLD FACE

PRICES INCLUDE BURNER ASSEMBLY WITH PAINTED STEEL HOUSING AND SUFFICIENT QUANTITIES OF THE FOLLOWING COMPONENTS:

MOISTURE & ACID RESISTANT DIRECT SPARK IGNITION SYSTEM, OUTSIDE AIR ADAPTER AND WALL CAP, ALUMINIZED STEEL TUBES AND REFLECTORS, TWO END PLATE HANGERS, '-JZ' WEBBED HANGERS, TUBE COUPLERS, AND REQUIRED TURBULATOR(S).

COMPLE	TE S	YSTE	MS:

	Btuh			<i>§</i>	2 4	dia di	
MODEL	INPUT	LENGTHS	LIST PRICE		THE THE PERSON OF THE PERSON O	3	
SPW-JZ 45*	45,000	10'	\$ 1,567.00	✓	✓	✓	lı
3F W-02 43	43,000	20'	1,727.00		✓	✓	
SPW-JZ 60*	60,000	20'	1,727.00	✓	✓	✓	
3F W-32 00	00,000	30'	1,914.00		✓	✓	
		20'	1,727.00	✓	✓	✓	
SPW-JZ 80*	80,000	30'	1,914.00	✓	✓	✓	
		40'	2,131.00		✓	✓	
		30'	1,914.00	✓	✓	✓	
SPW-JZ 110*	110,000	40'	2,131.00		✓	✓	
		50'	2,410.00		✓	✓	
		30'	1,914.00	✓	✓	✓	
SPW-JZ 130*	130,000	40'	2,131.00	✓	✓	✓	
		50'	2,410.00		✓	✓	
		40'	2,131.00		✓	✓	
SPW-JZ 155	155,000	50'	2,410.00		✓	✓	
		60'	2,607.00		✓	✓	
		50'	2,503.00		✓	✓	
SPW-JZ 175	175,000	60'	2,700.00		✓	✓	
		70'	2,907.00		✓	✓	
		50'	2,503.00		✓	✓	
SPW-JZ 200	200,000	60'	2,700.00		✓	✓	
		70'	2,907.00		✓	✓	

Individual burner kits + tube kits are shipped to assemble tube heater orders.

~ See next page for details ~

40 ft heater price based on TW 1040-JZ Tube Kit

NOTE:

Standard burners are stocked for natural gas fuel only.
Field conversion kits are required for conversion to LP gas - refer to **Burner Kits** on the page listed below

NOTE: SPW-JZ Series burners require 120V supply

KIT ASSEMBLY CHART: next page

SPW BURNER KITS: page T-41

TUBE KITS: page T-45

^{*} RECOMMENDED PATIO HEATER SIZES ARE HIGHLIGHTED IN BOLD FACE



OUTDOOR TUBE HEATER SPW-JZ Series

BURNER & TUBE KIT ASSEMBLY CHART

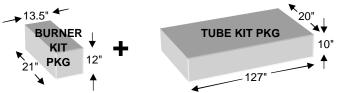
Burner Kits: next page Tube

Kits: page T-45

MODEL: SPW-JZ: Patio, Hand Car Wash Areas

& Damp Environment Applications

Aluminized Steel Tubes and Reflectors



Chain: ((tube length/10)+ 2) x length at each suspension point 'S' hooks: (tube length/10) x 2+ 4

				Orde	er: SPW-JZ	TUBE	KIT PART	# & QUAN	ITITY RE	QUIRED	
				Stand-A	lone Kits		Primary	Kits +	S	econdary l	Kits
Tub	e Kit Gross Weight	(lbs) -	70	120	170	210	165	165	120	165	210
	Nominal Length		10'	20'	30'	40'	30'	30'	20'	30'	40'
MODEL	BURNER KIT Gross $Wt = 30 \text{ lb}$		TS-4510- JZ	TW-1420- JZ	TW-1430- JZ	TW- 1040- JZ	TW-F030-	TW-1030- JZ	TW-0020- JZ	TW-0030- JZ	TW-0040- JZ
SPW-JZ 45	10 045W DNI	10'	1								
SPW-JZ 45	JS-045W-BN	20'			1						
SPW-JZ 60	JS-060W-BN	20' 30'		1	1						
SPW-JZ 80	JS-080W-BN	20'		1							
3PW-JZ 60	J3-000VV-BIV	30' 40'			1	1					
SPW-JZ 110	JS-110W-BN	30' 40'			1	1					
		50'					1+		1		
SPW-JZ 130	JS-130W-BN	30' 40'			1	1					
		50'					1+		1		
SPW-JZ 155	JS-155W-BN	40' 50'				1	1+		1		
		60'					1+			1	
SPW-JZ 175	JS-175W-BN	50'						1+	1		
3FVV-JZ 1/5	NG-11201	60' 70'						1+ 1+		1	1
SPW-JZ 200	JS-200W-BN	50' 60'						1+ 1+	1	1	
J1 VV-JZ ZUU	J3-200W-BN	70'						1+		!	1

Stand-Alone tube kits require no additional tube kits.

Primary tube kits require at least one additional Secondary tube kit.

Secondary tube kit require a Primary tube kit.

COMPLETE SYSTEMS: previous page

SPW BURNER KITS: next page

TUBE KITS: page T-45

OUTDOOR TUBE HEATER SPW-JZ Series





POWDER COATED STEEL BURNER HOUSING

Car Wash / Outdoor Patio* / Damp Environment

for Power Wash Bays and Harsh Environment see:

STW-JZ: Stainless Steel Burner Housing, Aluminized Steel Tubes & Reflectors -> next page STW-JZ2: Stainless Steel Burner Housing, Stainless Steel Tubes & Reflectors -> next page

^{*} Sizes in bold face are suitable for outdoor patios

				4		
Btuh <u>INPUT</u>	AVAILABLE TUBE LENGTHS		HEW RES	Para Para	ORDER <u>FUEL PART # LIST</u>	PRICE
45,000	10' , 20'	✓	✓	✓	N.G. JS-045W-BN \$ 1,13	38.00
60,000	20' , 30'	✓	✓	✓	N.G. JS-060W-BN 1,16	69.00
80,000	20' , 30' , 40'	✓	✓	✓	N.G. JS-080W-BN 1,13	38.00
110,000	30' , 40', 50'	✓	✓	✓	N.G. JS-110W-BN 1,13	38.00
130,000	30', 40' , 50'	✓	✓	✓	N.G. JS-130W-BN 1,13	38.00
155,000	40', 50', 60'		✓	✓	N.G. JS-155W-BN 1,13	38.00
175,000	50', 60', 70'		✓	✓	N.G. JS-175W-BN 1,16	69.00
200,000	50', 60', 70'		✓	✓	N.G. JS-200W-BN 1,16	69.00

The following items are packed inside the burner Kit carton: Burner fastening nuts & bolts, flange gasket, igniter (mounted), fresh air intake cap for wall, installation manual.

All burner assemblies operate on line voltage (120VAC).

Heaters are shipped and invoiced as burner kits and tube kits. Please order kits.

LPG FIELD CONVERSION KITS FOR SPW-JZ BURNERS

Conversion Kits for LP to NG are listed on page T-52

<u>INPUT</u>		PART#	LIST PRICE*
45,000 Btuh	Field Conversion Kit NG to LP	JS-0556-XC	\$ 45.00
60,000 Btuh	Field Conversion Kit NG to LP	JS-0557-XX	24.00
80,000 Btuh	Field Conversion Kit NG to LP	JS-0559-XX	24.00
110,000 Btuh	Field Conversion Kit NG to LP	JS-0561-XX	24.00
130,000 Btuh	Field Conversion Kit NG to LP	JS-0563-XX	24.00
155,000 Btuh	Field Conversion Kit NG to LP	JS-0565-XX	24.00
175,000 Btuh	Field Conversion Kit NG to LP	JS-0567-AA	24.00
200,000 Btuh	Field Conversion Kit NG to LP	JS-0567-CC	24.00

COMPLETE SPW-JZ SYSTEMS: page T-39 SPW-JZ BURNER KITS: previous page OPTIONAL ACCESSORIES: page T-48



HARSH ENVIRONMENT & OUTDOOR TUBE HEATER STW-JZ & STW-JZ2 Series

POWERWASH & HARSH ENVIRONMENT



Stainless Steel Burner Housing

STW-JZ2 = Aluminized Steel Reflectors & Tubes **STW-JZ2** = Stainless Steel Reflectors & Tubes

COMPLETE	SYSTEMS	COMPLETE SYSTEM I	LIST PRICES	
			Aluminized Tubes	Stainless Tubes
		TUBE	& Reflectors	& Reflectors
MODEL	<u>INPUT</u>	LENGTHS	- <u>JZ</u>	- <u>JZ2</u>
STW-JZ 45	45,000 Btuh	10'	\$ 2,033.00	\$ 2,701.00
		20'	2,193.00	3,498.00 Ind
STW-JZ 60	60,000 Btuh	20'	2,193.00	3,498.00 ar
		30'	2,380.00	4,367.00
		20'	2,193.00	3,498.00
STW-JZ 80	80,000 Btuh	30'	2,380.00	4,367.00 ~
		40' *	2,597.00	5,226.00
		30'	2,380.00	4,367.00
STW-JZ 110	110,000 Btuh	40' *	2,597.00	5,226.00
		50'	2,876.00	6,136.00
		30'	2,380.00	4,367.00
STW-JZ 130	130,000 Btuh	40' *	2,597.00	5,226.00
		50'	2,876.00	6,136.00
		40' *	2,597.00	5,226.00
STW-JZ 155	155,000 Btuh	50'	2,876.00	6,136.00
		60'	3,073.00	7,016.00
		50'	3,000.00	6,167.00
STW-JZ 175	175,000 Btuh	60'	3,197.00	7,047.00
		70'	3,404.00	7,988.00
		50'	3,000.00	6,167.00
STW-JZ 200	200,000 Btuh	60'	3,197.00	7,047.00
		70'	3,404.00	7,988.00
FOR BUI	RNER & TUBE	KITS SEE:	PAGES T-42 to T-45	PAGES T-46 to T-47

ndividual burner kits + tube kits are shipped to assemble tube heater orders.

See next page for details ~

* 40 ft heater price based on TW-1040-JZ Tube Kit

NOTE:

Standard burners are stocked for natural gas fuel only. Field conversion kits are required for conversion to LP gas refer to **Burner Kits** on the page listed below

PRICES INCLUDE BURNER ASSEMBLY WITH STAINLESS STEEL HOUSING AND SUFFICIENT QUANTITIES OF THE FOLLOWING COMPONENTS:

MOISTURE & ACID RESISTANT DIRECT SPARK IGNITION SYSTEM, AIR INTAKE ADAPTER & HOOD, TWO END PLATE HANGERS, WEBBED HANGERS, PRIMARY & SECONDARY TUBES, FOCUS SHIELD REFLECTORS, TUBE COUPLER(S), AND REQUIRED TURBULATOR(S).

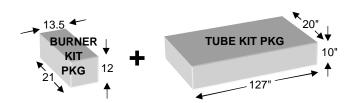
KIT ASSEMBLY CHART: next page STW BURNER KITS: page T-44

TUBE KITS: page T-45

HARSH ENVIRONMENT & OUTDOOR TUBE HEATER STW-JZ Series

BURNER & TUBE KIT ASSEMBLY CHART

MODEL: STW-JZ: Power Car Wash Areas & Harsh Environment Applications
Stainless Steel Burner & Aluminized Steel Tubes and Reflectors



Chain: ((tube length/10)+ 2) x length at each suspension point 'S' hooks: (tube length/10) x 2+ 4

Stand-Alone tube kits require no additional tube kits.

Primary tube kits require at least one additional Secondary tube kit.

Secondary tube kit require a Primary tube kit.

				5	STW-JZ TI	JBE KIT F	PART # &	QUANTIT	Y REQUI	RED	
				Stand-A	lone Kits		Primary	Kits +	S	econdary l	Kits
T	ube Kit Gross Weig	ht (lbs) ->	70	120	170	210	165	165	120	165	210
	Nomina	al Length ->	10'	20'	30'	40'	30'	30'	20'	30'	40'
MODEL	BURNER KIT Gross Wt = 30 lb	\downarrow	TS-4510- JZ	TW-1420- JZ	TW-1430- JZ	TW-1040- JZ	TW-F030- JZ	TW-1030- JZ	TW-0020- JZ	TW-0030- JZ	TW-0040- JZ
OTIM 17 45	10.0450.0.11	10'	1								
STW-JZ 45	JS-045P-B N	20'		1							
0714/ 17 00	10 000B B N	20'		1							
STW-JZ 60	JS-060P-B N	30'			1						
		20'		1							
STW-JZ 80	JS-080P-B N	30'			1						
		40'				1					
		30'			1						
STW-JZ 110	JS-110P-B N	40'				1					
		50'					1+		1		
		30'			1						
STW-JZ 130	JS-130P-B N	40'				1					
		50'					1+		1		
		40'				1					
STW-JZ 155	JS-155P-B N	50'					1+		1		
		60'					1+			1	
		50'						1+	1		
STW-JZ 175	JS-175P-B N	60'						1+		1	
		70'						1+			1
		50'						1+	1		
STW-JZ 200	JS-200P-B N	60'						1+		1	
		70'		[[[1+			1

COMPLETE SYSTEMS: previous page

STW BURNER KITS: next page

TUBE KITS: page T-45

HARSH ENVIRONMENT & OUTDOOR TUBE HEATER STW-JZ & STW-JZ2 Series

BURNER KITS
STAINLESS STEEL BURNER HOUSING
Power Car Wash / Harsh Environment
for Models:

STW-JZ: Aluminized Steel Tubes & Aluminized Steel Reflectors

STW-JZ2: Stainless Steel Tubes & Stainless Steel Reflectors (longer lead time)

	13.5" BURNER KIT 12" PKG 12"
lectors	21" PKG 12"
	*
etore (langar load tima)	I

IST PRICE*	<u>LI</u>	ORDER <u>PART #</u>	<u>FUEL</u>	AVAILABLE <u>TUBE LENGTHS</u>	Btuh CAPACITY
1,604.00	\$	JS-045P-BN	N.G.	10', 20'	45,000
1,604.00		JS-060P-BN	N.G.	20', 30'	60,000
1,604.00		JS-080P-BN	N.G.	20', 30', 40'	80,000
1,604.00		JS-110P-BN	N.G.	30', 40', 50'	110,000
1,604.00		JS-130P-BN	N.G.	30', 40', 50'	130,000
1,604.00		JS-155P-BN	N.G.	40', 50', 60'	155,000
1,635.00		JS-175P-BN	N.G.	50', 60', 70'	175,000
1,635.00		JS-200P-BN	N.G.	50', 60', 70'	200,000

The following items are packed inside the burner kit carton: Burner fastening nuts & bolts, flange gasket, igniter (mounted), installation manual, fresh air intake cap.

All burner assemblies operate on line voltage (120VAC).

Heaters are shipped and invoiced as burner kits and tube kits. Please order kits.

LPG FIELD CONVERSION KITS FOR STW-JZ BURNERS

Conversion Kits for LP to NG are listed on page T-52

<u>INPUT</u>		PART#	LIST PRICE*
45,000 Btuh	Field Conversion Kit NG to LP	JS-0556-XC	\$ 45.00
60,000 Btuh	Field Conversion Kit NG to LP	JS-0557-XX	24.00
80,000 Btuh	Field Conversion Kit NG to LP	JS-0559-XX	24.00
110,000 Btuh	Field Conversion Kit NG to LP	JS-0561-XX	24.00
130,000 Btuh	Field Conversion Kit NG to LP	JS-0563-XX	24.00
155,000 Btuh	Field Conversion Kit NG to LP	JS-0565-XX	24.00
175,000 Btuh	Field Conversion Kit NG to LP	JS-0567-AA	24.00
200,000 Btuh	Field Conversion Kit NG to LP	JS-0567-CC	24.00

Series ->	<u>-JZ</u>	<u>-JZ2</u>	-JZ2 = Stainless
KIT ASSEMBLY CHART	p. T-43	p. T-46	Steel ~ Longer
TUBE KITS	p. T-45	p. T-47	Lead Times

COMPLETE SYSTEMS: page T-42
OPTIONAL ACCESSORIES: page T-48

HARSH ENVIRONMENT & OUTDOOR TUBE HEATER SPW-JZ & STW-JZ Series

TUBE KITS (emissive coated)

ALUMINIZED STEEL TUBES & REFLECTORS CAR WASH & PATIO TUBE HEATER

Stand-Alone tube kits require no additional tube kits.

Primary tube kits require at least one additional Secondary tube kit.

Secondary tube kit require a Primary tube kit.

Secondary tube kit require a Primary tube kit.

Kits include: Tubes. 'JZ' Reflectors. End Plate Hangers. Couplers. Turbulator

TUBE KIT PKG 20" 10"

Chain: ((tube length/10)+ 2) x length at each suspension point 'S' hooks: (tube length/10) x 2+ 4

Note: "TS-" part number is correct - this kit has an aluminized steel tube

Kits iriciude. Tubes	, 32 Reflectors, End Plate Hangers, Couplers, Turbulator		
Stand-Alone	<u>Description</u>	TUBE KIT #	LIST PRICE*
10' : 45,000	One coated flanged/swaged aluminized steel tube with no ports and 5 ft Turbulator	TS-4510-JZ	\$ 429.00
20' : 45/60/80,000	Flanged/swaged tube with no ports, one coated aluminized steel swaged tube, one 4 ft turbulator and one 10 ft turbulator	TW-1420-JZ	589.00
30' : 60/80/110/130	Flanged/swaged tube with no ports, two coated aluminized steel swaged tubes, one 4 ft turbulator and one 10 ft turbulator	TW-1430-JZ	776.00
40' : 80/110/130/155	Flanged/swaged tube with no ports, 3 coated aluminized steel swaged tubes, and one 10 ft turbulator	TW-1040-JZ	993.00
Primary Kits [to make (40)), 50', 60' & 70' heaters]		
30' : 110/130/155,000	Flanged/swaged tube with no ports, two coated aluminized steel swaged tubes	TW-F030-JZ	755.00
30' : 175/200,000	Flanged/swaged alumatherm tube with no ports, two coated aluminized steel swaged tube, one 10 ft turbulator	TW-1030-JZ	848.00
Secondary Kits [add to ab	ove Primary Kits to make (40'), 50', 60' & 70' heaters]		
20'	Two coated aluminized steel swaged tubes(creates 50 ft heater)	TW-0020-JZ	517.00
30'	Three coated aluminized steel swaged tubes(creates 60 ft heater)	TW-0030-JZ	714.00
40' \(\frac{1}{2}\)NEW \(\frac{3}{2}\)	Four coated aluminized steel swaged tubes(creates 70 ft heater)	TW-0040-JZ	921.00
10'	One coated aluminized steel swaged tube, and one 10 ft turbulator	TW-1010-JZ	320.00
NOTE:	Secondary tube kit TW1010-JZ can be used with TW-F030-JZ to create	a 40 ft kit.	

NOTE: Secondary tube kit TW1010-J2 can be used with TW-F030-J2 to create a 40 it kit

Do not use this kit to extend heater length beyond the maximum length approved for any input.

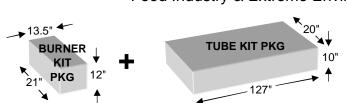
KIT ASSEMBLY CHART: pages T-43, T-46 COMPLETE SYSTEMS: pages T-39, T-42 SPW BURNER KITS: page T-41

STW BURNER KITS: page T-44

HARSH ENVIRONMENT & OUTDOOR TUBE HEATER STW-JZ2 Series

BURNER & TUBE KIT ASSEMBLY CHART MODEL: STW-JZ2: Stainless Steel Tube & Reflector Kits

Food Industry & Extreme Environment Applications



Chain: ((tube length/10)+ 2) x length at each suspension point 'S' hooks: (tube length/10) x 2+ 4

				STW-JZ	Z2 TUBE I	KIT PART	# & QUA	NTITY RE	QUIRED	
				Stand-A	one Kits		Primary	/ Kits +	Second	lary Kits
T	ube Kit Gross Weig	ght (lbs) ->	70	120	170	210	165	165	120	165
	Tube Kit Nomin	al Length ->	10'	20'	30'	40'	30'	30'	20'	30'
		g	TW-							
MODEL	BURNER KIT Gross Wt = 30 lb		4510 -JZ2	1420 -JZ2	1430 -JZ2	1040- JZ2	F030 -JZ2	1030 -JZ2	0020 -JZ2	0030 -JZ2
STW-JZ2 45	JS-045P-B N	10'	1							
		20'		1						
STW-JZ2 60	STW-JZ2 60 JS-060P-B N	20'		1						
		30'			1					
		20'		1						
STW-JZ2 80 JS-080P-B N	JS-080P-B N	30'			1					
		40'				1				
OTIN 170 440	10 4405 5 14	30'			1					
STW-JZ2 110	JS-110P-B N	40'				1				
		50' 30'			1		1+		1	
STW-JZ2 130	JS-130P-B N	40'			1	1				
31W-JZZ 130	JS-130P-B N	50'				!	1+		1	
		40'				1	17		-	
STW-JZ2 155	JS-155P-B N	50'				:	1+		1	
0.11 022 .00	00 100. 21.	60'					1+		:	1
		50'						1+	1	
STW-JZ2 175	JS-175P-B N	60'						1+		1
		70'						1+	2	† -
		50'						1+	1	
STW-JZ2 200	JS-200P-B N	60'						1+		1
		70'						1+	2	1

Stand-Alone tube kits require no additional tube kits.

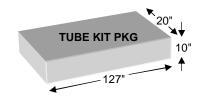
Primary tube kits require at least one additional Secondary tube kit.

Secondary tube kit require a Primary tube kit.

COMPLETE SYSTEMS: page T-42
STW-JZ BURNER KITS: page T-44
STW-JZ2 TUBE KITS: next page
OPTIONAL ACCESSORIES: page T-48

HARSH ENVIRONMENT & OUTDOOR TUBE HEATER STW-JZ2 Series

'-JZ-2' TUBE KITS



STAINLESS STEEL REFLECTORS + STAINLESS STEEL TUBES

Longer Lead Times for Stainless Steel Tube Kits

Stand-Alone tube kits require no additional tube kits. **Primary** tube kits require at least one additional Secondary tube kit. **Secondary** tube kit require a Primary tube kit.

Stand-Alone	Each kit includes Stainless Styeel: Tubes, 'JZ-2' Reflectors, Webbed S/S hanger system, Tube Couplers, Turbulator(s) as required	TUBE KIT#	LI	ST PRICE*			
10' : 45,000 Btuh	Flanged/swaged S/S tube with no ports, one 5 ft turbulator	TW-4510-JZ-2	\$	1,097.00			
20': 60,000/80,000	Flanged stainless steel swaged tube with no ports + one S/S swaged tube, one 4 ft turbulator and one 10 ft turbulator	TW-1420-JZ-2	Ψ	1,894.00			
30': 60/80/110/130,000	Flanged stainless steel swaged tube with no ports + two S/S swaged tubes, one 4 ft turbulator and one 10 ft turbulator	TW-1430-JZ-2		2,763.00			
40': 80/110/130/155,000	Flanged stainless steel swaged tube with no ports + 3 S/S swaged tubes, and one 10 ft turbulator	TW-1040-JZ-2		3,622.00			
Primary Kits [to make (40	o'), 50', 60' & 70' heaters]						
30' : 110/130/155,000	Flanged stainless steel swaged tube with no ports, two stainless steel swaged tubes	TW-F030-JZ-2		2,711.00			
30' : 175/200,000	Flanged stainless steel swaged tube with no ports, two stainless steel swaged tubes, one 10 ft turbulator	TW-1030-JZ-2		2,711.00			
Secondary Kits [add to above Primary Kits to make (40'), 50', 60' & 70' heaters]							
10'	One stainless steel swaged tube, and one 10 ft turbulator	TW-1010-JZ-2		1,024.00			
20'	Two stainless steel swaged tubes	TW-0020-JZ-2		1,821.00			
30'	Three stainless steel swaged tubes	TW-0030-JZ-2		2,701.00			

KIT ASSEMBLY CHART: previous page

COMPLETE SYSTEMS: page T-42

STW BURNER KITS: page T-44



OPTIONAL ACCESSORIES - Page 1 of 2 SPW-JZ, STW-JZ & STW-JZ2 TUBE HEATERS

Note: Stainless Steel accessories have longer lead times

		PART#		LIST PRICE
Moisture Proof Thermostat (NEMA 4X Enc	elosure)	JS-0570-XX	\$	331.00
Suspension Hardware				
#8 Hanging Chain - (box of 50' Jack Chain - 'S' hool quantity: ((tube length/10) + 2) x length at each su	JL-0798-JC		58.00	
'S' Hooks - 1 ⁷ / ₈ " - Package of 25 quantity: ((tube length/10) x 2 + 4		JL-0798-SH		22.50
All the second s	Flue Vent Terminals: 4" horizontal (through wall)	<u>PART #</u> JA-0528-XX	\$	LIST PRICE 38.30
	6" horizontal	JA-0529-XX		46.60
Wall Terminal*				
Vent Tee 4" X 4" X 6" (Two Couplers JA-0516-AA are optional)		JA-0514-XX		191.00
Optional Couplers for Vent Tee:				
4" x 8" Aluminized Steel Coupler with 2 x U-Bolts		JA-0516-AA		40.40
(ADD <u>TWO</u> optional tube couplers JA-0516-AA or JA-0516	6-XX if desired for vent pipe connection	on to Tee)		
4" swaged Tube Coupler (required quantity is ship	oped with heater)	JA-0516-SW		40.40
- Also available in stainless steel		JA-0516-SS		78.00
lotes: Use termination cap by Schwank, or use the termina * Fits single wall vent pipe - field modification required		supplied by that ma	nufacture	er
JSA ONLY: Flexible Gas Connectors for Substitution of the Indian American Substitution of the Indian A	exible connector is 24 inches. R	evisions to the Gas	_ Code/Sta	
Flexible Gas Connector 1/2" x 24" - for 45 to 155		JL-0771-XX	\$	31.10
Flexible Gas Connector 3/4" x 24" - for 175 to 200) Mbh	JL-0771-ZZ		100.00
CANADA ONLY: Hose Type Gas Conne	ectors for Tube Heater	<u>s</u> : Not for use in t	JSA	
Hose Type Gas Connectors are required only for tu	•	•		
Type 1 Hose Connector 1/2" x 36" - 1/2" MPT eac		JL-0771-RC	\$	32.10
Type 1 Hose Connector 3/4" x 36" - 1/2" MPT + 3/	/4" MPT - for 175 & 200 Mbh	JL-0771-RB		75.00

Additional Options: Elbow Kits, Tuxedo Grille, Reflector Side Extensions, etc on next page. Moisture Proof Thermostat listed above



OPTIONAL ACCESSORIES - Page 2 of 2 SPW-JZ, STW-JZ & STW-JZ2 TUBE HEATERS

Decorative 'Tuxedo' Grille Kit - Matte Black Finish

Dress up your tube heater installations.

Ideal for: Patios

□ Retail areas

□ Showrooms

Matte black grille & aluminized steel framing secures with tabs to 'JZ' Series heater reflectors. (Not for S100 Series)

Decorative 'Tuxedo' Grille Kit - 10 ft - Matte Black Grille Each 10 foot section TG-0010-KT \$ 349.00

ST-JZ Elbow Kits:







⇒ Reflector Angle Adapter - one required each juncture of angle change JS-0504-JZ \$ 15.10

NOTE: The elbow reflector cap must always be in the same plane as the elbow - cap cannot be angled independently
The Reflector Angle Adapter is required for angle mounting a reflector section before or after an elbow
Or for mounting of a reflector section at an independent angle relative to the other reflectors in the system.

Other Optional Accessories:

The optional Acceptable		
Reflector Angle Adapter(see Note above) This item is required for changing angle of a reflector section before or after an elbow or other	JS-0504-JZ section of reflector	\$ 15.10
Side Reflector Extension(- All models - 10" deep x 116" long c/w 'S' hooks)	JS-0509-KT	45.60
#8 Hanging Chain - (box of 50' Jack Chain - 'S' hooks separate - see next item)	JL-0798-JC	58.00
'S' Hooks - 1 ⁷ / ₈ " - Package of 25	JL-0798-SH	22.50
High Temp, Touch Up Paint -369g aerosol can	JA-0587-XX	25.90
'-JZ' Tube Kit 5 ft length Tube Protection Screen (1/2" x 1/2" galvanized screen) (custom order: longer lead time)	JA-0780-XX	58.00



TruTemp

Infrared Setback Thermostat



SCHWANK TruTemp INFRARED SETBACK THERMOSTAT

NOT FOR USE IN WET ENVIRONMENTS

The <u>only</u> infrared thermostat that senses and averages radiant and ambient temperatures for true comfort control and efficient heating system operation. An automatic setback feature further adds to fuel savings when the heated space is unoccupied. Controls a Schwank heating system to provide true comfort levels. TruTemp thermostat can be used in conjunction with all Schwank heaters. 4" Diameter fits standard electrical box

MODEL	VOLTAGE	PART#	LIST PRICE
TruTemp Thermostat	24 Volts	JM-0150-XX	\$ 206.00

FIELD MOUNTED OPTIONS REQUIRED WITH TruTemp THERMOSTAT

- SINGLE STS-JZ TUBE HEATER & SINGLE TruTemp

 ORDER
 PART #

 1
 TruTemp Thermostat
 JM-0150-XX
 \$ 206.00

- SINGLE S100 SERIES TUBE HEATER & SINGLE TruTemp

ORDER TruTemp +

1 S100 24V Control Option

(Relay Switch Field Mounts in burner on Control Plate)



PART#

JS-0568-KT

36.30

103.00

- MULTIPLE TUBE HEATERS & SINGLE TruTemp (Up To 7 STS-JZ or S100 Heaters per Zone)

ORDER TruTemp +

1 24V Transformer/Relay Option

(Transformer/Relay & Accessories)

(Field Mounts on exterior of a burner housing)



SECURITY OPTION TO PREVENT UNAUTHORIZED TAMPERING

Two S/S Tamperproof Screws and One Tool (Order for the first TruTemp on project)

Two S/S Tamperproof Screws

(Order for each Additional TruTemp on project)

JM-0180-XX	\$ 63.00
JM-0180-AA	6.30



TUBE HEATER 24V CONTROL OPTION GUIDELINES

for: TruTemp / 24V Thermostat / patioPanel / Remote Control

SCHWANK TUBE HEATERS: Single heater per control zone

STS-JZ, STV-JZ, SPW-JZ & STW-JZ (Multiple heaters per zone - see below)

Single HEATER per Single TruTemp / 24V THERMOSTAT / patioPanel switch* / Remote Contro

- 120 V supply is ALWAYS required to the burner to power the blower and the individual transformer in each burner assembly, regardless of the thermostat or control voltage.
- 24V power to the thermostat is supplied by the transformer within the heater
- A 24V/120V relay switch is factory installed in the burner

*ORDER - Any 24 volt thermostat or TruTemp supplied by Schwank will control a single burner of models above

- patioPanel: 24V power to the panel switch is supplied from the transformer within the burner ONLY ONE tube heater can be controlled by each patioPanel switch
- Remote Control: Each Burner is ready for installation of Remote Control Receiver Kit: JP-1234-RK
 Refer to patio heater section for information on Remote Control options
- Existing Tube heaters in the field (made prior to May 1, 2006) require the installation of optional kits:
 - JS-0568-KT 24V Relay Kit: For heaters with 24V Transformer in burner (ST Series)
 - JM-0568-KT 24V Transformer-Relay Kit: For heaters without 24V Transformer in burner (SE Series)

S100 Builder Series (Multiple heaters per zone - see below)

Single HEATER per Single TruTemp or 24V THERMOSTAT

- 120 V supply is ALWAYS required to the burner to power the blower and gas and ignition controls
- 24 V Relay Kit JS-0568-KT (field mount in burner) is required to control a single heater using a low voltage thermostat

TUBE HEATERS: 2 to 7 heaters per control zone

ALL MODELS (for single heater per zone - see above)

MAXIMUM 7 HEATERS PER ZONE / ORDER Transformer-Relay KIT JM-0303-KT

- 120V supply is ALWAYS required to the burner to power the blower and controls
- The Transformer-Relay is factory mounted in an electrical enclosure; the kit is field installed
- The Transformer-Relay Kit may be mounted on or in near proximity to the heater(s) or thermostat
- NO ADDITIONAL 24V OPTION is required within the burner(s)
- 24V power is provided to the thermostat by the transformer within the Transformer-Relay Kit
- The thermostat call-for-heat closes the relay within the Transformer-Relay
- The 'closed' relay provides 120V to the heater(s) in the zone

ORDER: Transformer-Relay Kit JM-0303-KT + a Thermostat (24 Volt OR TruTemp)

LUMINOUS HEATER 24V GUIDELINES are on page L-14



GAS CONVERSION KITS SCHWANK TUBE HEATERS

NOTE: Conversion kits are NOT available for: JP tube heaters and Models BR-85, BR-100 - Contact Schwank

When ordering, please provide complete Model Number (see CSA label) and Gas Type to convert to

Complete Model # Required	<u>Input</u>	NG to LP	LP to NG	<u>List Price</u>
Discontinued 45,000 Btuh model numb	ers:			
STS, STS-JZ, STR, STR-JZ,	SER 45,000	JS-0556-XA	JS-0556-XB	\$ 45.00
Current 45,000 Btuh model numbers:				
STS-JZ-X1, STR-JZ-X1, SPW-JZ, STW	/-JZ 45,000	JS-0556-XC	JS-0556-XD	45.00
S100, S1	00U 45,000	JS-0556-XE	JS-0556-XF	35.00
_	<u>Input</u>	NG to LP	LP to NG	
STS-JZ, STSp, STS	60,000	JS-0557-XX	JS-0558-XX	24.00
STR-JZ, STR	80,000	JS-0559-XX	JS-0560-XX	24.00
STW-JZ, STW, STS-WP	100,000	Available in NG	ONLY	
SPW-JZ	110,000	JS-0561-XX	JS-0562-XX	24.00
STV-JZ, STSV	130,000	JS-0563-XX	JS-0564-XX	24.00
S100	155,000	JS-0565-XX	JS-0566-XX	24.00
SEM-CH* (Honeywell	175,000	JS-0567-AA	JS-0567-BB	24.00
120V Valve)	200,000	JS-0567-CC	JS-0567-DD	24.00
		NC to LB	L D to NO	
SET	80/60,000	NG to LP JS-0555-TC	<u>LP to NG</u> JS-0555-TD	41.00
2-STAGE	110,75,000	JS-0555-TG	JS-0555-TH	41.00
2 002	130/90,000	JS-0555-TK	JS-0555-TL	41.00
	155/130,000	JS-0555-TO	JS-0555-TP	41.00
	lanus	NC to LB	I D to NC	
	<u>Input</u> 60,000	NG to LP JS-0557-LS	<u>LP to NG</u> JS-0558-NS	\$ 46.60
ATH	80,000	JS-0557-LS JS-0559-LS	JS-05561NS	46.60
SEB	110,000	JS-0559-LS JS-0561-LS	JS-0562-NS	46.60
SER: 60,000	130,000	JS-0563-LS	JS-0564-NS	46.60
SEM- CA * (Robertshaw	155,000	JS-0566-LS	JS-0566-NS	46.60
120V Valve)	175,000	JS-0567-LS	JS-0567-NS	46.60
* SEM Model 'dash number"	200,000	JS-0567-LI	JS-0567-NI	46.60
CENTINOGOL GASTITIGINISCI	200,000	00 0007 E1	00 0007 141	40.00
PRT Series	<u>Input</u>	NG to LP	LP to NG	
PRT 60	60,000	JT-0941-TA	JT-0940-TA	\$ 45.60
PRT 80	80,000	JT-0941-TB	JT-0940-TB	45.60
PRT 100	100,000	JT-0941-TC	JT-0940-TC	45.60

LUMINOUS HEATER Gas Conversion Kits: page L-16