



Submittal Data

duraSchwank SPW Series

Outdoor Car Wash & Harsh Environment Low-Intensity Single-Stage Gas-Fired Infrared Tube Heater

Project

Schwank models #

Fuel

Date submitted

Features

Approvals / Certificates

UL Certification.

ANSI Z83.26 / CSA 2.37 Standard for gas-fired Outdoor Infrared Patio Heaters.

ANSI Z83.20 / CSA 2.34 Standard for Gas-Fired Low-Intensity Infrared Heaters.

Burner/Motor

Powder Coated Water Resistant.

Complete with operation status indicator lights.

Potted direct spark ignition.

Housing: The "Clamshell Design" provides access from the 2 sides, end, and bottom.

Power

4' Length 16/3 electrical supply cord with 3 pin grounded plug.

120V/1PH

Safety Switch

Two separate air pressure switches sense adequate combustion air and blocked flue.

Gas connection

Natural gas: 3.5" W.C. Manifold.

Propane: 10" W.C. Manifold.

Canada: Type 1 hose gas connector is included with each burner kit.

1/2" X 30" 45,000 TO 130,000 AND 3/4" X 30" 150,000 TO 200,000

USA: Flexible gas connector is included with each burner kit.

1/2" X 24" 45,000 TO 130,000 AND 3/4" X 24" = 150,000 TO 200,000

Reflector

Aluminized steel.

Reflectors are closed at the start and end of each straight run of tubes by end plate hangers.

Controls/Thermostat

Factory ready for 24VAC or 120VAC control. On/Off switch control.

Moisture Proof Nema 4X Thermostat.

24V Digital Thermostat. Note: Multiple Heaters Per 24V Thermostat Require Relay Control Center Kit.

ThermoControlPlus.



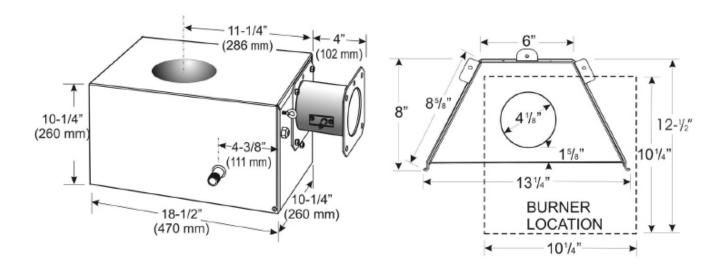
Read the I&O Manual

Performance

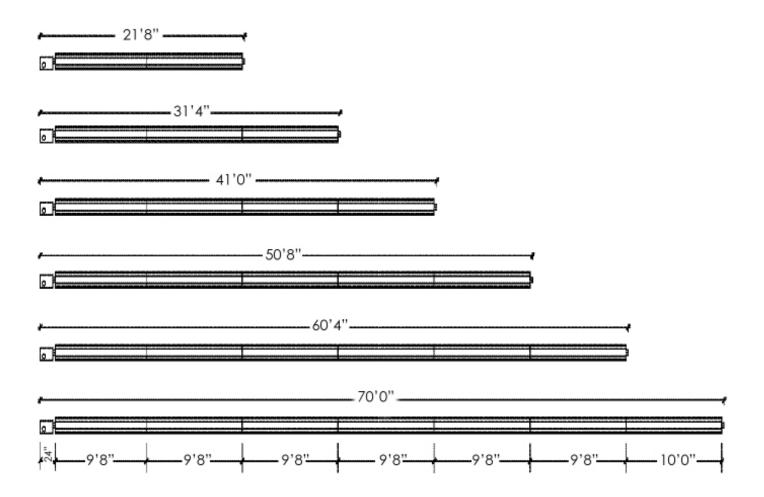
Tag Qty		Model	Total Heater Length	Input (BTU/hr)	Turbulator Length	Line Pressure NG/LP	Manifold Pressure NG/LP	Flue & Air Vents	Shipping Weight (lbs.)
		SPW-200-70	70' 0"		6'				324 Lbs
		SPW-200-60	60' 4"	200,000	6'	_			282 Lbs
		SPW-200-50	50' 8"		10'	_			239 Lbs
		SPW-175-70	70' 0"		10'	_			324 Lbs
		SPW-175-60	60' 4"	175,000	10'	_			282 Lbs
		SPW-175-50	50' 8"		10'	_			239 Lbs
		SPW-155-60	60' 4"		2'	_ _ Line minimum:			282 Lbs
		SPW-155-50	50' 8"	150,000	2'	– Line minimom.			239 Lbs
		SPW-155-40	41' 0"	_	12'	5" W.C NG - 11" W.C LP - Line Maximum: - NG or LP	3.5" W.C NG		197 Lbs
		SPW-130-50	50' 8"		2'		3.5 W.C NG	4"	239 Lbs
		SPW-130-40	41' 0"	125,000	12'		10" W.C LP	4	197 Lbs
		SPW-130-30	31' 4"	_	13'				154 Lbs
		SPW-110-50	50' 8"		2'				239 Lbs
		SPW-110-40	41' 0"	110,000	12'	14" W.C			197 Lbs
		SPW-110-30	31' 4"	_	13'	_			154 Lbs
		SPW-80-40	41' 0"		12'	•			197 Lbs
		SPW-80-30	31' 4"	80,000	8'	_			154 Lbs
		SPW-80-20	21' 8"		14'	_			111 Lbs
		SPW-60-30	31' 4"	40.000	8'	-			154 Lbs
		SPW-60-20	21' 8"	- 60,000	14'	_			111 Lbs
		SPW-45-20	21' 8"	45,000	14'	_			111 Lbs

For all the heaters above; Gas Inlet is 1/2" NPT. For heaters above 150,000-200,000 Btu/hr; Gas Inlet is 3/4 NPT. Electrical is 120V-60Hz, 145 VA.

Dimensions

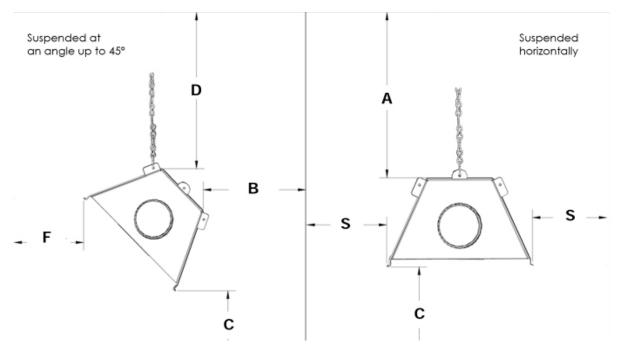


Side-view of systems:



Clearance to Combustibles:

The clearance to combustible material represents the minimum distance that must be maintained between heater and a nearby combustible surface. The stated clearance to combustibles represents a surface temperature of 90°F (50°C) above room temperature. Some materials such as awnings or plastic may require higher clearances. It is the installer's responsibility to ensure that building materials with a low heat tolerance which may degrade at lower temperature are protected to prevent degradation.



SPW Minimum Clearances to Combustibles

MODEL SPW Input Rate (BTU/hr)	SUSPENDE	D AT AN ANG	LE UP TO 45 DEG	SUSPENDE	SUSPENDED HORIZONTALLY			
Inches	D	В	F	С	Α	S	С	
SPW-200	13"	6"	74''	70''	14''	44''	76''	
SPW-175	12"	6''	72"	68''	13"	42''	74"	
SPW-155	5.5"	1"	64"	64''	3.5"	22"	70"	
SPW-130	4.5"	1"	60"	60''	3.3"	21"	65''	
SPW-110	3.5"	1"	54"	54''	2"	19"	60"	
SPW-80	3"	1"	23"	38"	1.75"	6''	38"	
SPW-60	2.5"	1"	17"	34"	1.5"	5.5''	34"	
SPW-45	2.75''	1"	24''	32"	2.25"	7''	32"	

Controls & Control Accessories

Tag	Qty	Item Number	Description
		JM-0504-TKX	Thermocontrol Plus Controller (See Separate Detailed Thermocontrol Plus Submittal Document)
		JS-0570-XX	Moisture Proof Nema 4X Thermostat Single-Stage
		JS-0568-CC	24V Relay Switch. Control Multiple Tube Heaters in a common zone with one 24V Thermostat (wired to 1st heater)
		JM-0408-XX	ACPT- 8. Up to 8 heaters (Arena control panel)
		JM-0412-XX	ACPT-12. Up to 12 heaters (Arena control panel)
		JM-0416-XX	ACPT-16. Up to 16 heaters (Arena control panel)
		JM-0204-NT	PCP-4. Up to 4 heaters (Patio control panel)
		JM-0208-NT	PCP-8. Up to 8 heaters (Patio control panel)
		JM-0212-NT	PCP-12. Up to 12 heaters (Patio control panel)
		JP-1236-RK	Remote Control Receiver Kit installs in burner. REQUIRED - Order one for each heater - High-intensity or Tube type
		JP-1236-HS	Hand Set Control (four On/Off buttons): REQUIRED - Order one for every four zones: a zone is 1 or more heaters - Control up to 4 individual heaters or up to 4 zones
		JP-1236-KT	Wireless Remote Control Keypad Transmitter: OPTIONAL - JP-1236-HS Required for master code programming - Control up to four patio zones - 3 Zones with unique 4 digit pin & 1 zone with direct push button - Weather resistant: Outdoor or indoor installation

Additional Accessories

Tag	Qty	Item Number	Description
		JL-0800-GR-B	Gripple Express™. For indoor use only. No tools required for adjustment. Ready to use 10 ft cable length kit - loop one end. 100 lb work load.
		JL-0800-XX	#2 Lion Chain. 115 lb work load - 200 ft roll.
		JL-0800-SH	Safety Snap Hooks - 2". Package of 24
		JL-0800-SH-B	Safety Snap Hooks - 2". Package of 100
		JL-0798-SH	"'S' Hooks - 1 7/8". Quantity of 'S' hooks needed: JZ Series quantity required = ((tube length/10) \times 2) + 4: ie: SPW-JZ \times 40 ft = (40/10) \times 2) + 4 = 12 hooks"
		JL-0798-CS	Clearance to combustible sign. Metal sign - 18" x 6" - 3/4" red lettering on white background
		JS-0508-JZ	90° Aluminized Steel Elbow & Reflector Cover Kit. Compatible with STS-JZ, STW-JZ, STWS & SPW-JZ tube heater models. Elbow can be installed right or left hand. Includes coupler, reflector cover, hanger plate.
		JA-0528-XX	4" horizontal Flue Vent Terminals. Fits single wall vent pipe - field crimp required to fit to double wall pipe. Use this termination cap by Schwank or use an approved High Wind termination cap as supplied by others.
		JA-0514-XX	Common Flue Vent Tee Box Roof Termination: Use approved cap supplied by manufacturer of double-walled vent pipe. Not available in stainless steel.
		JA-0516-AA	4" x 8" Aluminized Steel Coupler with 2 x U-bolts. Optional Couplers for Vent Tee. ADD TWO optional tube couplers JA-0516-AA if desired for vent pipe connection to Tee.
		TG-0010-KT	Tuxedo Grill Kit JZ Models ONLY Decorative 'Tuxedo' Grille Kit - 10 ft - Matte Black Grille
		JA-0780-XX	Tube Protection Screen. STS-JZ, STW-JZ, SPW-JZ Models. 5 ft length - 1/2" x 1/2" galvanized screen.
		JS-0509-KT	Reflector Side Extension. All models - 10" deep x 116" long c/w Qty 3 x 'S' hooks

Additional Items

Tag	Qty	Part #	Description

SPW Straight Tube System

COMPONENT QUANTITIES PER HEATER MODEL	SPW 45-20	SPW 60-20 80-20	SPW 60-30 80-30 110-30 130-30	SPW 80-40 110-40 130-40 155-40	SPW 110-50 130-50 155-50	SPW 175-50 200-50	SPW 155-60	SPW 175-60 200-60	SPW 175-70 200-70
10' Stainless Steel W/ Flange	0	0	0	0	0	1	0	1	1
10' Aluminized Steel W/ Flange	1	1	1	1	1	0	1	0	0
10' Aluminized Steel	0	0	0	0	0	1	0	1	1
10' Aluminized W/ Emissive Coating	1	1	2	3	4	3	5	4	5
Focus Shield Reflector 9'8"	2	2	3	4	5	5	6	6	7
Aluminized Coupler	1	1	2	3	4	4	5	5	6
End Webbed Plate Hanger	2	2	2	2	2	2	2	2	2
Tube / Reflector Webbed Hanger	1	1	2	3	4	4	5	5	6
Reflector Stabilizer	6	6	9	12	15	15	18	18	21

Notes:

1. Combustion Tube: 10' X 4" Diameter 16 Ga. Aluminized Steel Swaged One End.

Each Additional Tube: 10' X 4" Diameter, .16 Ga. Steel Tubes With Or Without High Temperature Emissive Coating, Swaged One End

2. Combustion Tube: 10' X 4" Diameter, 16 Ga. 439 Stainless Steel Swaged One End Second Tube: 10' X 4" Diameter, 16 Ga. 439 Stainless Steel Swaged One End

Third Tube: 10' X 4" Diameter, 16 Ga. Aluminized Steel Swaged One End.

Each Additional Tube: 10' X 4" Diameter, 16 Ga. Steel With Or Without High Temperature Emissive Coating Swaged One End

- 3. Combustion Air Ducted Directly To 4" Collar At Ntake Of Blower
- 4. All Vent Pipe Is Field Supplied By Others; Single Wall Vent Pipe Other Than Portion Through Wall Or Roof May Be Double Wall Vent Pipe
- 5. System Utilizes Wire Hanger S, Two Per 10' Tube. Allowing Convection Heat Flow Along System.
- 6. Ignition: Channel Direct Spark Module: Pre-Purge And Post-Purge Of Tube System
- 7. All Wiring Connections By Means Of Common Terminal Block; Jumper: For 120V Thermostat; Remove For 24V Thermostat