

## REZNOR UDAP SERIES UNIT HEATERS

### Reznor UDAP Series Unit Heaters

**REZNOR®**



Reznor® V3 series model UDAP gas-fired unit heaters have a refreshing new appearance with a glossy white cabinet finish, unique Reznor® mitered corner, and less visible hardware. The low voltage terminal strip on the outside of the cabinet makes connecting control wiring easy with no panels to remove. The addition of a “G” terminal to the strip, along with the new design of the circuit board, allows for fan only operation (without adding relays). All units have a factory installed gas line nipple to the exterior of the cabinet for easy gas service connection.

The preeminent new internal feature is the T-CORE2® heat exchanger and single burner combustion system. Other standard features include a single-stage gas valve, multi-try direct spark ignition with 100% lockout, pressure switch to verify vent flow, resiliently isolated venter motor, venter wheel with improved housing, resiliently isolated axial fan and motor assembly, and a high temperature limit control. Sizes 30-125 also include a flame rollout safety switch.

- Sizes 30-125 certified for residential heating applications
- Sizes 30-400 certified for commercial/industrial heating applications
- 82-83% thermal efficient; TOP in its class!
- 50-60°F rise range
- Open fan motor with internal overload protection
- Transformer for 24V controls
- Integrated circuit board with diagnostic indicator lights
- Fan relay (included on the circuit board)
- Multi-try direct spark ignition with 100% lockout
- Single-stage gas valve (field adjustable for operation to 9,000 ft elevation)
- Vibration/noise isolated fan and venter motors; designed for low noise operation
- 2-point and 4-point suspension standard on all sizes
- External terminal strip for 24V wiring
- External gas connection
- Full fan guard; engineered for safety
- Improved cabinet design with less visible hardware and a NEW Reznor appearance
- Toll-Free Technical Support: 800-695-1901

PART NO	INPUT (MBH)	DIA (MBH)	NUMBER OF BLOWERS/FANS	BLOWER/FAN SIZE (IN)	WEIGHT (LB)	LENGTH (IN)	WIDTH (IN)	HEIGHT (IN)	VENT DIA (IN)	VOLTAGE (V)	FUEL TYPE	LP CONV KIT
RZUDAP03050000	30	25	1	10	54	26	26-5/8	12-1/8	3	120	Natural Gas	RZ201727
RZUDAP04550000	45	37	1	10	59	26	26-5/8	12-1/8	3	120	Natural Gas	RZ201727
RZUDAP06050000	60	50	1	12	67	27	26-5/8	15-1/8	3	120	Natural Gas	RZ201728
RZUDAP07550000	75	62	1	12	72	27-5/8	26-5/8	15-1/8	4	120	Natural Gas	RZ201728
RZUDAP10050000	105	87	1	16	96	28-5/8	26-5/8	23-1/8	4	120	Natural Gas	RZ202938
RZUDAP12550000	125	100	1	16	101	28-5/8	26-5/8	23-1/8	4	120	Natural Gas	RZ202938
RZUDAP15050000	150	125	1	18	172	42	38	20-1/8	5	120	Natural Gas	RZ201730
RZUDAP17550000	175	145	1	18	187	42	38	20-1/8	5	120	Natural Gas	RZ201730
RZUDAP20050000	200	166	1	18	187	42	38	20-1/8	5	120	Natural Gas	RZ201731
RZUDAP22550000	225	187	1	20	203	42	38	26-1/8	5	120	Natural Gas	RZ201731
RZUDAP25050000	250	208	1	20	215	42	38	26-1/8	5	120	Natural Gas	RZ201731
RZUDAP30050000	300	249	1	24	269	42	41	34-1/8	6	120	Natural Gas	RZ201732
RZUDAP35050000	350	291	1	24	294	42	41	34-1/8	6	120	Natural Gas	RZ201732
RZUDAP40050000	400	332	1	24	306	42	41	34-1/8	6	120	Natural Gas	RZ201732

**GAS VALVES – WHITE-RODGERS**



**Gas Valves – White-Rodgers 36C Series**



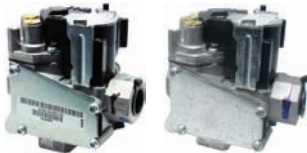
PART NO	VENDOR PART NO	FUEL TYPE	NO OF STAGES	CAPACITY (BTU/HR @ 1 IN W.C. PRESSURE DROP)	OPENING TYPE	IGNITION SYSTEM	VALVE BODY LENGTH (IN)	VALVE BODY WIDTH (IN)	INPUT FITTING SIZE NPT (IN)	OUTPUT FITTING SIZE NPT (IN)	LP CONV KIT INCLUDED	LP SPRING KIT	NAT GAS SPRING KIT
607012	36C94-907	Natural Gas	1	280,000	Slow	Pilot	4	3-3/16	3/4	3/4	Yes	60-21193-01	60-21193-02
607011	36C84-921	Natural Gas	1	280,000	Standard	Pilot	4	3-3/16	3/4	3/4	Yes	60-21193-01	60-21193-02
60-20714-84	36C68-423	Natural Gas	1	280,000	Standard	Pilot	3-15/16	2-7/8	3/4	3/4	Yes	60-21193-01	60-21193-02



**Gas Valves – White-Rodgers 36E Series**



PART NO	VENDOR PART NO	FUEL TYPE	NO OF STAGES	CAPACITY (BTU/HR @ 1 IN W.C. PRESSURE DROP)	OPENING TYPE	IGNITION SYSTEM	VALVE BODY LENGTH (IN)	VALVE BODY WIDTH (IN)	INPUT FITTING SIZE NPT (IN)	OUTPUT FITTING SIZE NPT (IN)	LP CONV KIT INCLUDED	LP SPRING KIT	NAT GAS SPRING KIT
60-24215-03	36E27-203	Natural Gas	Modulating	140,000	—	Hot Surface/ Direct Spark	4-7/8	3-1/8	1/2	1/2	—	—	—
60-23490-04	36E96-222	Natural Gas	2	140,000	Standard	Hot Surface/ Direct Spark	4-7/8	3-1/8	1/2	1/2	No	—	—
60-24290-01	36E23-202	Natural Gas	1	140,000	Slow	Hot Surface/ Direct Spark	4-7/8	3-1/8	1/2	1/2	No	60-21193-01	60-21193-02
607013	36E86-302	Natural Gas	1	140,000	Standard	Pilot	4-7/8	3-1/8	1/2	3/4	No	60-21193-01	60-21193-02
60-24215-04	36E27-204	LP	Modulating	140,000	—	Hot Surface/ Direct Spark	4-7/8	3-1/8	1/2	1/2	—	—	—



**Gas Valves – White-Rodgers 36G Series**



PART NO	VENDOR PART NO	FUEL TYPE	NO OF STAGES	CAPACITY (BTU/HR @ 1 IN W.C. PRESSURE DROP)	OPENING TYPE	IGNITION SYSTEM	VALVE BODY LENGTH (IN)	VALVE BODY WIDTH (IN)	INPUT FITTING SIZE NPT (IN)	OUTPUT FITTING SIZE NPT (IN)	LP CONV KIT INCLUDED	LP SPRING KIT	NAT GAS SPRING KIT
60-102405-82	36G55-524	Natural Gas	2	140,000	Slow	Hot Surface/ Direct Spark	4	2-7/16	1/2	1/2	No	—	—
60-24180-81	36G23-202E91	Natural Gas	1	140,000	Slow	Hot Surface/ Direct Spark	4	2-7/16	1/2	1/2	No	—	—
60-101921-01	36G55-521	Natural Gas	2	140,000	Slow	Hot Surface/ Direct Spark	4	2-7/16	1/2	1/2	No	—	—
60-102405-02	36G55-524	LP	2	140,000	Slow	Hot Surface/ Direct Spark	4	2-7/16	1/2	1/2	No	—	—
60-101921-81	36G55-521	Natural Gas	2	140,000	Slow	Hot Surface/ Direct Spark	4	2-7/16	1/2	1/2	No	—	—
60-102405-81	36G55-523	Natural Gas	2	140,000	Slow	Hot Surface/ Direct Spark	4	2-7/16	1/2	1/2	No	—	—
60-101921-02	36G55-522	LP	2	140,000	Slow	Hot Surface/ Direct Spark	4	2-7/16	1/2	1/2	No	—	—
60-101921-82	36G55-522	LP	2	140,000	Slow	Hot Surface/ Direct Spark	4	2-7/16	1/2	1/2	No	—	—
60-102405-01	36G55-523	Natural Gas	2	140,000	Slow	Hot Surface/ Direct Spark	4	2-7/16	1/2	1/2	No	—	—



**Gas Valve – White-Rodgers 36H Series**



PART NO	VENDOR PART NO	FUEL TYPE	NO OF STAGES	CAPACITY (BTU/HR @ 1 IN W.C. PRESSURE DROP)	OPENING TYPE	IGNITION SYSTEM	VALVE BODY LENGTH (IN)	VALVE BODY WIDTH (IN)	INPUT FITTING SIZE NPT (IN)	OUTPUT FITTING SIZE NPT (IN)	LP CONV KIT INCLUDED	LP SPRING KIT	NAT GAS SPRING KIT
607010	36H64-463	Natural Gas	2	300,000	Standard	Intermittent Pilot	4	3-5/16	3/4	3/4	Yes	60-21193-01	60-21193-02

**GAS VALVES – HONEYWELL**



**Gas Valve – Honeywell VR8520 Series**

**Honeywell**

PART NO	VENDOR PART NO	FUEL TYPE	NO OF STAGES	CAPACITY (BTU/HR @ 1 IN W.C. PRESSURE DROP)	OPENING TYPE	IGNITION SYSTEM	VALVE BODY LENGTH (IN)	VALVE BODY WIDTH (IN)	INPUT FITTING SIZE NPT (IN)	OUTPUT FITTING SIZE NPT (IN)	LP CONV KIT INCLUDED	LP SPRING KIT	NAT GAS SPRING KIT
60-42133-01	VR8520A2091	LP	2	—	Standard	Pilot	4-1/8	3-1/8	1/2	1/2	No	—	—



**Gas Valves – Honeywell VR8200 Series**

**Honeywell**

PART NO	VENDOR PART NO	FUEL TYPE	NO OF STAGES	CAPACITY (BTU/HR @ 1 IN W.C. PRESSURE DROP)	OPENING TYPE	IGNITION SYSTEM	VALVE BODY LENGTH (IN)	VALVE BODY WIDTH (IN)	INPUT FITTING SIZE NPT (IN)	OUTPUT FITTING SIZE NPT (IN)	LP CONV KIT INCLUDED	LP SPRING KIT	NAT GAS SPRING KIT
60-21103-01	VR8200A2132	Natural Gas	1	180,000	Standard	Pilot	4-1/8	2-11/16	1/2	1/2	Yes	60-22513-03	60-23430-01
60-22174-02	VR8200H1004	Natural Gas	1	150,000	Slow	Pilot	4-1/8	2-11/16	1/2	1/2	No	60-22513-03	60-23430-01



**Gas Valves – Honeywell VR8204 Series**

**Honeywell**

PART NO	VENDOR PART NO	FUEL TYPE	NO OF STAGES	CAPACITY (BTU/HR @ 1 IN W.C. PRESSURE DROP)	OPENING TYPE	IGNITION SYSTEM	VALVE BODY LENGTH (IN)	VALVE BODY WIDTH (IN)	INPUT FITTING SIZE NPT (IN)	OUTPUT FITTING SIZE NPT (IN)	LP CONV KIT INCLUDED	LP SPRING KIT	NAT GAS SPRING KIT
60-25076-02	VR8204A2001	Natural Gas	1	200,000	Standard	Pilot	4-1/8	2-11/16	1/2	1/2	No	60-22513-01	60-23430-01
60-22526-01	VR8204H1006	Natural Gas	1	150,000	Slow	Pilot	4-1/8	2-11/16	1/2	1/2	No	60-22513-03	60-23430-01
60-22447-01	VR8204C1092	Natural Gas	1	150,000	Step	Pilot	4-1/8	2-11/16	1/2	1/2	No	—	—



**Gas Valves – Honeywell VR8205 Series**

**Honeywell**

PART NO	VENDOR PART NO	FUEL TYPE	NO OF STAGES	CAPACITY (BTU/HR @ 1 IN W.C. PRESSURE DROP)	OPENING TYPE	IGNITION SYSTEM	VALVE BODY LENGTH (IN)	VALVE BODY WIDTH (IN)	INPUT FITTING SIZE NPT (IN)	OUTPUT FITTING SIZE NPT (IN)	LP CONV KIT INCLUDED	LP SPRING KIT	NAT GAS SPRING KIT
60-24394-01	VR8205N8829	Natural Gas	2	150,000	Slow	Hot Surface/ Direct Spark	5-5/8	3-5/16	1/2	1/2	No	60-22513-03	60-23430-01
60-100394-02	VR8205S2395/T	Natural Gas	1	160,000	Standard	Hot Surface/ Direct Spark	4-1/8	2-11/16	1/2	1/2	No	60-22513-03	60-23430-01

**GAS VALVES – HONEYWELL**



**Gas Valves – Honeywell VR8300 Series**

**Honeywell**

PART NO	VENDOR PART NO	FUEL TYPE	NO OF STAGES	CAPACITY (BTU/HR @ 1 IN W.C. PRESSURE DROP)	OPENING TYPE	IGNITION SYSTEM	VALVE BODY LENGTH (IN)	VALVE BODY WIDTH (IN)	INPUT FITTING SIZE NPT (IN)	OUTPUT FITTING SIZE NPT (IN)	LP CONV KIT INCLUDED	LP SPRING KIT	NAT GAS SPRING KIT
60-25075-81	VR8300A4003	Natural Gas	1	300,000	Standard	Pilot	4-1/8	2-11/16	3/4	3/4	Yes	60-22513-01	60-23430-01
60-21424-81	VR8300A2106	Natural Gas	1	180,000	Standard	Pilot	4-1/8	2-3/4	1/2	1/2	No	60-22513-03	60-23430-01



**Gas Valves – Honeywell VR8304 Series**

**Honeywell**

PART NO	VENDOR PART NO	FUEL TYPE	NO OF STAGES	CAPACITY (BTU/HR @ 1 IN W.C. PRESSURE DROP)	OPENING TYPE	IGNITION SYSTEM	VALVE BODY LENGTH (IN)	VALVE BODY WIDTH (IN)	INPUT FITTING SIZE NPT (IN)	OUTPUT FITTING SIZE NPT (IN)	LP CONV KIT INCLUDED	LP SPRING KIT	NAT GAS SPRING KIT
60-25076-81	VR8304M4002	Natural Gas	1	300,000	Standard	Pilot	4-1/16	2-11/16	3/4	3/4	Yes	60-22513-01	60-23430-01
60-21621-71	VR8304M3103	Natural Gas	1	270,000	Standard	Pilot	4-1/8	2-3/4	1/2	3/4	No	60-22513-03	60-23430-01
60-21621-81	VR8304M3103	Natural Gas	1	270,000	Standard	Pilot	4-1/8	2-3/4	1/2	3/4	Yes	60-22513-03	60-23430-01



**Gas Valves – Honeywell VR8305 Series**

**Honeywell**

PART NO	VENDOR PART NO	FUEL TYPE	NO OF STAGES	CAPACITY (BTU/HR @ 1 IN W.C. PRESSURE DROP)	OPENING TYPE	IGNITION SYSTEM	VALVE BODY LENGTH (IN)	VALVE BODY WIDTH (IN)	INPUT FITTING SIZE NPT (IN)	OUTPUT FITTING SIZE NPT (IN)	LP CONV KIT INCLUDED	LP SPRING KIT	NAT GAS SPRING KIT
60-42570-01	VR8305Q4120	Natural Gas	2	300,000	Standard	Hot Surface/ Direct Spark	5-5/8	3-5/16	3/4	3/4	No	60-22513-03	60-23430-01
60-42570-82	VR8305Q4120	Natural Gas	2	300,000	Standard	Hot Surface/ Direct Spark	5-5/8	3-5/16	3/4	3/4	Yes	60-22513-03	60-23430-01
60-101778-01	VR8305Q 4351	Natural Gas	2	270,000	Standard	Hot Surface/ Direct Spark	5-3/8	3-1/2	3/4	3/4	No	60-22513-03	60-23430-01



**Gas Valve – Honeywell SV9501 Series**

**Honeywell**

PART NO	VENDOR PART NO	FUEL TYPE	NO OF STAGES	CAPACITY (BTU/HR @ 1 IN W.C. PRESSURE DROP)	OPENING TYPE	IGNITION SYSTEM	VALVE BODY LENGTH (IN)	VALVE BODY WIDTH (IN)	INPUT FITTING SIZE NPT (IN)	OUTPUT FITTING SIZE NPT (IN)	LP CONV KIT INCLUDED	LP SPRING KIT	NAT GAS SPRING KIT
SV9501M2528	SV9501M2528	Natural Gas	1 or 2	150,000	Standard	Hot Surface/Pilot	4-1/8	3-1/4	1/2	1/2	No	—	—

**GAS VALVES – ROBERTSHAW (INVENSYS)**



**Gas Valve – Robertshaw 2000D Series**

*Robertshaw.*

PART NO	VENDOR PART NO	FUEL TYPE	NO OF STAGES	CAPACITY (BTU/HR @ 1 IN W.C. PRESSURE DROP)	OPENING TYPE	IGNITION SYSTEM	VALVE BODY LENGTH (IN)	VALVE BODY WIDTH (IN)	INPUT FITTING SIZE NPT (IN)	OUTPUT FITTING SIZE NPT (IN)	LP CONV KIT INCLUDED	LP SPRING KIT	NAT GAS SPRING KIT
60-24350-01	620011300	Natural Gas	1	125,000	Slow	Hot Surface/ Direct Spark	4-7/16	2-3/16	1/2	1/2	No	—	—



**Gas Valves – Robertshaw 7000 Series**

*Robertshaw.*

PART NO	VENDOR PART NO	FUEL TYPE	NO OF STAGES	CAPACITY (BTU/HR @ 1 IN W.C. PRESSURE DROP)	OPENING TYPE	IGNITION SYSTEM	VALVE BODY LENGTH (IN)	VALVE BODY WIDTH (IN)	INPUT FITTING SIZE NPT (IN)	OUTPUT FITTING SIZE NPT (IN)	LP CONV KIT INCLUDED	LP SPRING KIT	NAT GAS SPRING KIT
60-42013-81	7000BDER2-3	Natural Gas	2	250,000	Standard	Pilot	3-7/8	3-1/2	3/4	3/4	No	60-18759-05	60-18759-03
60-25137-83	3D9509924A	Natural Gas	2	250,000	Standard	Pilot	3-7/8	3-1/2	3/4	3/4	No	60-18759-05	60-18759-03
60-21271-84	7000BER-S7B	Natural Gas	1	240,000	Slow	Pilot	3-13/16	3	1/2	3/4	No	60-18759-05	60-18759-03
60-18556-86	7000BER-S7B	Natural Gas	1	240,000	Slow	Pilot	3-13/16	3	1/2	3/4	No	60-18759-05	60-18759-03
60-21617-03	7000BER-S7B-LP	Natural Gas	1	240,000	Standard	Pilot	3-13/16	3	1/2	3/4	No	60-18759-05	60-18759-03
60-25137-82	7000BER2-3LP	LP	2	400,000	Slow	Pilot	3-7/8	3-9/16	3/4	3/4	No	—	—
60-42014-81	7000BER2-3LP	LP	2	400,000	Slow	Pilot	3-7/8	3-9/16	3/4	3/4	No	—	—
60-18759-04	7000BER-LP	LP	1	240,000	Standard	Pilot	3-7/8	3	1/2	1/2	No	60-18759-05	60-18759-03



**Gas Valves – Robertshaw 7200 Series**

*Robertshaw.*

PART NO	VENDOR PART NO	FUEL TYPE	NO OF STAGES	CAPACITY (BTU/HR @ 1 IN W.C. PRESSURE DROP)	OPENING TYPE	IGNITION SYSTEM	VALVE BODY LENGTH (IN)	VALVE BODY WIDTH (IN)	INPUT FITTING SIZE NPT (IN)	OUTPUT FITTING SIZE NPT (IN)	LP CONV KIT INCLUDED	LP SPRING KIT	NAT GAS SPRING KIT
60-42464-02	7D2G0H536A	Natural Gas	2	150,000	Standard	Pilot	4-1/8	3	3/4	3/4	No	60-18759-06	60-23430-03
60-42463-02	7D2F7G534A	Natural Gas	2	150,000	Standard	Pilot	4-1/8	3	3/4	3/4	No	60-18759-06	60-23430-03
60-23442-01	7D1E7B029A	Natural Gas	1	150,000	Slow	Pilot	4-1/8	2-7/8	1/2	1/2	No	60-18759-06	60-23430-03
60-22525-06	7A5C5B015A	Natural Gas	1	150,000	Slow	Pilot	4-3/8	3-1/16	1/2	1/2	No	60-18759-06	60-23430-03
60-22525-02	7A0A5B001A/C	Natural Gas	1	150,000	Slow	Pilot	4-3/8	2-7/8	1/2	1/2	No	60-18759-06	60-23430-03
60-22525-05	7A5A8B014D	Natural Gas	1	150,000	Standard	Pilot	4-1/8	2-7/8	1/2	1/2	No	60-18759-06	60-23430-03
60-42462-02	7E2D5B029A	Natural Gas	1	150,000	Standard	Pilot	4-1/8	3	1/2	3/4	No	60-18759-06	60-23430-03
60-22525-04	7A5A8B003A/C	Natural Gas	1	150,000	Standard	Pilot	4-3/8	3-1/16	1/2	1/2	No	60-18759-06	60-23430-03
60-22525-03	7A5B6J506A/D	Natural Gas	1	150,000	Step	Pilot	4-3/8	2-7/8	1/2	1/2	No	60-18759-07	60-23430-02
60-22525-08	7200DER LP-S7C	LP	1	150,000	Standard	Pilot	4-3/8	2-7/8	1/2	1/2	No	—	—

**GAS VALVE ACCESSORIES**



**Gas Valve Flange Kits**

**Honeywell**

PART NO	VENDOR PART NO	USED WITH HONEYWELL GAS VALVE SERIES	FITTING SIZE NPT (IN)	FITTING ORIENTATION
607014	393690-13	VR8200, VR8300, VR4200, VR4300, SV9500, VR8305, VR4204, VR4304, VR4305, VR8204, VR8205, VR8304	1/2	Angle
607015	393690-15	VR8200, VR8300, VR4200, VR4300, SV9500, VR8305, VR4204, VR4304, VR4305, VR8204, VR8205, VR8304	3/4	Angle
60-25072-04	393690-14	VR8200, VR8300, VR4200, VR4300, SV9500, VR8305, VR4204, VR4304, VR4305, VR8204, VR8205, VR8304	3/4	Straight



**60-25072-01 ECO Safety Control – Honeywell V8200 & VR8200 Gas Valves**

**Honeywell**

- For use with Honeywell gas valves V400 and V800 that permit installation of this device
- Interrupts the thermocouple circuit and shuts off the main burner and pilot gas flow if high temperature is sensed by a remote limit switch
- Used in the same position where the thermocouple connection is typically installed; the thermocouple is then screwed into the ECO

PART NO	VENDOR PART NO	DESCRIPTION
60-25072-01	392451	ECO Safety Control



**60-25072-02 ECO Safety Control – Honeywell V400 & V800 Gas Valves**

**Honeywell**

- For use with Honeywell V8200 and VR8200 continuous pilot combination gas valves that allow the use of a high-limit ECO in the thermocouple circuit
- Installs in the gas valve and interrupts the thermocouple circuit if high temperature is sensed in the plenum

PART NO	VENDOR PART NO	DESCRIPTION
60-25072-02	393200-1	ECO Safety Control



**45-21266-03 ECO Safety Cable – Robertshaw Gas Valves**

*Robertshaw*

- For use with Robertshaw gas valves that permit installation of this device
- Connects the gas valve to a fusible link; shuts off the flow of gas to the main burner and pilot if the fusible link senses high temperature

PART NO	VENDOR PART NO	DESCRIPTION
45-21266-03	17456	ECO Safety Cable

**Mercury Flame Sensor Switches – Plug-In**

Mercury flame sensors should only be replaced by cross-referencing the original mercury flame sensor model, or based on the recommendation of the OEM equipment manufacturer. They cannot be replaced by the gas valve model number.



**62-21426-02 (3098-156) Mercury Flame Sensor Switch**

**White Rodgers**

PART NO	VENDOR PART NO	USED WITH	REPLACES
62-21426-02	3098-156	White-Rodgers Gas Valve Series: 36C	3098-122, 3098-126, 3098-127, 3098-130, 3098-131, 3098-142, 3098-143, 3098-149, 3098-153, 3098-168, 3098-174, 3098-175, 3098-182

**GAS VALVE ACCESSORIES**

**Mercury Flame Sensor Switches – Plug-In**



**62-21004-01 (3094-123) Mercury Flame Sensor Switch**



PART NO	VENDOR PART NO	USED WITH	REPLACES
62-21004-01	3094-123	White-Rodgers Gas Valve Series: 36C	—



**62-30A46-5 (30A46-5) Mercury Flame Sensor Switch**



PART NO	VENDOR PART NO	USED WITH	REPLACES
62-30A46-5	30A46-5	White-Rodgers Gas Valve Series: 25G01 and 25D46	—



**Gas Valve Reducing Bushing (3/4 in. x 1/2 in.)**

PART NO	DESCRIPTION
82-21806-62	Reducing Bushing - 3/4 in. x 1/2 in.

**PILOTS AND PILOT ACCESSORIES – PILOT BURNER ASSEMBLIES**

**Pilot Burner Assembly w/Orifices – Natural Gas/LP**



**62-25063-01 Pilot Burner Assembly w/Orifices – Natural Gas/LP**



PART NO	MFG PART NO	PILOT ORIFICE INCLUDED	ORIFICE DIAMETER (IN)	FUEL TYPE
62-25063-01	Q314A1586	Yes	0.018, 0.010	Natural Gas, LP

**Pilot Burner Assemblies w/Orifices - Natural Gas**



**62-19125-01 Pilot Burner Assembly w/Orifice – Natural Gas**



PART NO	MFG PART NO	PILOT ORIFICE INCLUDED	ORIFICE DIAMETER (IN)	FUEL TYPE
62-19125-01	E32-6S	Yes	0.018	Natural Gas



**62-21005-01 Pilot Burner Assembly w/Orifice – Natural Gas**



PART NO	MFG PART NO	PILOT ORIFICE INCLUDED	ORIFICE DIAMETER (IN)	FUEL TYPE
62-21005-01	E32-2	Yes	0.020	Natural Gas



**20066401 Pilot Burner Assembly w/Orifice – Natural Gas**



PART NO	MFG PART NO	PILOT ORIFICE INCLUDED	ORIFICE DIAMETER (IN)	FUEL TYPE
20066401	Q373A2024	Yes	0.020	Natural Gas

**PILOTS AND PILOT ACCESSORIES – PILOT BURNER ASSEMBLIES**

**Pilot Burner Assemblies w/Orifices – Natural Gas**



**62-21609-01 Pilot Burner Assembly w/Orifice – Natural Gas**

**Honeywell**

PART NO	MFG PART NO	PILOT ORIFICE INCLUDED	ORIFICE DIAMETER (IN)	FUEL TYPE
62-21609-01	Q362A1011	Yes	0.020	Natural Gas



**62-21883-01 Pilot Burner Assembly w/Orifice – Natural Gas**

**Honeywell**

PART NO	MFG PART NO	PILOT ORIFICE INCLUDED	ORIFICE DIAMETER (IN)	FUEL TYPE
62-21883-01	Q348A1192	Yes	0.022	Natural Gas



**62-21489-01 Pilot Burner Assembly w/Orifice – Natural Gas**

*Robertshaw*

PART NO	MFG PART NO	PILOT ORIFICE INCLUDED	ORIFICE DIAMETER (IN)	FUEL TYPE
62-21489-01	3CL-2	Yes	0.018	Natural Gas



**62-21743-05 Pilot Burner Assembly w/Orifice – Natural Gas**

*Robertshaw*

PART NO	MFG PART NO	PILOT ORIFICE INCLUDED	ORIFICE DIAMETER (IN)	FUEL TYPE
62-21743-05	78650	Yes	0.018	Natural Gas



**62-22864-02 Pilot Burner Assembly w/Orifice – Natural Gas**

*Robertshaw*

PART NO	MFG PART NO	PILOT ORIFICE INCLUDED	ORIFICE DIAMETER (IN)	FUEL TYPE
62-22864-02	7CL-6P	Yes	0.011	Natural Gas

**Pilot Burner Assemblies w/Orifices – LP**



**62-19640-02 Pilot Burner Assembly w/Orifice – LP**

*Robertshaw*

PART NO	MFG PART NO	PILOT ORIFICE INCLUDED	ORIFICE DIAMETER (IN)	FUEL TYPE
62-19640-02	76451-LP	Yes	0.010	LP



**62-22864-82 Pilot Burner Assembly Kit w/Thermocouple and Orifice – LP**

*Robertshaw*

PART NO	MFG PART NO	PILOT ORIFICE INCLUDED	ORIFICE DIAMETER (IN)	FUEL TYPE
62-22864-82	—	Yes	0.008	LP



**PILOTS AND PILOT ACCESSORIES – PILOT BURNER ASSEMBLIES**

**Pilot Burner Assemblies w/o Orifices**



**62-21425-01 Pilot Burner Assembly w/o Orifice**

**White  
Rodgers**

PART NO	MFG PART NO
62-21425-01	E51-111



**62-21432-01 Pilot Burner Assembly w/o Orifice**

**White  
Rodgers**

PART NO	MFG PART NO
62-21432-01	E50-101



**62-21612-01 Pilot Burner Assembly w/o Orifice**

**White  
Rodgers**

PART NO	MFG PART NO
62-21612-01	E52-1



**62-21612-02 Pilot Burner Assembly w/o Orifice**

**White  
Rodgers**

PART NO	MFG PART NO
62-21612-02	E52-200

**PILOTS AND PILOT ACCESSORIES – PILOT ORIFICES**

**Pilot Orifices – Natural Gas**



**62-21609-03 Pilot Orifice – Natural Gas**

**Honeywell**

PART NO	VENDOR PART NO	ORIFICE DIAMETER (IN)	FUEL TYPE
62-21609-03	390686-14	0.016	Natural Gas



**62-22331-05 Pilot Orifice – Natural Gas**

**Honeywell**

PART NO	VENDOR PART NO	ORIFICE DIAMETER (IN)	FUEL TYPE
62-22331-05	390686-39	0.016	Natural Gas



**62-19640-04 Pilot Orifice – Natural Gas**

*Robertshaw*

PART NO	VENDOR PART NO	ORIFICE DIAMETER (IN)	FUEL TYPE
62-19640-04	10-021	0.018	Natural Gas



**62-22832-02 Pilot Orifice – Natural Gas**

*Robertshaw*

PART NO	VENDOR PART NO	ORIFICE DIAMETER (IN)	FUEL TYPE
62-22832-02	76377-1	0.011	Natural Gas

## PILOTS AND PILOT ACCESSORIES – PILOT ORIFICES

### Pilot Orifices – LP



#### 62-21609-05 Pilot Orifice – LP

**Honeywell**

PART NO	VENDOR PART NO	ORIFICE DIAMETER (IN)	FUEL TYPE
62-21609-05	390686-36	0.011	LP



#### 62-22727-01 Pilot Orifice – LP

**Honeywell**

PART NO	VENDOR PART NO	ORIFICE DIAMETER (IN)	FUEL TYPE
62-22727-01	390686-1	0.010	LP



#### 62-22834-03 Pilot Orifice – LP

**Honeywell**

PART NO	VENDOR PART NO	ORIFICE DIAMETER (IN)	FUEL TYPE
62-22834-03	390686-23	0.008	LP



#### 62-22834-04 Pilot Orifice – LP

**Honeywell**

PART NO	VENDOR PART NO	ORIFICE DIAMETER (IN)	FUEL TYPE
62-22834-04	390686-15	0.009	LP



#### 62-22331-03 Pilot Orifice – LP

**Honeywell**

PART NO	VENDOR PART NO	ORIFICE DIAMETER (IN)	FUEL TYPE
62-22331-03	390686-23	0.008	LP



#### 625006 Pilot Orifice – LP

*Robertshaw*

PART NO	VENDOR PART NO	ORIFICE DIAMETER (IN)	FUEL TYPE
625006	10-211-0	0.0115	LP



#### 62-19640-03 Pilot Orifice – LP

*Robertshaw*

PART NO	VENDOR PART NO	ORIFICE DIAMETER (IN)	FUEL TYPE
62-19640-03	10-114-0	0.010	LP



#### 62-21743-03 Pilot Orifice – LP

*Robertshaw*

PART NO	VENDOR PART NO	ORIFICE DIAMETER (IN)	FUEL TYPE
62-21743-03	76371-1	0.0115	LP



#### 62-22832-03 Pilot Orifice – LP

*Robertshaw*

PART NO	VENDOR PART NO	ORIFICE DIAMETER (IN)	FUEL TYPE
62-22832-03	27270-1	0.008	LP

## PILOTS AND PILOT ACCESSORIES – PILOT ORIFICE ASSEMBLIES

### Pilot Orifice Assemblies – Natural Gas



#### 62-21384-01 Pilot Orifice Assembly – Natural Gas



PART NO	VENDOR PART NO	ORIFICE DIAMETER (IN)	FUEL TYPE
62-21384-01	PSE-31396	0.020	Natural Gas



#### 62-21384-03 Pilot Orifice Assembly – Natural Gas



PART NO	VENDOR PART NO	ORIFICE DIAMETER (IN)	FUEL TYPE
62-21384-03	PSE-31417	0.016	Natural Gas

### Pilot Orifice Assemblies – LP



#### 62-21384-02 Pilot Orifice Assembly – LP



PART NO	VENDOR PART NO	ORIFICE DIAMETER (IN)	FUEL TYPE
62-21384-02	PSE-31393	0.013	LP



#### 62-21384-04 Pilot Orifice Assembly – LP



PART NO	VENDOR PART NO	ORIFICE DIAMETER (IN)	FUEL TYPE
62-21384-04	F69-2161	0.010	LP



#### 62-21883-04 Pilot Orifice Assembly – LP



PART NO	VENDOR PART NO	ORIFICE DIAMETER (IN)	FUEL TYPE
62-21883-04	388146KP	0.014	LP

## PILOTS AND PILOT ACCESSORIES – PILOT TUBING



PART NO	DESCRIPTION
803007	Pilot Tubing (Aluminum) - 1/4 in. O.D. x 50 ft.
803008	Pilot Tubing (Aluminum) - 1/4 in. O.D. x 5 ft. w/Fittings

## PILOTS AND PILOT ACCESSORIES – PILOT TUBE COMPRESSION FITTINGS



### Pilot Tube Compression Fittings – Breakaway Ferrule Type

PART NO	VENDOR	VENDOR PART NO	TUBING SIZE - OD (IN)	FITTING SIZE - OD (IN)	CASE QTY	CASE REQ
62-23498-01	Honeywell	386449-1	1/4	7/16-28	1	—
625026	Uni-Line	4590-069	1/4	7/16-28	15	Yes
625030	Uni-Line	4590-067	3/16	3/8-28	15	Yes

**THERMOCOUPLES**



**Thermocouples – White-Rodgers H06E Series**



PART NO	VENDOR PART NO	CAPILLARY TUBE LENGTH (IN)	BULB LENGTH (IN)	BULB DIA (IN)	BULB END CONNECTIONS	GAS VALVE END FITTING OD (IN)	CASE QTY	CASE REQ
62-25113-01	H06E018	18	2-11/64	3/16	Nut, Push-in Clip	11/32	10	Yes
62-25113-02	H06E024	24	2-11/64	3/16	Nut, Push-in Clip	11/32	10	Yes
62-25113-03	H06E036	36	2-11/64	3/16	Nut, Push-in Clip	11/32	10	Yes



**Thermocouples – Honeywell Q340 Series**



PART NO	VENDOR PART NO	CAPILLARY TUBE LENGTH (IN)	BULB LENGTH (IN)	BULB DIA (IN)	BULB END CONNECTIONS	GAS VALVE END FITTING OD (IN)	CASE QTY	CASE REQ
62-25079-95	Q340A1074	24	2-11/64	3/16	Nut, Adapter, Push-in Clip	11/32	10	Yes
62-25079-96	Q340A1082	30	2-11/64	3/16	Nut, Adapter, Push-in Clip	11/32	10	Yes
62-25079-97	Q340A1090	36	2-11/64	3/16	Nut, Adapter, Push-in Clip	11/32	10	Yes



**Thermocouples – Honeywell Q390 Series**



PART NO	VENDOR PART NO	CAPILLARY TUBE LENGTH (IN)	BULB LENGTH (IN)	BULB DIA (IN)	BULB END CONNECTIONS	GAS VALVE END FITTING OD (IN)	CASE QTY	CASE REQ
62-25079-01	Q390A1095	18	2-11/64	3/16	Nut, Adapter, Push-in Clip	11/32	10	Yes
62-25079-02	Q390A1046	24	2-11/64	3/16	Nut, Adapter, Push-in Clip	11/32	10	Yes
62-25079-03	Q390A1053	30	2-11/64	3/16	Nut, Adapter, Push-in Clip	11/32	10	Yes
62-25079-04	Q390A1061	36	2-11/64	3/16	Nut, Adapter, Push-in Clip	11/32	10	Yes



**Thermocouples – Robertshaw 217 Series**



PART NO	VENDOR PART NO	CAPILLARY TUBE LENGTH (IN)	BULB LENGTH (IN)	BULB DIA (IN)	BULB END CONNECTIONS	GAS VALVE END FITTING OD (IN)	CASE QTY	CASE REQ
21724B	21724	24	2-11/64	3/16	Nut, Adapter, Push-in Clip	11/32	100	—
21730B	21730B	30	2-11/64	3/16	Nut, Adapter, Push-in Clip	11/32	100	—
21748B	21748B	48	2-11/64	3/16	Nut, Adapter, Push-in Clip	11/32	100	—

**FLAME SENSOR RODS**



**62-20719-01 Flame Sensor Rod**

PART NO	LENGTH - MOUNTING FLANGE TO SENSOR TIP (IN)	LENGTH SENSOR OFFSET (IN)	ANGLE - SENSOR OFFSET (DEGREES)	LEAD LENGTH (IN)	TERMINATION
62-20719-01	1-5/32	—	—	—	1/4 inch Male Quick Connect



**62-23543-05 Flame Sensor Rod**

PART NO	LENGTH - MOUNTING FLANGE TO SENSOR TIP (IN)	LENGTH SENSOR OFFSET (IN)	ANGLE - SENSOR OFFSET (DEGREES)	LEAD LENGTH (IN)	TERMINATION
62-23543-05	1-5/16	—	—	—	1/4 inch Male Quick Connect



**62-21744-01 Flame Sensor Rod**

PART NO	LENGTH - MOUNTING FLANGE TO SENSOR TIP (IN)	LENGTH SENSOR OFFSET (IN)	ANGLE - SENSOR OFFSET (DEGREES)	LEAD LENGTH (IN)	TERMINATION
62-21744-01	2-3/64	—	—	—	1/4 inch Male Quick Connect

## FLAME SENSOR RODS



### 62-23543-01 Flame Sensor Rod

PART NO	LENGTH - MOUNTING FLANGE TO SENSOR TIP (IN)	LENGTH SENSOR OFFSET (IN)	ANGLE - SENSOR OFFSET (DEGREES)	LEAD LENGTH (IN)	TERMINATION
62-23543-01	2-1/2	1-9/16	90	—	1/4 inch Male Quick Connect



### 62-23543-02 Flame Sensor Rod

PART NO	LENGTH - MOUNTING FLANGE TO SENSOR TIP (IN)	LENGTH SENSOR OFFSET (IN)	ANGLE - SENSOR OFFSET (DEGREES)	LEAD LENGTH (IN)	TERMINATION
62-23543-02	2-1/16	1-13/16	90	—	1/4 inch Male Quick Connect



### 62-23543-06 Flame Sensor Rod

PART NO	LENGTH - MOUNTING FLANGE TO SENSOR TIP (IN)	LENGTH SENSOR OFFSET (IN)	ANGLE - SENSOR OFFSET (DEGREES)	LEAD LENGTH (IN)	TERMINATION
62-23543-06	2-3/8	1-7/32	90	—	1/4 inch Male Quick Connect



### 45-42374-83 Flame Sensor Rod

PART NO	LENGTH - MOUNTING FLANGE TO SENSOR TIP (IN)	LENGTH SENSOR OFFSET (IN)	ANGLE - SENSOR OFFSET (DEGREES)	LEAD LENGTH (IN)	TERMINATION
45-42374-83	3-3/32	1-1/2	135	42	1/4 & 1/8 in. Female Quick Connects



### 45-25323-02 Wire Lead for Flame Sensor

PART NO	DESCRIPTION	TERMINATION
45-25323-02	Flame Sensor Wire - 42 in.	1/4 in. Quick Connect to Male Molex Pin

## FLAME SENSORS



### 62-24044-71 Non-Integrated Flame Sense Retrofit Kit

This kit allows retrofit of older furnace models with HSI ignition which originally had integrated flame sensing through the HSI ignitor. Mounting brackets are included for both ribbon style and inshot style burners, along with ignitor 62-23543-01.

PART NO	DESCRIPTION	CASE QTY	CASE REQ
62-24044-71	Non-Integrated Flame Sense Retrofit Kit	12	Yes
62-24044-71-1PK	Non-Integrated Flame Sense Retrofit Kit	—	—



### CAD Cell



PART NO	VENDOR PART NO	DESCRIPTION
42-22771-01	C554A1687	Cad Cell

## HOT SURFACE IGNITORS (HSI) – CERAMIC METAL COMPOSITE



### 62-24305-82 Hot Surface Ignitor (HSI - Ceramic Metal Composite)



PART NO	VENDOR PART NO	ELEMENT MATERIAL	HEAT-UP TIME (S)	IGNITION TEMP (°F)	WIRE LENGTH (IN)	CASE QTY	CASE REQ
62-24305-82	—	Ceramic Metallic Composite	5	2174	7-1/2	—	—

**HOT SURFACE IGNITORS (HSI) – SILICON CARBIDE**



**62-22868-93 Hot Surface Ignitor (HSI – Silicon Carbide)**



PART NO	VENDOR PART NO	ELEMENT MATERIAL	HEAT-UP TIME (S)	IGNITION TEMP (°F)	WIRE LENGTH (IN)	CASE QTY	CASE REQ
62-22868-93	—	Silicon Carbide	34	2000	5-1/4	25	Yes
62-22868-93-1PK	—	Silicon Carbide	34	2000	5-1/4	—	—



**62-22669-92 Hot Surface Ignitor (HSI – Silicon Carbide)**



PART NO	VENDOR PART NO	ELEMENT MATERIAL	HEAT-UP TIME (S)	IGNITION TEMP (°F)	WIRE LENGTH (IN)	CASE QTY	CASE REQ
62-22669-92	—	Silicon Carbide	34	1800	8-1/2	12	Yes
62-22669-92-1PK	—	Silicon Carbide	34	1800	8-1/2	—	—



**767A-382 Hot Surface Ignitor (HSI – Silicon Carbide)**



PART NO	VENDOR PART NO	ELEMENT MATERIAL	HEAT-UP TIME (S)	IGNITION TEMP (°F)	WIRE LENGTH (IN)	CASE QTY	CASE REQ
767A-382	767A-382	Silicon Carbide	17	1800	5-1/4	—	—



**767A-383 Hot Surface Ignitor (HSI – Silicon Carbide)**



PART NO	VENDOR PART NO	ELEMENT MATERIAL	HEAT-UP TIME (S)	IGNITION TEMP (°F)	WIRE LENGTH (IN)	CASE QTY	CASE REQ
767A-383	767A-383	Silicon Carbide	17	1800	5-1/4	—	—



**767A-384 Hot Surface Ignitor (HSI – Silicon Carbide)**



PART NO	VENDOR PART NO	ELEMENT MATERIAL	HEAT-UP TIME (S)	IGNITION TEMP (°F)	WIRE LENGTH (IN)	CASE QTY	CASE REQ
767A-384	767A-384	Silicon Carbide	17	1800	5-1/4	—	—



**625014 (41-407) Hot Surface Ignitor (HSI – Silicon Carbide)**



PART NO	VENDOR PART NO	ELEMENT MATERIAL	HEAT-UP TIME (S)	IGNITION TEMP (°F)	WIRE LENGTH (IN)	CASE QTY	CASE REQ
625014	41-407	Silicon Carbide	17	2150	4-1/2	—	—



**625015 (41-410) Hot Surface Ignitor (HSI – Silicon Carbide)**



PART NO	VENDOR PART NO	ELEMENT MATERIAL	HEAT-UP TIME (S)	IGNITION TEMP (°F)	WIRE LENGTH (IN)	CASE QTY	CASE REQ
625015	41-410	Silicon Carbide	17	2150	4-1/2	—	—



**625016 (41-403) Hot Surface Ignitor (HSI – Silicon Carbide)**



PART NO	VENDOR PART NO	ELEMENT MATERIAL	HEAT-UP TIME (S)	IGNITION TEMP (°F)	WIRE LENGTH (IN)	CASE QTY	CASE REQ
625016	41-403	Silicon Carbide	17	2150	5-1/2	—	—

**HOT SURFACE IGNITORS (HSI) – SILICON CARBIDE**



**625017 (41-404) Hot Surface Ignitor (HSI – Silicon Carbide)**

*Robertshaw.*

PART NO	VENDOR PART NO	ELEMENT MATERIAL	HEAT-UP TIME (S)	IGNITION TEMP (°F)	WIRE LENGTH (IN)	CASE QTY	CASE REQ
625017	41-404	Silicon Carbide	17	2150	4-1/2	—	—



**625018 (41-406) Hot Surface Ignitor (HSI – Silicon Carbide)**

*Robertshaw.*

PART NO	VENDOR PART NO	ELEMENT MATERIAL	HEAT-UP TIME (S)	IGNITION TEMP (°F)	WIRE LENGTH (IN)	CASE QTY	CASE REQ
625018	41-406	Silicon Carbide	17	2150	10-1/2	—	—



**625019 (41-401) Hot Surface Ignitor (HSI – Silicon Carbide)**

*Robertshaw.*

PART NO	VENDOR PART NO	ELEMENT MATERIAL	HEAT-UP TIME (S)	IGNITION TEMP (°F)	WIRE LENGTH (IN)	CASE QTY	CASE REQ
625019	41-401	Silicon Carbide	17	2150	4-1/2	—	—



**625020 (41-409) Hot Surface Ignitor (HSI – Silicon Carbide)**

*Robertshaw.*

PART NO	VENDOR PART NO	ELEMENT MATERIAL	HEAT-UP TIME (S)	IGNITION TEMP (°F)	WIRE LENGTH (IN)	CASE QTY	CASE REQ
625020	41-409 (271 NORTON)	Silicon Carbide	17	2150	4-1/2	—	—



**625021 (41-402) Hot Surface Ignitor (HSI – Silicon Carbide)**

*Robertshaw.*

PART NO	VENDOR PART NO	ELEMENT MATERIAL	HEAT-UP TIME (S)	IGNITION TEMP (°F)	WIRE LENGTH (IN)	CASE QTY	CASE REQ
625021	41-402	Silicon Carbide	17	2150	19	—	—



**625022 (41-414) Hot Surface Ignitor (HSI – Silicon Carbide)**

*Robertshaw.*

PART NO	VENDOR PART NO	ELEMENT MATERIAL	HEAT-UP TIME (S)	IGNITION TEMP (°F)	WIRE LENGTH (IN)	CASE QTY	CASE REQ
625022	41-414	Silicon Carbide	17	2150	5-1/4	—	—



**625023 (41-405) Hot Surface Ignitor (HSI – Silicon Carbide)**

*Robertshaw.*

PART NO	VENDOR PART NO	ELEMENT MATERIAL	HEAT-UP TIME (S)	IGNITION TEMP (°F)	WIRE LENGTH (IN)	CASE QTY	CASE REQ
625023	41-405	Silicon Carbide	17	2150	5-1/2	—	—



**625024 (41-412) Hot Surface Ignitor (HSI – Silicon Carbide)**

*Robertshaw.*

PART NO	VENDOR PART NO	ELEMENT MATERIAL	HEAT-UP TIME (S)	IGNITION TEMP (°F)	WIRE LENGTH (IN)	CASE QTY	CASE REQ
625024	41-412	Silicon Carbide	17	2150	5-1/4	—	—

**HOT SURFACE IGNITORS (HSI) – SILICON NITRIDE**



**62-24134-82 Hot Surface Ignitor (HSI - Silicon Nitride)**

Consists of 768A-844 with wiring harness adapter.



PART NO	VENDOR PART NO	ELEMENT MATERIAL	HEAT-UP TIME (S)	IGNITION TEMP (°F)	WIRE LENGTH (IN)	OEM CROSS REFERENCE
62-24134-82	62-24134-82	Silicon Nitride	20	2174	12-1/4	—



**768A-842 Hot Surface Ignitor (HSI - Silicon Nitride)**



PART NO	VENDOR PART NO	ELEMENT MATERIAL	HEAT-UP TIME (S)	IGNITION TEMP (°F)	WIRE LENGTH (IN)	OEM CROSS REFERENCE
768A-842	768A-842	Silicon Nitride	20	2174	5	Amana 11111701



**768A-843 Hot Surface Ignitor (HSI - Silicon Nitride)**



PART NO	VENDOR PART NO	ELEMENT MATERIAL	HEAT-UP TIME (S)	IGNITION TEMP (°F)	WIRE LENGTH (IN)	OEM CROSS REFERENCE
768A-843	768A-843	Silicon Nitride	20	2174	5	Thermo Products 768A-143



**768A-844 Hot Surface Ignitor (HSI - Silicon Nitride)**



PART NO	VENDOR PART NO	ELEMENT MATERIAL	HEAT-UP TIME (S)	IGNITION TEMP (°F)	WIRE LENGTH (IN)	OEM CROSS REFERENCE
768A-844	768A-844	Silicon Nitride	20	2174	12-1/4	Lennox 41K5601



**768A-845 Hot Surface Ignitor (HSI - Silicon Nitride)**



PART NO	VENDOR PART NO	ELEMENT MATERIAL	HEAT-UP TIME (S)	IGNITION TEMP (°F)	WIRE LENGTH (IN)	OEM CROSS REFERENCE
768A-845	768A-845	Silicon Nitride	20	2174	4-3/4	Trane B340970P01

**HOT SURFACE IGNITORS (HSI) – SILICON NITRIDE UPGRADE KITS**



**21D64-1 Silicon Nitride Hot Surface Ignitor (HSI) Upgrade Kit**

The 21D64-1 upgrade kit is designed to upgrade existing non-integrated HSI systems from a silicon carbide to a silicon nitride ignitor. The power module included with the kit connects the new nitride ignitor to the existing module. It steps down and regulates the voltage to the ignitor to approximately 80 volts for proper operation.



- Robust ignitor design for longer life and fewer callbacks
- Universal bracket fits most furnaces
- 5-year limited warranty

PART NO	VENDOR PART NO	ELEMENT MATERIAL	HEAT-UP TIME (S)	IGNITION TEMP (°F)	WIRE LENGTH (IN)	OEM CROSS REFERENCE
21D64-1	21D64-1	Silicon Nitride	20	2000	12	—



**21D64-2 Silicon Nitride Hot Surface Ignitor (HSI) Upgrade Kit**

The 21D64-2 upgrade kit is designed to easily upgrade existing integrated or non-integrated HSI systems from a silicon carbide to a silicon nitride ignitor. No separate power module is required.



- Robust ignitor design for longer life and fewer callbacks
- Universal bracket fits most furnaces
- 3-year limited warranty

PART NO	VENDOR PART NO	ELEMENT MATERIAL	HEAT-UP TIME (S)	IGNITION TEMP (°F)	WIRE LENGTH (IN)	OEM CROSS REFERENCE
21D64-2	21D64-2	Silicon Nitride	17	2101	14-1/2	—



## SPARK IGNITORS



### 62-23556-03 Direct Spark Ignitor (DSI)

PART NO	LENGTH MOUNTING FLANGE TO IGNITOR TIP (IN)	LENGTH SPARK ELECTRODE OFFSET (IN)	ANGLE SPARK ELECTRODE OFFSET (IN)	LENGTH GROUND ELECTRODE OFFSET (DEGREES)	ANGLE GROUND ELECTRODE OFFSET (DEGREES)	SPARK GAP (IN)	WIRE LENGTH (IN)	TERMINATION
62-23556-03	1-15/16	1-1/8	90	1-1/4	90	5/32	96	Cut wire (for use with nail pin)



### 62-23556-04 Direct Spark Ignitor (DSI)

PART NO	LENGTH MOUNTING FLANGE TO IGNITOR TIP (IN)	LENGTH SPARK ELECTRODE OFFSET (IN)	ANGLE SPARK ELECTRODE OFFSET (IN)	LENGTH GROUND ELECTRODE OFFSET (DEGREES)	ANGLE GROUND ELECTRODE OFFSET (DEGREES)	SPARK GAP (IN)	WIRE LENGTH (IN)	TERMINATION
62-23556-04	1-15/16	1-1/8	90	1-1/4	90	5/32	40	Cut wire (for use with nail pin)



### 62-23556-08 Direct Spark Ignitor (DSI)

PART NO	LENGTH MOUNTING FLANGE TO IGNITOR TIP (IN)	LENGTH SPARK ELECTRODE OFFSET (IN)	ANGLE SPARK ELECTRODE OFFSET (IN)	LENGTH GROUND ELECTRODE OFFSET (DEGREES)	ANGLE GROUND ELECTRODE OFFSET (DEGREES)	SPARK GAP (IN)	WIRE LENGTH (IN)	TERMINATION
62-23556-08	2-3/16	1-1/8	90	1-1/4	90	5/32	96	Cut wire (for use with nail pin)



### 62-23556-09 Direct Spark Ignitor (DSI)

PART NO	LENGTH MOUNTING FLANGE TO IGNITOR TIP (IN)	LENGTH SPARK ELECTRODE OFFSET (IN)	ANGLE SPARK ELECTRODE OFFSET (IN)	LENGTH GROUND ELECTRODE OFFSET (DEGREES)	ANGLE GROUND ELECTRODE OFFSET (DEGREES)	SPARK GAP (IN)	WIRE LENGTH (IN)	TERMINATION
62-23556-09	2-3/16	1-1/8	90	1-1/4	90	5/32	96	Cut wire (for use with nail pin)



### 62-23556-82 Direct Spark Ignitor (DSI)

PART NO	LENGTH MOUNTING FLANGE TO IGNITOR TIP (IN)	LENGTH SPARK ELECTRODE OFFSET (IN)	ANGLE SPARK ELECTRODE OFFSET (IN)	LENGTH GROUND ELECTRODE OFFSET (DEGREES)	ANGLE GROUND ELECTRODE OFFSET (DEGREES)	SPARK GAP (IN)	WIRE LENGTH (IN)	TERMINATION
62-23556-82	1-15/16	1-1/8	90	1-1/4	90	5/32	35	1/4 inch Quick Connect



### 62-24141-02 Direct Spark Ignitor (DSI)

PART NO	LENGTH MOUNTING FLANGE TO IGNITOR TIP (IN)	LENGTH SPARK ELECTRODE OFFSET (IN)	ANGLE SPARK ELECTRODE OFFSET (IN)	LENGTH GROUND ELECTRODE OFFSET (DEGREES)	ANGLE GROUND ELECTRODE OFFSET (DEGREES)	SPARK GAP (IN)	WIRE LENGTH (IN)	TERMINATION
62-24141-02	1-1/2	3/4	116	5/8	90	1/8	27	0.084 in. dia. round pin



### 62-24141-04 Direct Spark Ignitor (DSI)

PART NO	LENGTH MOUNTING FLANGE TO IGNITOR TIP (IN)	LENGTH SPARK ELECTRODE OFFSET (IN)	ANGLE SPARK ELECTRODE OFFSET (IN)	LENGTH GROUND ELECTRODE OFFSET (DEGREES)	ANGLE GROUND ELECTRODE OFFSET (DEGREES)	SPARK GAP (IN)	WIRE LENGTH (IN)	TERMINATION
62-24141-04	1-15/16	1-3/16	78	3/4	90	1/8	40	0.084 in. dia. round pin



### 62-24164-01 Direct Spark Ignitor (DSI)

PART NO	LENGTH MOUNTING FLANGE TO IGNITOR TIP (IN)	LENGTH SPARK ELECTRODE OFFSET (IN)	ANGLE SPARK ELECTRODE OFFSET (IN)	LENGTH GROUND ELECTRODE OFFSET (DEGREES)	ANGLE GROUND ELECTRODE OFFSET (DEGREES)	SPARK GAP (IN)	WIRE LENGTH (IN)	TERMINATION
62-24164-01	2-1/8	1-3/16	83	13/16	135	1/8	35	0.084 in. dia. round pin



### 62-24164-02 Direct Spark Ignitor (DSI)

PART NO	LENGTH MOUNTING FLANGE TO IGNITOR TIP (IN)	LENGTH SPARK ELECTRODE OFFSET (IN)	ANGLE SPARK ELECTRODE OFFSET (IN)	LENGTH GROUND ELECTRODE OFFSET (DEGREES)	ANGLE GROUND ELECTRODE OFFSET (DEGREES)	SPARK GAP (IN)	WIRE LENGTH (IN)	TERMINATION
62-24164-02	2-1/8	1-3/16	83	13/16	135	1/8	35	0.084 in. dia. round pin



### 62-24271-01 Direct Spark Ignitor (DSI)

PART NO	LENGTH MOUNTING FLANGE TO IGNITOR TIP (IN)	LENGTH SPARK ELECTRODE OFFSET (IN)	ANGLE SPARK ELECTRODE OFFSET (IN)	LENGTH GROUND ELECTRODE OFFSET (DEGREES)	ANGLE GROUND ELECTRODE OFFSET (DEGREES)	SPARK GAP (IN)	WIRE LENGTH (IN)	TERMINATION
62-24271-01	1-1/4	1/4	90	1-1/4	0	1/8	13	0.084 in. dia. round pin

**SPARK IGNITORS**



**62-24271-02 Direct Spark Ignitor (DSI)**

PART NO	LENGTH MOUNTING FLANGE TO IGNITOR TIP (IN)	LENGTH SPARK ELECTRODE OFFSET (IN)	ANGLE SPARK ELECTRODE OFFSET (IN)	LENGTH GROUND ELECTRODE OFFSET (DEGREES)	ANGLE GROUND ELECTRODE OFFSET (DEGREES)	SPARK GAP (IN)	WIRE LENGTH (IN)	TERMINATION
62-24271-02	1-1/4	1/4	90	1-1/4	0	1/8	30	0.084 in. dia. round pin



**62-24313-02 Direct Spark Ignitor (DSI)**

PART NO	LENGTH MOUNTING FLANGE TO IGNITOR TIP (IN)	LENGTH SPARK ELECTRODE OFFSET (IN)	ANGLE SPARK ELECTRODE OFFSET (IN)	LENGTH GROUND ELECTRODE OFFSET (DEGREES)	ANGLE GROUND ELECTRODE OFFSET (DEGREES)	SPARK GAP (IN)	WIRE LENGTH (IN)	TERMINATION
62-24313-02	2-7/16	1-3/16	90	1-1/8	135	1/8	32	0.084 in. dia. round pin



**45-42375-82 Intermittent Pilot Spark Ignitor**

PART NO	LENGTH MOUNTING FLANGE TO IGNITOR TIP (IN)	LENGTH SPARK ELECTRODE OFFSET (IN)	ANGLE SPARK ELECTRODE OFFSET (IN)	LENGTH GROUND ELECTRODE OFFSET (DEGREES)	ANGLE GROUND ELECTRODE OFFSET (DEGREES)	SPARK GAP (IN)	WIRE LENGTH (IN)	TERMINATION
45-42375-82	—	—	—	—	100	—	40	1/4 in. Quick Connect or Plug Style Adapter

**IGNITION MODULES – INTERMITTENT PILOT**



**OEM Spec Replacements for Honeywell S8600/S86 Intermittent Pilot Ignition Modules**



When replacing Honeywell S8600 and S86 intermittent pilot ignition modules on Rheem, Ruud, and WeatherKing equipment, these control modules maintain the engineering approved timing, ignition sequence, and lockout profiles.

PART NO	PREPURGE TIME (S)	TRIAL FOR IGNITION (S)	NO OF TRIALS FOR IGNITION	FLAME SENSING	TERMINALS	REPLACES
625038	45	90	1	Integrated (though ignitor)	MV, MV/PV, PV, 24V, GND (Burner), 24V (GND), SPARK	62-21192-03, 62-21192-05, 62-21192-07, 62-21192-08, 62-21192-09, 62-21192-11, 62-21192-12, 62-21192-13, 62-21192-14, 62-21192-82, 62-21192-83, 62-21192-84, 62-21192-93, 62-21192-93, 62-21193-83, 62-25078-01
625040	1	90	1	Non-Integrated (separate flame sensor)	MV, MV/PV, PV, 24V, GND (Burner), 24V (GND), SENSE, SPARK	62-42231-01, 62-42231-02
625042	1	90	Continuous	Integrated (though ignitor)	MV, MV/PV, PV, 24V, GND (Burner), 24V (GND), SPARK	62-21192-01, 62-21192-06, 62-21192-10, 62-21192-80, 62-21192-90



**620044 (5059-134) Intermittent Pilot Ignition Module**



A 24V control that generates ignition sparks for intermittent pilot applications. It is energized by the thermostat on a call for heat. Once flame is established, the control senses the flame and stops sparking. If the pilot flame is extinguished during a call for heat, the relight control will begin sparking immediately upon sensing absence of flame. The control delivers very low current sparks at approximately 6,000V. Module should only be applied to systems which already incorporate the necessary pilot safety control system.

PART NO	VENDOR PART NO	DESCRIPTION
620044	5059-134	Ignition Module - Intermittent Pilot

## IGNITION MODULES – INTERMITTENT PILOT



### 625013 (785-001) Intermittent Pilot Ignition Module

*Robertshaw*

A 24V or 120V control that generates ignition sparks for intermittent pilot applications. It is energized by the thermostat on a call for heat. Once flame is established, the control senses the flame and stops sparking. If the pilot flame is extinguished during a call for heat, the relight control will begin sparking within 0.8 seconds upon sensing absence of flame. The control delivers very low current sparks at approximately 15,000V. Includes flame sensor, ignition cable and mounting brackets. Module should only be applied to systems which already incorporate the necessary pilot safety control system.

PART NO	VENDOR PART NO	DESCRIPTION
625013	785-001	Ignition Module - Intermittent Pilot



### 62-21747-02 (SP715A) Intermittent Pilot Ignition Module

*Robertshaw*

PART NO	VENDOR PART NO	PREPURGE TIME (S)	TRIAL FOR IGNITION (S)	NO OF TRIALS FOR IGNITION	FLAME SENSING	TERMINALS
62-21747-02	SP715A	0	Indefinite	—	Non-Integrated (Separate Flame Sensor)	TH, PV, SENSE, E3, MV, MV/PV, TR, GND, IGN



### 62-21940-01 (LO-15) Lockout Module for 62-21747-02 (SP715A)

*Robertshaw*

PART NO	VENDOR PART NO	DESCRIPTION
62-21940-01	LO-15 (100-00805-01)	Lockout Module



### 62-22821-01 (SP735A) Intermittent Pilot Ignition Module

*Robertshaw*

PART NO	VENDOR PART NO	PREPURGE TIME (S)	TRIAL FOR IGNITION (S)	NO OF TRIALS FOR IGNITION	FLAME SENSING	TERMINALS
62-22821-01	SP735A	0	60	1	Non-Integrated (Separate Flame Sensor)	IGN, TR, GND, PV/MV, TH, PV, MV, SENSE



### 625010 (780-001) Intermittent Pilot Ignition Module

*Robertshaw*

PART NO	VENDOR PART NO	PREPURGE TIME (S)	TRIAL FOR IGNITION (S)	NO OF TRIALS FOR IGNITION	FLAME SENSING	TERMINALS
625010	780-001	0	Indefinite	—	Integrated or Non-Integrated	24V (TH), PV, (OPT) SENSOR, ACCESSORY TERM E3, MV, MV/PV, TR, GROUND, IGNITOR



### 625011 (780-002) Intermittent Pilot Ignition Module

*Robertshaw*

PART NO	VENDOR PART NO	PREPURGE TIME (S)	TRIAL FOR IGNITION (S)	NO OF TRIALS FOR IGNITION	FLAME SENSING	TERMINALS
625011	780-002	0	90	3	Integrated or Non-Integrated	MV, PV, 24V (TH), MV/PV, TR (GND), SENSE

**IGNITION MODULES – HOT SURFACE IGNITION (HSI)**



**50A55-843 HSI Ignition Module**

The 50A55-843 Universal Replacement Module for Integrated HSI (Silicon Carbide) employs a microprocessor which continually monitors, analyzes and controls the proper operation of the gas burner, inducer and fan. This module will replace most of the White-Rodgers 50A5x-xxx integrated ignition modules as well as many competitive models. Kit Includes:

- Mounting hardware
- Extensive cross-reference guide
- Additional jumper wires
- Wiring harness and a jumper for Trane applications
- Terminals for powering a humidifier and electronic air cleaner



PART NO	VENDOR PART NO	PREPURGE TIME (S)	HEAT-UP TIME (S)	TRIAL FOR IGNITION (S)	NO OF TRIALS FOR IGNITION	FLAME SENSING	TERMINALS
50A55-843	50A55-843	30	Programmable	4	3/hr	Integrated (through ignitor)	COOL, HEAT, PARK, PARK, LINE, XFMR, EAC, HUM, IND, IGN, IND N, IGN N, MV, RO2, PS, MV, GND, HL1, TR, ROI, TH, FP, HLO, WN, Y, W, R, G, C



**50E47-843 HSI Ignition Module**

The 50E47-843 Universal Replacement Module for Non-Integrated HSI (Silicon Carbide) replaces all White-Rodgers 50E47-xxx modules and many competitive models. Kit Includes:

- Program keys
- Mounting hardware
- Extensive cross-reference guide
- Color-coded timing label



PART NO	VENDOR PART NO	PREPURGE TIME (S)	HEAT-UP TIME (S)	TRIAL FOR IGNITION (S)	NO OF TRIALS FOR IGNITION	FLAME SENSING	TERMINALS
50E47-843	50E47-843	Prog	Prog	Prog	Prog	Non-Integrated (separate flame sensor)	MV2, TR, GND, TH, MV1, L2, HS2, FP, L1, HSI



**62-25078-02 (S8910U1000) HSI Ignition Module**



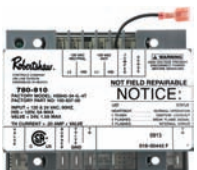
PART NO	VENDOR PART NO	PREPURGE TIME (S)	HEAT-UP TIME (S)	TRIAL FOR IGNITION (S)	NO OF TRIALS FOR IGNITION	FLAME SENSING	TERMINALS
62-25078-02	S8910U1000	32	34	Prog	Prog	Integrated or Non-Integrated	GND (Burner), 24V (GND), VALVE, (GND), 24V, VALVE, L2, HS2, L1, HSI, SENSE



**62-22578-01 (HS780-34-PL308) HSI Ignition Module**



PART NO	VENDOR PART NO	PREPURGE TIME (S)	HEAT-UP TIME (S)	TRIAL FOR IGNITION (S)	NO OF TRIALS FOR IGNITION	FLAME SENSING	TERMINALS
62-22578-01	HS780-34-PL308	34	34	8	3	Integrated (through ignitor)	TH, VALVE, GND, RS, L1/120, IGN, IGN, L2/NEU



**62-25077-01 (780-910) HSI Ignition Module**



PART NO	VENDOR PART NO	PREPURGE TIME (S)	HEAT-UP TIME (S)	TRIAL FOR IGNITION (S)	NO OF TRIALS FOR IGNITION	FLAME SENSING	TERMINALS
62-25077-01	780-910	Prog	Prog	Prog	Prog	Integrated or Non-Integrated	VALVE, BURNER, VALVE GND, TR, TH, L2, HSI, L1, HSI, JUMPER, SENSE

## IGNITION MODULES – DIRECT SPARK IGNITION (DSI)



### 62-23544-82 (1016-452) DSI Ignition Module



PART NO	VENDOR PART NO	PREPURGE TIME (S)	TRIAL FOR IGNITION (S)	NO OF TRIALS FOR IGNITION	FLAME SENSING	TERMINALS
62-23544-82	1016-452	30	7	3/hr	Non-Integrated (separate flame sensor)	MV, W, FS, C/COM, HV



### 50D50-842 DSI Ignition Module



The 50D50-842 Universal Replacement for Non-Integrated DSI will replace many competitive models. These modules are designed to give dealers and service technicians reduced inventory. Provide a complete diagnostic system, thus making installation easier with fewer callbacks. Kit Includes:

- Program keys
- Mounting hardware
- Extensive cross-reference guide
- Color-coded timing label

PART NO	VENDOR PART NO	PREPURGE TIME (S)	TRIAL FOR IGNITION (S)	NO OF TRIALS FOR IGNITION	FLAME SENSING	TERMINALS
50D50-842	50D50-842	Prog	Prog	Prog	Integrated or Non-Integrated	MV, VAL, TR, TH, GND, FLY LEAD, SPARK, FLAME

## IGNITION CABLE – SPARK PLUG TYPE



- Ignition cable with spark plug type connections; also includes 62-21813-01 for quick connect terminations
- Insulation rating: 10kVAC, 25kVDC

PART NO	DESCRIPTION
45-21219-82	Ignition Cable Kit – spark plug type w/quick connect adapter (31 in.)

## IGNITION MODULE TERMINAL ADAPTER



Adapts quick connect terminal to spark plug type connection.

PART NO	DESCRIPTION
62-21813-01	Terminal Adapter

## BURNER ORIFICES – GAS FURNACES



### Burner Orifices – Gas Furnaces (62-22175 Series)

PART NO	OVERALL LENGTH	HEX HEAD SIZE (IN)	THREAD SIZE (NPT)	DRILL SIZE	DRILL DIA (IN)	CASE QTY	CASE REQ
62-22175-01	9/16	7/16	1/8-27	Blank	—	—	—
62-22175-64	9/16	7/16	1/8-27	64	0.0360	—	—
62-22175-63	9/16	7/16	1/8-27	63	0.0370	—	—
62-22175-62	9/16	7/16	1/8-27	62	0.0380	—	—
62-22175-61	9/16	7/16	1/8-27	61	0.0390	—	—
62-22175-60	9/16	7/16	1/8-27	60	0.0400	—	—
62-22175-59	9/16	7/16	1/8-27	59	0.0410	—	—
62-22175-58	9/16	7/16	1/8-27	58	0.0420	—	—
62-22175-57	9/16	7/16	1/8-27	57	0.0430	—	—
62-22175-90	9/16	7/16	1/8-27	1.10 mm	0.0433	8	Yes
62-22175-91	9/16	7/16	1/8-27	1.15 mm	0.0453	8	Yes
62-22175-56	9/16	7/16	1/8-27	56	0.0465	—	—
62-22175-13	9/16	7/16	1/8-27	3/64	0.0469	—	—
62-22175-55	9/16	7/16	1/8-27	55	0.0520	6	Yes
62-22175-54	9/16	7/16	1/8-27	54	0.0550	6	Yes
62-22175-53	9/16	7/16	1/8-27	53	0.0595	—	—
62-22175-52	9/16	7/16	1/8-27	52	0.0635	—	—
62-22175-51	9/16	7/16	1/8-27	51	0.0670	—	—
62-22175-50	9/16	7/16	1/8-27	50	0.0700	—	—
62-22175-49	9/16	7/16	1/8-27	49	0.0730	—	—
62-22175-48	9/16	7/16	1/8-27	48	0.0760	—	—
62-22175-15	9/16	7/16	1/8-27	5/64	0.0781	—	—
62-22175-47	9/16	7/16	1/8-27	47	0.0785	—	—
62-22175-46	9/16	7/16	1/8-27	46	0.0810	—	—
62-22175-45	9/16	7/16	1/8-27	45	0.0820	—	—
62-22175-43	9/16	7/16	1/8-27	43	0.0890	—	—
62-22175-42	9/16	7/16	1/8-27	42	0.0935	—	—
62-22175-40	9/16	7/16	1/8-27	40	0.0980	—	—
62-22175-39	9/16	7/16	1/8-27	39	0.0995	—	—
62-22175-38	9/16	7/16	1/8-27	38	0.1015	—	—
62-22175-44	9/16	7/16	1/8-27	44	0.8600	—	—
62-22175-41	9/16	7/16	1/8-27	41	0.9600	—	—



### Burner Orifices – Gas Furnaces (62-21551 Series)

PART NO	OVERALL LENGTH	HEX HEAD SIZE (IN)	THREAD SIZE (NPT)	DRILL SIZE	DRILL DIA (IN)	CASE QTY	CASE REQ
62-21551-01	7/16	7/16	1/8-27	Blank	—	—	—
62-21551-58	7/16	7/16	1/8-27	58	0.0420	—	—
62-21551-57	7/16	7/16	1/8-27	57	0.0430	—	—
62-21551-90	7/16	7/16	1/8-27	1.10 mm	0.0433	—	—
62-21551-91	7/16	7/16	1/8-27	1.15 mm	0.0453	—	—
62-21551-56	7/16	7/16	1/8-27	56	0.0465	—	—
62-21551-13	7/16	7/16	1/8-27	3/64	0.0469	6	Yes
62-21551-55	7/16	7/16	1/8-27	55	0.0520	6	Yes
62-21551-54	7/16	7/16	1/8-27	54	0.0550	6	Yes
62-21551-53	7/16	7/16	1/8-27	53	0.0595	—	—
62-21551-51	7/16	7/16	1/8-27	51	0.0670	—	—
62-21551-50	7/16	7/16	1/8-27	50	0.0700	—	—
62-21551-49	7/16	7/16	1/8-27	49	0.0730	—	—
62-21551-48	7/16	7/16	1/8-27	48	0.0760	—	—
62-21551-15	7/16	7/16	1/8-27	5/64	0.0781	—	—
62-21551-47	7/16	7/16	1/8-27	47	0.0785	—	—
62-21551-45	7/16	7/16	1/8-27	45	0.0820	—	—
62-21551-44	7/16	7/16	1/8-27	44	0.0860	—	—
62-21551-43	7/16	7/16	1/8-27	43	0.0890	—	—
62-21551-42	7/16	7/16	1/8-27	42	0.0935	—	—
62-21551-40	7/16	7/16	1/8-27	40	0.0980	—	—

## BURNER NOZZLES – OIL BURNERS



- Brass construction for maximum resistance to corrosion
- Manufactured with rolled threads to avoid metal chips and burrs
- 100% tested to verify design flow rate and spray angle
- All nozzles are sold complete with a sintered filter for maximum protection against orifice clogging



### Burner Nozzles – Oil Burners (Type A)

Hollow Cone Type A nozzles are mainly used on burners with a hollow cone air pattern. The droplet distribution is concentrated on the outside of the cone and results in good ignition and low-noise combustion.



PART NO	TYPE	SPARY PATTERN	FLOWRATE (GPH)	SPRAY ANGLE (DEGREES)
595001	A	Hollow Cone	0.75	30
595025	A	Hollow Cone	0.75	45
595026	A	Hollow Cone	0.75	60
595027	A	Hollow Cone	0.75	70
595028	A	Hollow Cone	0.75	80
595029	A	Hollow Cone	0.75	90
595004	A	Hollow Cone	0.80	30
595040	A	Hollow Cone	0.80	45
595041	A	Hollow Cone	0.80	60
595042	A	Hollow Cone	0.80	70
595043	A	Hollow Cone	0.80	80
595044	A	Hollow Cone	0.80	90
595007	A	Hollow Cone	0.85	30
595055	A	Hollow Cone	0.85	45
595056	A	Hollow Cone	0.85	60
595057	A	Hollow Cone	0.85	70
595058	A	Hollow Cone	0.85	80
595059	A	Hollow Cone	0.85	90
595010	A	Hollow Cone	0.90	30
595070	A	Hollow Cone	0.90	45
595071	A	Hollow Cone	0.90	60
595072	A	Hollow Cone	0.90	70
595073	A	Hollow Cone	0.90	80
595074	A	Hollow Cone	0.90	90
595015	A	Hollow Cone	1	30
595095	A	Hollow Cone	1	45
595096	A	Hollow Cone	1	60
595097	A	Hollow Cone	1	70
595098	A	Hollow Cone	1	80
595099	A	Hollow Cone	1	90
595020	A	Hollow Cone	1.10	30
595120	A	Hollow Cone	1.10	45
595121	A	Hollow Cone	1.10	60
595122	A	Hollow Cone	1.10	70
595123	A	Hollow Cone	1.10	80



### Burner Nozzles – Oil Burners (Type R-D)

Type R-D nozzles have a high concentration of droplets in the center of the spray cone. They are particularly recommended for burners with a highly concentrated solid air pattern. The average droplet size is slightly coarser than on Type B.



PART NO	TYPE	SPARY PATTERN	FLOWRATE (GPH)	SPRAY ANGLE (DEGREES)
59-22709-01	R-D	Solid Cone	0.50	70

**BURNER NOZZLES – OIL BURNERS**



**Burner Nozzles – Oil Burners (Type AR-D)**

Type AR-D nozzles are Solid Cone similar to Type B but with a slightly lower concentration of droplets in the center of the cone.



PART NO	TYPE	SPARY PATTERN	FLOWRATE (GPH)	SPRAY ANGLE (DEGREES)
59-22709-02	AR	Solid Cone	0.60	60



**Burner Nozzles – Oil Burners (Type B)**

Solid Cone Type B nozzles produce a spray that distributes fairly uniformly throughout the complete pattern. Provides smooth ignition and efficient combustion, particularly in larger burners.



PART NO	TYPE	SPARY PATTERN	FLOWRATE (GPH)	SPRAY ANGLE (DEGREES)
595145	B	Solid Cone	0.65	80
59-22709-08	B	Solid Cone	0.50	70
59-22709-09	B	Solid Cone	0.60	70
595002	B	Solid Cone	0.75	30
595030	B	Solid Cone	0.75	45
595031	B	Solid Cone	0.75	60
595032	B	Solid Cone	0.75	70
595033	B	Solid Cone	0.75	80
595034	B	Solid Cone	0.75	90
595005	B	Solid Cone	0.80	30
595045	B	Solid Cone	0.80	45
595046	B	Solid Cone	0.80	60
595047	B	Solid Cone	0.80	70
595048	B	Solid Cone	0.80	80
595049	B	Solid Cone	0.80	90
595008	B	Solid Cone	0.85	30
595060	B	Solid Cone	0.85	45
595061	B	Solid Cone	0.85	60
595062	B	Solid Cone	0.85	70
595063	B	Solid Cone	0.85	80
595064	B	Solid Cone	0.85	90
595011	B	Solid Cone	0.90	30
595075	B	Solid Cone	0.90	45
595076	B	Solid Cone	0.90	60
595077	B	Solid Cone	0.90	70
595078	B	Solid Cone	0.90	80
595079	B	Solid Cone	0.90	90
595016	B	Solid Cone	1.00	30
595100	B	Solid Cone	1.00	45
595101	B	Solid Cone	1.00	60
595102	B	Solid Cone	1.00	70
595103	B	Solid Cone	1.00	80
595104	B	Solid Cone	1.00	90
595021	B	Solid Cone	1.10	30
595125	B	Solid Cone	1.10	45
595126	B	Solid Cone	1.10	60
595127	B	Solid Cone	1.10	70
595128	B	Solid Cone	1.10	80
595129	B	Solid Cone	1.10	90
59-22709-06	B	Solid Cone	1.20	70
59-22709-07	B	Solid Cone	1.35	70



## BURNER NOZZLES – OIL BURNERS



### Burner Nozzles – Oil Burners (Type B Del-O-Flo)



Solid Cone Type B Del-O-Flo style nozzles are low-capacity nozzles designed to minimize plugging problems associated with very low flow rates. The special interior design flushes contaminants and limits build-up. The Del-O-Flo Type B nozzle satisfactorily interchanges with other hollow and solid cone nozzles.

PART NO	TYPE	SPARY PATTERN	FLOWRATE (GPH)	SPRAY ANGLE (DEGREES)
59-22709-12	B (Del-O-Flo)	Solid Cone	0.50	70
59-22709-13	B (Del-O-Flo)	Solid Cone	0.60	70
59-22709-10	B (Del-O-Flo)	Solid Cone	0.75	70
59-22709-11	B (Del-O-Flo)	Solid Cone	0.85	70



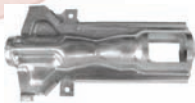
### Burner Nozzles – Oil Burners (Type W)



Type W All Purpose nozzles are neither truly hollow nor solid. These nozzles frequently can be used in place of either solid or hollow cone nozzles above 0.40 GPH regardless of the burner's air pattern.

PART NO	TYPE	SPARY PATTERN	FLOWRATE (GPH)	SPRAY ANGLE (DEGREES)
595003	W	All Purpose	0.75	30
595036	W	All Purpose	0.75	60
595037	W	All Purpose	0.75	70
595038	W	All Purpose	0.75	80
595039	W	All Purpose	0.75	90
595006	W	All Purpose	0.80	30
595050	W	All Purpose	0.80	45
595051	W	All Purpose	0.80	60
595052	W	All Purpose	0.80	70
595053	W	All Purpose	0.80	80
595054	W	All Purpose	0.80	90
595009	W	All Purpose	0.85	30
595065	W	All Purpose	0.85	45
595066	W	All Purpose	0.85	60
595067	W	All Purpose	0.85	70
595068	W	All Purpose	0.85	80
595069	W	All Purpose	0.85	90
595012	W	All Purpose	0.90	30
595080	W	All Purpose	0.90	45
595081	W	All Purpose	0.90	60
595082	W	All Purpose	0.90	70
595083	W	All Purpose	0.90	80
595084	W	All Purpose	0.90	90
595017	W	All Purpose	1.00	30
595105	W	All Purpose	1.00	45
595106	W	All Purpose	1.00	60
595107	W	All Purpose	1.00	70
595108	W	All Purpose	1.00	80
595109	W	All Purpose	1.00	90
595022	W	All Purpose	1.10	30
595130	W	All Purpose	1.10	45
595131	W	All Purpose	1.10	60
595132	W	All Purpose	1.10	70
595133	W	All Purpose	1.10	80
595134	W	All Purpose	1.10	90

**INSHOT BURNERS**



**75-22840-02 Inshot Burner Tube**



PART NO	VENDOR PART NO	DESCRIPTION
75-22840-02	Z-93591	Burner Tube - Inshot



**75-24001-01 Inshot Burner Tube**



PART NO	VENDOR PART NO	DESCRIPTION
75-24001-01	0-93533-01	Burner Tube - Inshot

**FUEL OIL FILTER – ASSEMBLIES**

- Iron and galvanized steel construction for maximum integrity and durability; epoxy powder coat finish
- Leak-proof construction with machined gasket seat
- Low pressure drop, suitable for gravity flow and one or two pipe systems on pressure type burners
- Micronic filtration suited to the smallest oil burner nozzle
- High quality wool felt filter elements that remove solid contaminants
- Bonding treatment of center core in filter element eliminates lint
- Step design element offers largest dirt capacity with true depth filtration



**59-77 Fuel Oil Filter Assembly**



PART NO	VENDOR PART NO	FILTER MATERIAL	MAX WORKING PRESSURE (PSIG)	YIELD PRESSURE (PSIG)	MAX FIRING RATE NO 2 FUEL OIL (GPH)	INLET NPT (IN)	OUTLET NPT (IN)	FILTER ASSEMBLY OVERALL LENGTH (IN)	FILTER CANISTER DIA (IN)	REPLACEMENT ELEMENT (WOOL FELT)	REPLACEMENT ELEMENT (RAYON)
59-77	77	Wool Felt	40	200	10	3/8	3/8	5-1/8	3-5/8	59-88-CR	59-RF-1



**59-99 Fuel Oil Filter Assembly**



PART NO	VENDOR PART NO	FILTER MATERIAL	MAX WORKING PRESSURE (PSIG)	YIELD PRESSURE (PSIG)	MAX FIRING RATE NO 2 FUEL OIL (GPH)	INLET NPT (IN)	OUTLET NPT (IN)	FILTER ASSEMBLY OVERALL LENGTH (IN)	FILTER CANISTER DIA (IN)	REPLACEMENT ELEMENT (WOOL FELT)	REPLACEMENT ELEMENT (RAYON)
59-99	99	Wool Felt	40	200	25	3/8	3/8	6-1/4	4-3/8	59-101	59-RF-2

**FUEL OIL FILTERS – REPLACEMENT CARTRIDGES**

**Fuel Oil Filters – Replacement Cartridges (Rayon)**

Crafted with quality from continuous spun rayon fibers with an exclusive gear tooth design for maximum surface area and enhanced depth filtration. The unique density specifications allow collection of contaminants deep into the filter.



PART NO	VENDOR PART NO	FILTER MATERIAL	CROSS REFERENCE
59-RF-1	RF-1	Rayon	Unifilter 77, General 1A-25A, Sears 8055, Sid Harvey XF-25/264, Mitco 264, AutoFlo F-300, Eddington S-254, Federal A-77
59-RF-2	RF-2	Rayon	Unifilter 99, General 2A-700A, Sid Harvey XF-1/265, Mitco 265, AutoFlo F-400, Eddington S-252
59-RF-4	RF-4	Rayon	Fufllo B4, AS4, FB4

## FUEL OIL FILTERS – REPLACEMENT CARTRIDGES



### Fuel Oil Filters – Replacement Cartridges (Wool Felt)

Crafted with special “step design” wool felt element. Unique center core bond treatment eliminates lint.



PART NO	VENDOR PART NO	FILTER MATERIAL	CROSS REFERENCE
59-101	101	Wool Felt	Unifilter 99, General 2A-700A, Sid Harvey XF-1/265, Mitco 265, AutoFlo F-400, Eddington S-252
59-88-CR	88-CR	Wool Felt	Unifilter 77, General 1A-25A, Sears 8055, Sid Harvey XF-25/264, Mitco 264, AutoFlo F-300, Eddington S-254, Federal A-77

## INDUCED DRAFT BLOWERS



- All induced draft blowers include gasket
- Discharge direction determined by looking at motor end when mounted on furnace
- This information is provided for reference only; induced draft blowers should be selected using the parts list for the unit being repaired



PART NO	MOTOR VOLTAGE (V)	NO OF STAGES	INDUCER HOUSING	SIDE OF DISCHARGE
70-24157-03	120	1	Cast Metal	Right
70-21496-83	120	1	Polymeric	Left
70-22436-01	120	1	Polymeric	Right
70-102691-01	120	1	Polymeric	Right
703020	120	1	Polymeric	Right
70-22436-02	120	1	Polymeric	Right
70-24071-84	120	1	Polymeric	Right
70-24071-85	120	1	Polymeric	Right
70-24033-01	120	1	Polymeric	Right
70-21496-01	120	1	Polymeric	Right
70-22165-81	120	1	Polymeric	Right
70-101087-81	120	1	Sheet Metal	Right
70-100612-02	120	2	Polymeric	Right
70-24206-01	120	2	Polymeric	Right
70-24206-02	120	2	Polymeric	Right
70-101888-01	120	2	Sheet Metal	Right
70-101888-02	120	2	Sheet Metal	Right
703001	120	2	Sheet Metal	Right
70-42241-01	208,230	1	Polymeric	Left
70-42295-81	208,230	1	Polymeric	Right
70-42278-02	208,230	1	Polymeric	Right
70-23641-81	208,230	1	Sheet Metal	Right
70-23641-82	380-415,460	1	Sheet Metal	Right
70-42242-01	460	1	Polymeric	Left
70-42296-81	460	1	Polymeric	Right
70-42279-01	460	1	Polymeric	Right

## VENT MOTOR WITH BLADES



- 208/230V motor; nominal 3000 rpm
- Includes centrifugal proving switch
- Mounting bolt pattern 4-1/4 inch x 4-1/4 inch
- Includes three fan blades (3 inch, 3-1/2 inch, and 4 inch diameter)

PART NO	DESCRIPTION
51-21964-11	Vent Motor w/Blades

**OIL BURNERS**



**Complete Oil Burners**



PART NO	VENDOR PART NO	AIR TUBE	CERAMIC HEAT SHIELD	CERAMIC HEAT SHIELD/RETAINING RING ASSEMBLY	COMBUSTION HEAD	OPERATIONAL AT FIRING RATES (GPH)	ELECTRODE KIT	NOZZLE LINE ELECTRODE ASSEMBLY/ AIR TUBE/ COMBUSTION HEAD ASSEMBLY	RETAINING RING	STATIC DISK DIA (IN)
59-102187-01	RH-1401	59-21810-10	59-21810-18	59-22660-60	59-25012-01	0.50, 0.60	59-25009-01	595158	59-25015-01	3-3/8
59-102187-02	RH-1402IND	59-21810-10	59-21810-18	59-22660-60	59-25013-01	0.75, 0.85, 1.00	59-25009-02	595160	59-25015-01	2-3/4
59-102187-03	RH-1403IND	59-21810-10	59-21810-18	59-22660-60	59-25014-01	1.20, 1.35	595162	—	59-25015-01	3-3/8
59-22660-05	RH-1102	—	59-21810-18	59-22660-60	59-25013-01	0.75, 0.85, 1.00	—	—	59-25015-01	2-3/4
59-22660-11	RH1201IND	59-21810-10	59-21810-18	59-22660-60	59-25012-01	0.50, 0.60	59-25009-01	—	59-25015-01	3-3/8
59-24171-01	RH-1301	59-21810-10	59-21810-18	59-22660-60	59-25012-01	0.50, 0.60	59-25009-01	595158	59-25015-01	3-3/8
59-24171-02	RH-1302	59-21810-10	59-21810-18	59-22660-60	59-25013-01	0.75, 0.85, 1.00	59-25009-02	595160	59-25015-01	2-3/4
59-24171-03	RH-1303	59-21810-10	59-21810-18	59-22660-60	59-25014-01	1.20, 1.35	595162	—	59-25015-01	3-3/8



**Air Guide/Cone**



PART NO	VENDOR PART NO	DESCRIPTION
59-21810-23	31231U	Air Guide/Cone



**Air Tubes w/Flange**



PART NO	VENDOR PART NO	DESCRIPTION
59-21810-10	5153613BKU	Air Tube w/Flange



**Air Tubes w/o Flange**

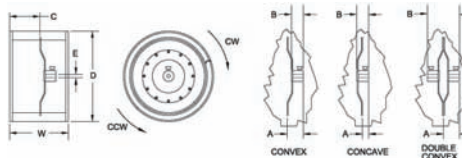


PART NO	VENDOR PART NO	DESCRIPTION
59-19206-13	3292064SS	Air Tube w/o Flange



**Blower Wheels – Oil Burners**

Rotation is determined viewing from hub end with set screw.



PART NO	VENDOR PART NO	ROTATION DIRECTION (FACING HUB)	NOM SIZE (IN)	OVERALL DIAMETER DIM D (IN)	OVERALL DIAMETER DIM W (IN)	NO OF BLADES	NOM HUB BORE SHAFT SIZE DIM E (IN)	NO SET SCREWS	OUTSIDE EDGE DISC TO OUTSIDE END HUB DIM A (IN)	HUB LENGTH DIM B (IN)	DISC SETBACK OUTSIDE EDGE DISC TO END WHEEL OPP HUB DIM C (IN)	KEYWAY (IN)	DISC SHAPE (HUB SIDE)
59-19206-15	2459	CCW	4 x 3-1/2	4-1/4	3-7/16	24	1/2	1	3/8	7/16	0	None	Convex
59-19206-84	2999U	CCW	4 x 2	4-1/4	2-3/8	34	1/2	1	7/16	17/32	0	None	Concave
59-21810-05	21434	CCW	4 x 2	4-1/4	2-3/8	24	1/2	1	3/8	1/2	0	None	Convex



**59-25012-01 (FO) Combustion Head**



PART NO	VENDOR PART NO	DESCRIPTION
59-25012-01	FO	Combustion Head

**OIL BURNERS**



**59-25013-01 (F3) Combustion Head**

*Beckett.*

PART NO	VENDOR PART NO	DESCRIPTION
59-25013-01	F3	Combustion Head



**59-25014-01 (F6) Combustion Head**

*Beckett.*

PART NO	VENDOR PART NO	DESCRIPTION
59-25014-01	F6	Combustion Head



**Electrode Kits**

*Beckett.*

PART NO	VENDOR PART NO	DESCRIPTION
59-21810-06	NL36JY	Electrode Kits ("Works")
59-25009-01	NL42JY	Electrode Kits ("Works")
59-25009-02	NL42XN	Electrode Kits ("Works")
595162	NL42JZ	Electrode Kits ("Works")



**Electrode Insulator Kit**

*Beckett.*

PART NO	VENDOR PART NO	DESCRIPTION
59-19206-21	—	Electrode Insulator Kit



**Ignition Transformers – Oil Burners**

*Beckett.*

PART NO	VENDOR PART NO	DESCRIPTION
59-19206-42	5878	Ignition Transformer - Iron Core
59-22773-01	51771U	Ignition Transformer - Solid State



**Nozzle Line – Oil Burners**

*Beckett.*

PART NO	VENDOR PART NO	DESCRIPTION
59-19206-34	570006	Nozzle Line



**End Cone – Oil Burners**

*Beckett.*

PART NO	VENDOR PART NO	DESCRIPTION
59-19206-86	3219	End Cone

**OIL BURNERS**



**Heat Shield & Retaining Ring Kit**

*Beckett.*

PART NO	VENDOR PART NO	DESCRIPTION
59-22660-60	51586	Heat Shield & Retaining Ring Kit



**Heat Shield - Ceramic**

*Beckett.*

PART NO	VENDOR PART NO	DESCRIPTION
59-21810-18	31517	Heat Shield - Ceramic



**Heat Shield - Retaining Ring**

*Beckett.*

PART NO	VENDOR PART NO	DESCRIPTION
59-25015-01	3716	Heat Shield Retaining Ring



**Motor - Oil Burners**

*Beckett.*

PART NO	VENDOR PART NO	DESCRIPTION
51-25061-01	21805U	Motor - Oil Burner



**Motor Coupling - Oil Burners**

*Beckett.*

PART NO	VENDOR PART NO	DESCRIPTION
59-25011-01	2454	Motor Coupling



**Copper Oil Line - Oil Burners**

*Beckett.*

PART NO	VENDOR PART NO	DESCRIPTION
59-19206-18	—	Copper Oil Line - 3/16 in. O.D. x 6-1/2 in. w/Flare Ends



**Fuel Pump - Solenoid Type (Single Stage)**

*Beckett.*

PART NO	VENDOR PART NO	DESCRIPTION
595150	2188404U	Fuel Pump - Single Stage



**Fuel Pump - Solenoid Type (Two Stage)**

*Beckett.*

PART NO	VENDOR PART NO	DESCRIPTION
595151	21941U	Fuel Pump - Two Stage

**OIL BURNERS**



**Fuel Pump – Non-Solenoid Type (Two Stage)**



PART NO	VENDOR PART NO	DESCRIPTION
59-17047-04	A-6	Fuel Pump - Two Stage



**Solenoid Coils – Oil Burner Fuel Pumps**



PART NO	VENDOR PART NO	DESCRIPTION
595156	21755U	Solenoid Coil - Fuel Pump - 120V
595157	21756U	Solenoid Coil - Fuel Pump - 230V



**42-22770-01 (7022U/R8184G1427)  
Primary Control – Oil Burners**



PART NO	VENDOR PART NO	DESCRIPTION
42-22770-01	7022U	Primary Control



**425040 (7456U) Primary Control – Oil Burners**



PART NO	VENDOR PART NO	DESCRIPTION
425040	7456U	Primary Control



**A/C Ready Kit / Terminal Base – Oil Burners**



PART NO	VENDOR PART NO	DESCRIPTION
595152	51970U	Terminal Base
595153	51950U	A/C Ready Kit (Includes 51970U Terminal Base and 21905U Transformer)

**COMBUSTION AIR AND VENTILATION SYSTEMS – POWER VENTERS**



**OEM Approved Power Venters – Tjernlund SS1R**

This kit is complete venting system designed for side wall venting of oil furnaces. Includes power venter, vent assembly, fan proving switch and control board. OEM approved for use on certain Rheem, Ruud, and WeatherKing furnaces; see unit specification sheets and installation instructions for cross-reference.



PART NO	DESCRIPTION
SS1R	SIDESHOT Vent System for Oil Fired Equipment (UC1 included)



**OEM Approved Power Venters – Tjernlund GPAK-1TR**

This kit is complete venting system designed for side wall venting of Natural Gas and LP gas furnaces. Includes power venter, vent hood, draft control and post purge relay timer. OEM approved for use on certain Rheem, Ruud, and WeatherKing furnaces; see unit specification sheets and installation instructions for cross-reference.



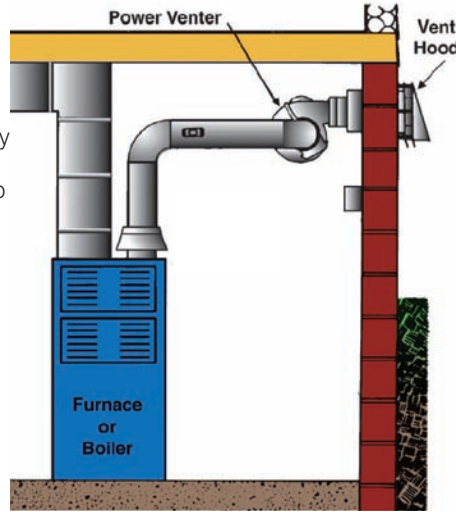
PART NO	DESCRIPTION
GPAK-1TR	Vent System for Gas Furnaces

**COMBUSTION AIR AND VENTILATION SYSTEMS – POWER VENTERS**

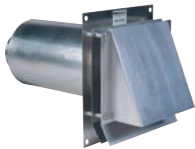


**Indoor Power Venters –  
PVG, PVO, & PVE Series**

Field Controls indoor power venters provide an economical power venting system for use with the fuels for which they were designed. All controls are included with these units. A vent hood is required to terminate the vent system and is sold separately. See specification manual for acceptable pipe sizing and runs.

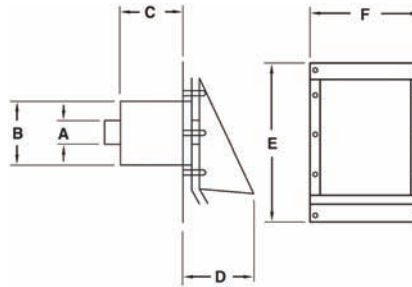


PART NO	VENDOR PART NO	FUEL	INLET SIZE (IN)	COMPONENTS INCLUDED
84-PVE-1200	84-PVE-1200	Gas,Oil	8,10	Power Venter, Note: Requires 84-CK kit (not included)
84-PVG-100	84-PVG-100	Gas	3,4	Power Venter
84-PVG-300	84-PVG-300	Gas	4,5,6	Power Venter
84-PVG-600	84-PVG-600	Gas	5,6,8	Power Venter
84-PVG-PACK-100	84-PVG-PACK-100	Gas	4,5,6	Power Venter, 84-4-MG1, 84-SWH-4
84-PVG-PACK-300	84-PVG-PACK-300	Gas	4,5,6	Power Venter, 84-4-MG1, 84-SWH-4
84-PVO-300	84-PVO-300	Oil	4,5,6	Power Venter
84-PVO-600	84-PVO-600	Oil	5,6,8	Power Venter



**Vent Hood for Indoor Power  
Venters – SWH Series**

Designed for standard vent pipe and Class B type double-wall (B-Vent) connection. Provides proper clearance between flue gas stream and wall combustibles.



PART NO	VENDOR PART NO	DIM A (IN)	DIM B (IN)	DIM C (IN)	DIM D (IN)	DIM E (IN)	DIM F (IN)
84-SWH-3	84-SWH-3	3	5	8-1/2	4-3/8	8-7/8	7-5/8
84-SWH-4	84-SWH-4	4	6	8-1/2	6-5/16	12-5/8	10-5/8
84-SWH-5	84-SWH-5	5	8	8-1/2	8	12-5/8	10-5/8
84-SWH-6	84-SWH-6	6	8	8-1/2	8-11/16	12-5/8	10-5/8
84-SWH-8	84-SWH-8	8	10	8-1/2	9-5/8	15	14



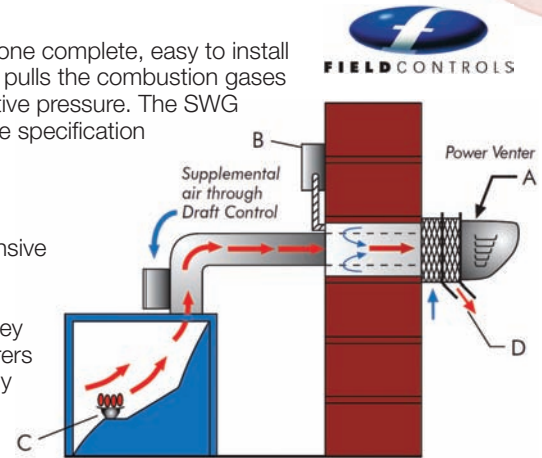
## COMBUSTION AIR AND VENTILATION SYSTEMS – POWER VENTERS



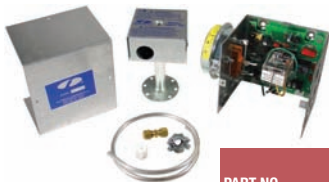
### Outdoor Power Venters – SWG Series

The SWG combines the motor, blower, and vent hood in one complete, easy to install unit. The SWG mounts on the outside of the building and pulls the combustion gases from the appliance through the outside wall utilizing negative pressure. The SWG must be sized to match the appliance input firing rate. See specification manual for acceptable pipe sizing and runs.

- Significantly longer vent lengths than positive pressure, direct vent systems
- Standard galvanized pipe can be used instead of expensive stainless steel
- Negative pressure in the vent pipe for maximum safety
- No need to seal vent pipe joints – saving time and money
- Recommended by major heating appliance manufacturers
- Must be installed with a CK Control Kit – sold separately



PART NO	VENDOR PART NO	INLET SIZE (IN)	MAX GAS INPUT (BTU/HR)	MAX OIL INPUT @ 100 PSI (GPH)	MAX OIL INPUT @ 140 PSI (GPH)	COMPONENTS INCLUDED
84-SWG-3	SWG-3	3	70,000			Power Venter
84-SWG-4G	SWG-4G	4	170,000	1.10	0.90	Power Venter, 84-4-MG1, 84-CK-43F
84-SWG-4HD	SWG-4HD	4	170,000	1.10	0.90	Power Venter
84-SWG-5	SWG-5	5	290,000	1.85	1.55	Power Venter
84-SWG-6	SWG-6	6	416,000	2.65	2.25	Power Venter
84-SWG-8	SWG-8	8	740,000	4.75	4	Power Venter



### CK Series Control Kits for SWG Series Outdoor Power Venters

Control Kits (CK) control the operation of the SWG power venters; see the chart to select the proper kit for your application.

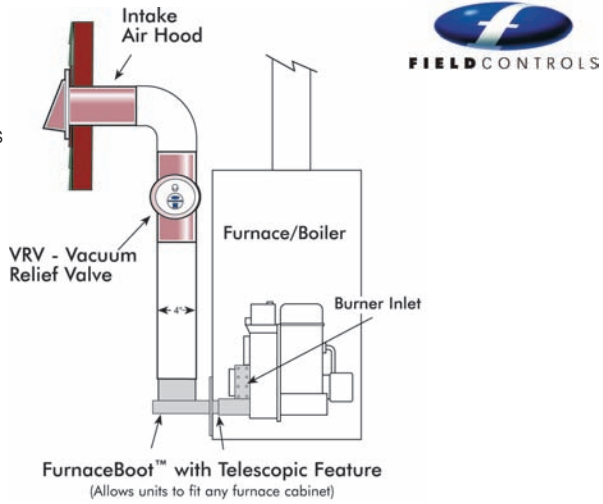


PART NO	VENDOR PART NO	DRAFT CONTROL	DRAFT PROVING SWITCH	FIXED POST PURGE	GAS PRESSURE SWITCH	RJR-6	SECONDARY SAFETY SWITCH	THERMAL POST PURGE	ADJ ELECTRONIC POST PURGE
84-CK-20FV	CK-20FV	No	No	Yes	Yes	No	Yes	No	No
84-CK-21	CK-21	No	No	No	Yes	No	Yes	No	No
84-CK-41F	CK-41F	No	Yes	Yes	No	No	Yes	No	No
84-CK-43	CK-43	Yes	Yes	No	No	No	No	No	Yes
84-CK-43F	CK-43F	Yes	Yes	Yes	No	No	No	No	No
84-CK-62	CK-62	No	Yes	No	No	Yes	Yes	Yes	No
84-CK-63	CK-63	No	Yes	No	No	No	Yes	No	Yes
84-CK-81	CK-81	No	Yes	Yes	No	No	No	No	No
84-CK-91FV	CK-91FV	Yes	Yes	Yes	Yes	No	Yes	No	No
84-CK-92FV	CK-92FV	No	Yes	Yes	Yes	No	Yes	No	No

**COMBUSTION AIR AND VENTILATION SYSTEMS – COMBUSTION AIR SYSTEMS**

**Combustion Air Systems – CAS-1 & CAS-2 Series**

The CAS-1 and CAS-2 Combustion Air Systems provide controlled amounts of outside air for proper combustion of oil heating appliances. These models are designed specifically for use with Aero, Beckett, Carlin, Riello, or Wayne burners as noted.

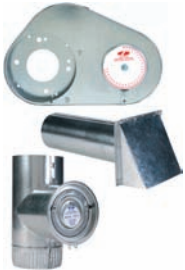


**Combustion Air System – CAS-1**



PART NO	VENDOR PART NO	FUEL	FOR USE WITH BURNER	APPLIANCE INPUT	COMPONENTS INCLUDED
84-CAS-1	CAS-1	Oil	Beckett AFII, NX; Riello 40BF	Up to 2.0 GPH	4 in. Intake Air Hood, 4 in. Vacuum Relief Valve

**Combustion Air System – CAS-2B, CAS-2C, CAS-2W**



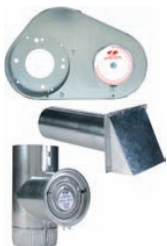
PART NO	VENDOR PART NO	FUEL	FOR USE WITH BURNER	APPLIANCE INPUT	COMPONENTS INCLUDED
84-CAS-2B	CAS-2B	Oil	Beckett AFG and AF	Up to 2.0 GPH	4 in. Intake Air Hood, 4 in. Vac. Relief Valve, Field AirBoot
84-CAS-2C	CAS-2C	Oil	Carlin EZ-1, CRD, FRD	Up to 2.0 GPH	4 in. Intake Air Hood, 4 in. Vac. Relief Valve, Field AirBoot
84-CAS-2W	CAS-2W	Oil	Wayne MSR	Up to 2.0 GPH	4 in. Intake Air Hood, 4 in. Vac. Relief Valve, Field AirBoot

**Combustion Air System – CAS-2B-90E**



PART NO	VENDOR PART NO	FUEL	FOR USE WITH BURNER	APPLIANCE INPUT	COMPONENTS INCLUDED
84-CAS-2B-90E	CAS-2B-90E	Oil	Beckett AF and AFG Warm Air Furnaces	Up to 1.5 GPH	4 in. Intake Air Hood, 4 in. Vacuum Relief Valve, Furnace Boot

**Combustion Air System – CAS-2BB**



PART NO	VENDOR PART NO	FUEL	FOR USE WITH BURNER	APPLIANCE INPUT	COMPONENTS INCLUDED
84-CAS-2BB	CAS-2BB	Oil	Beckett SF, SMG, CF-500, CF-800	Up to 4.5 GPH	6 in. Intake Air Hood, 6 in. Vacuum Relief Valve, Field BigBoot

**COMBUSTION AIR AND VENTILATION SYSTEMS – COMBUSTION AIR SYSTEMS**



**Combustion Air Systems – CAS-3 & CAS-4 Series**

When the thermostat calls for heat, the Fan-in-a-Can engages and begins drawing air into the structure. When air flow is established, the pressure switch closes. The CAS sends a signal to the appliance, allowing the burner to fire. The Fan-in-a-Can diffuses the outside air into the room near the burner to ensure adequate air for efficient combustion.

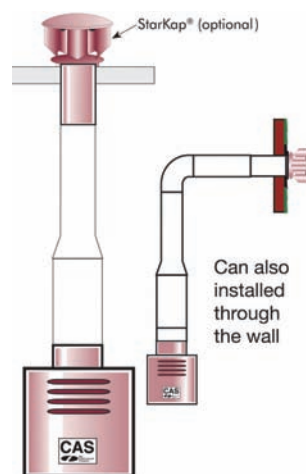


PART NO	VENDOR PART NO	FUEL	APPLICATION	MAX GAS INPUT (BTU/HR)	MAX OIL INPUT (GPH)	COMPONENTS INCLUDED
84-CAS-3	CAS-3	Oil	120V Oil Appliances	—	0.78	4 in. Intake Air Hood, Fan-in-a-Can, 6 in. to 4 in. Reducer, Restrictor Plate
84-CAS-4	CAS-4	Gas	24V Gas Appliances	110,000	—	4 in. Intake Air Hood, Fan-in-a-Can, 6 in. to 4 in. Reducer, Restrictor Plate
84-CAS-4MV	CAS-4MV	Gas	750mV Power Pile Gas Appliances	110,000	—	4 in. Intake Air Hood, Fan-in-a-Can, 6 in. to 4 in. Reducer, Restrictor Plate



**Combustion Air Systems – CAS-6 & CAS-7 Series**

The Fan-in-a-Drum is a commercial product designed to deliver combustion air into the mechanical room, boiler room or furnace location to overcome a confined space or inadequate air supply. When the thermostat calls for heat, the Fan-in-a-Drum engages and begins drawing air into the structure. If adequate air flow is established, the pressure switch closes. The CAS sends a signal to the appliance, allowing the burner to fire. The Fan-in-a-Drum diffuses the outside air into the room near the burner to ensure adequate air for efficient combustion.



PART NO	VENDOR PART NO	FUEL	APPLICATION	MAX GAS INPUT (BTU/HR)	MAX OIL INPUT (GPH)	COMPONENTS INCLUDED
84-CAS-6	CAS-6	Gas, Oil	24V or 120V Gas or Oil Appliances	910,000	6.50	Fan-in-a-Drum
84-CAS-7	CAS-7	Gas, Oil	24V or 120V Gas or Oil Appliances	1,803,000	12.88	Fan-in-a-Drum



**Vacuum Relief Valves – VRV Series**

PART NO	VENDOR PART NO	DESCRIPTION
84-VRV-4	84-VRV-4	Vacuum Relief Valve - 4 in.
84-VRV-6	84-VRV-6	Vacuum Relief Valve - 6 in.



**Intake Air Hoods – IAH Series**

PART NO	VENDOR PART NO	DESCRIPTION
84-IAH-4	IAH-4	Intake Air Hood - 4 in.
84-IAH-6	IAH-6	Intake Air Hood - 6 in.



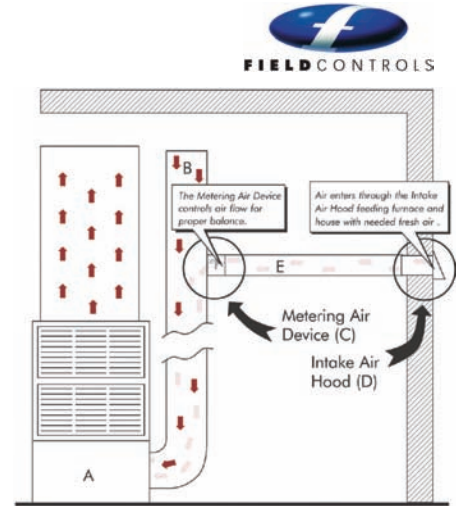
**COMBUSTION AIR AND VENTILATION SYSTEMS**



**MAS-1 Make-Up Air System**

The Make-Up Air System solves the “sick house syndrome” caused by too tight home construction. This unique system provides fresh air automatically, using no electricity or special controls, metering the air flow to keep the home balanced. The result is evenly distributed, tempered air that keeps the home fresh, the furnace efficient and the occupants comfortable. System consists of an Intake Air Hood which is installed through the wall to allow outside air in. The hood is connected via flexible 6 in. duct or standard duct pipe (not included) to the metering air device. The metering device effectively regulates the air inflow for proper air circulation, combustion and balance.

PART NO	VENDOR PART NO	COMPONENTS INCLUDED
84-MAS-1	MAS-1	Make-Up Air Metering Device, 84-IAH-6

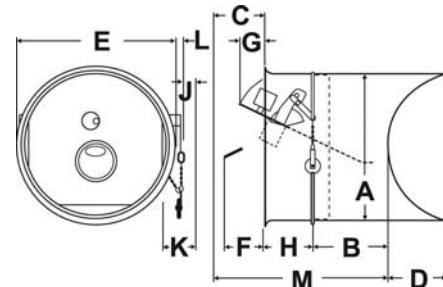


**COMBUSTION AIR AND VENTILATION SYSTEMS – DRAFT CONTROLS**



**Draft Controls – Field Controls MG1 Series (Gas Furnaces)**

A double-acting control for gas-fired furnaces and boilers is widely used for conversion burner installations, gas draft-induced appliance operation with mechanical draft inducers, or sidewall power venters. It is also recommended for use on gas atmospheric appliances where a draft hood cannot be installed, and can improve combustion stability and draft on many gas atmospheric installations with venting problems. The MG-1 provides precise, accurate control of drafts at levels higher than permitted by a standard draft diverter, which is a frequent requirement with gas. Because it is double-acting, it opens out to relieve positive vent system pressures as low as 0.01 in. Draft adjustments using weights are simple and accurate from 0.01 in. to 0.1 in.



PART NO	VENDOR PART NO	CONTROL SIZE	NOMINAL CAPACITY (SQ IN)	RECOMMENDED PIPE SIZE DIA (IN)
84-4-MG1	84-4-MG1	4	12.6	3 or 4
84-5-MG1	84-5-MG1	5	19.6	4 or 5
84-6-MG1	84-6-MG1	6	28.3	5 or 6
84-7-MG1	84-7-MG1	7	38.5	6 or 7
84-8-MG1	84-8-MG1	8	50.3	7 or 8
84-9-MG1	84-9-MG1	9	63.6	8 or 9

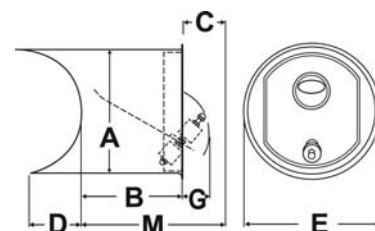
PART NO	DIMENSION A (IN)	DIMENSION B (IN)	DIMENSION C (IN)	DIMENSION D (IN)	DIMENSION E (IN)	DIMENSION F (IN)	DIMENSION G (IN)	DIMENSION H (IN)	DIMENSION J (IN)	DIMENSION K (IN)	DIMENSION L (IN)	DIMENSION M (IN)
84-4-MG1	4	2-1/2	2	2-5/16	4-9/16	1-1/2	1/4	2-1/2	1/2	1-1/4	3/8	7
84-5-MG1	5	2-1/2	2	2-5/16	5-9/16	2	5/8	2-1/2	1/2	1-1/4	1/2	7
84-6-MG1	6	2-11/16	3	3-1/4	6-5/8	2-1/8	13/16	2-3/4	3/4	1-3/4	5/8	8-7/16
84-7-MG1	7	3-3/8	3-1/2	3-3/4	7-5/8	2-3/8	1-1/8	2-3/4	3/4	2	1/4	9-5/8
84-8-MG1	8	4-3/8	4	3-3/8	8-11/16	3	1-1/2	2-5/8	3/4	2-1/4	3/8	11
84-9-MG1	9	5-1/8	4-1/2	3-3/4	9-11/16	3-1/2	1-3/4	2-5/8	3/4	2-1/2	3/8	12-1/4

## COMBUSTION AIR AND VENTILATION SYSTEMS – DRAFT CONTROLS



### Draft Controls – Field Controls M Series (Oil or Coal – Residential)

The Type M control lends itself ideally to conditions requiring a great deal of stability and accuracy. Designed for settings from 0.01 in. to 0.1 in., this control is recommended for oil or coal-fired residential heating applications. Features an infinitely variable screw adjustment, permitting an extremely fine instrument setting. Employs side wings to control air direction with gate curvatures designed to compensate for differences in horizontal and vertical settings.



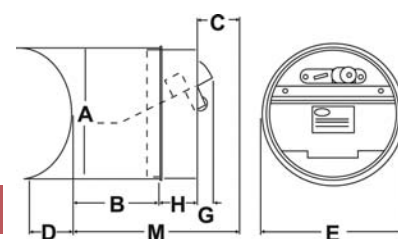
PART NO	VENDOR PART NO	CONTROL SIZE	NOMINAL CAPACITY (SQ IN)	RECOMMENDED PIPE SIZE DIA (IN)
84-6-M	84-6-M	6	28.3	5, 6 or 7
84-7-M	84-7-M	7	38.5	6, 7 or 8
84-8-M	84-8-M	8	50.3	7, 8 or 9
84-9-M	84-9-M	9	63.6	8, 9 or 10

PART NO	DIMENSION A (IN)	DIMENSION B (IN)	DIMENSION C (IN)	DIMENSION D (IN)	DIMENSION E (IN)	DIMENSION F (IN)	DIMENSION G (IN)	DIMENSION H (IN)	DIMENSION J (IN)	DIMENSION K (IN)	DIMENSION L (IN)	DIMENSION M (IN)
84-6-M	6	5	3	3-1/4	6-17/32	—	2	—	—	—	—	8
84-7-M	7	5-1/4	3-1/2	3-3/4	7-3/8	—	2-1/4	—	—	—	—	8-3/4
84-8-M	8	6-3/8	4	3-3/8	8-5/8	—	3	—	—	—	—	10-3/8
84-9-M	9	7-1/4	4-1/2	3-3/4	9-5/8	—	1-29/32	—	—	—	—	11-3/4



### Draft Controls – Field Controls RC Series (Oil or Coal – Residential/Commercial)

The Type RC control is furnished as standard equipment on many leading brands of oil or coal-fired heating equipment. It is calibrated to allow for easy adjustment to the furnace or boiler manufacturer's specifications. Designed for settings from 0.02 in. to 0.08 in., this control is so sensitive that instrumentation should be used when adjusting the unit during installation.



PART NO	VENDOR PART NO	CONTROL SIZE	NOMINAL CAPACITY (SQ IN)	RECOMMENDED PIPE SIZE DIA (IN)
84-4-RC	84-4-RC	4	12.6	3, 4, or 5
84-5-RC	84-5-RC	5	19.6	4, 5, or 6
84-6-RC	84-6-RC	6	28.3	5, 6, or 7
84-7-RC	84-7-RC	7	38.5	6, 7, or 8
84-8-RC	84-8-RC	8	50.3	7, 8, or 9
84-9-RC	84-9-RC	9	63.6	8, 9, or 10

PART NO	DIMENSION A (IN)	DIMENSION B (IN)	DIMENSION C (IN)	DIMENSION D (IN)	DIMENSION E (IN)	DIMENSION F (IN)	DIMENSION G (IN)	DIMENSION H (IN)	DIMENSION J (IN)	DIMENSION K (IN)	DIMENSION L (IN)	DIMENSION M (IN)
84-6-M	6	5	3	3-1/4	6-17/32	—	2	—	—	—	—	8
84-4-RC	4	2-1/2	2	2-5/16	4-9/16	—	1	2-1/2	—	—	—	7
84-5-RC	5	2-1/2	2	2-5/16	5-9/16	—	1	2-1/2	—	—	—	7
84-6-RC	6	1-7/8	3	2	6-5/8	—	1	2-3/4	—	—	—	7-5/8
84-7-RC	7	2-5/8	3-1/2	2-1/2	7-5/8	—	1	2-3/4	—	—	—	8-5/8
84-8-RC	8	4-3/8	4	3-3/8	8-11/16	—	1-1/8	2-5/8	—	—	—	11
84-9-RC	9	5-1/8	4-1/2	3-3/4	9-11/16	—	1-1/2	2-5/8	—	—	—	12-1/4

