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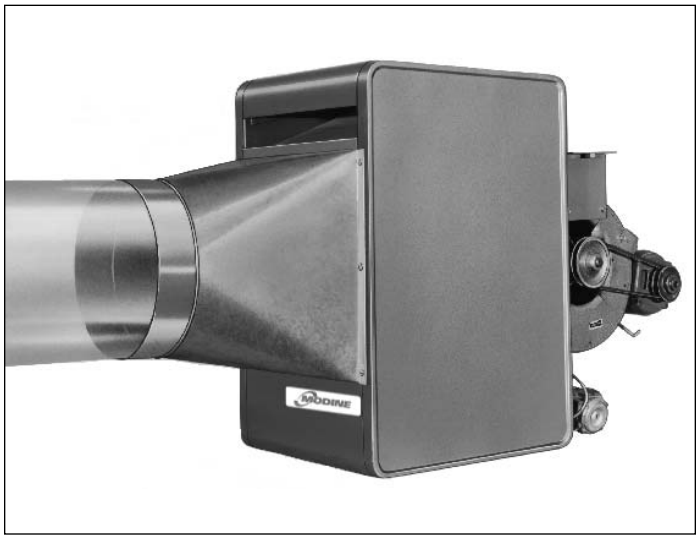
5H70479A (Rev. H)

July, 2003

INSTALLATION INSTRUCTIONS
air-discharge transition
gas-fired blower unit heaters



⚠ CAUTION

The minimum hole area for the cfm shown below must be maintained. Failure to maintain the proper hole area will result in overheating of the heat exchanger. More holes can be added however caution must be used to assure that the number of holes are not so great as to not allow proper inflation of the polytube. For hole sizes other than those shown In figure 2.1, maintain equivalent total hole area shown.

IMPORTANT

The use of this manual is specifically intended for a qualified installation and service agency. All installation and service of these units must be performed by a qualified installation and service agency. Modine manuals may contain excerpts from component supplier literature adapted for Modine products. Any accompanying component supplier literature is for general information.

Installation

A pre-fabricated air-discharge transition is available for direct attachment to Modine Models BD, BDP, BAE, GHE, BV and BSH blower type unit heaters. The transition includes fasteners for attachment and a duct band and seal for connecting a polyethylene tube for greenhouse heating systems. The outlet transition is shipped in a separate carton and should be attached before unit heater installation.

To attach:

1. Detach and remove all air deflector blades, if provided.
2. For early BD and BAE Models, remove trim channel between draft diverter opening and discharge opening. Later models do not include trim channels.
3. For early BV and BSH models, remove sheet metal panel between top of heat exchanger discharge opening and top panel of unit. Later models do not include this sheet metal pannel.
4. Loosen screws at bottom front of the unit heater's air discharge opening to accept bottom slotted edge of the transition.
5. Suspend hooked end of transition to the angle-end of the heater's draft diverter, above the heater discharge opening.
6. Guide and push bottom slotted end of transition into the heater discharge opening and tighten screws loosened in step 4.
7. Drill three holes in both sides of opening, through the transition fastening holes, and use (6) #10 x 1/2" sheet metal screws to fasten transition to the unit heater.
8. Ensure that the heater is hung level. Follow the installation and service manual for level hanging adjustment as well as heater installation and startup.

Figure 1.1
Transition Attachment

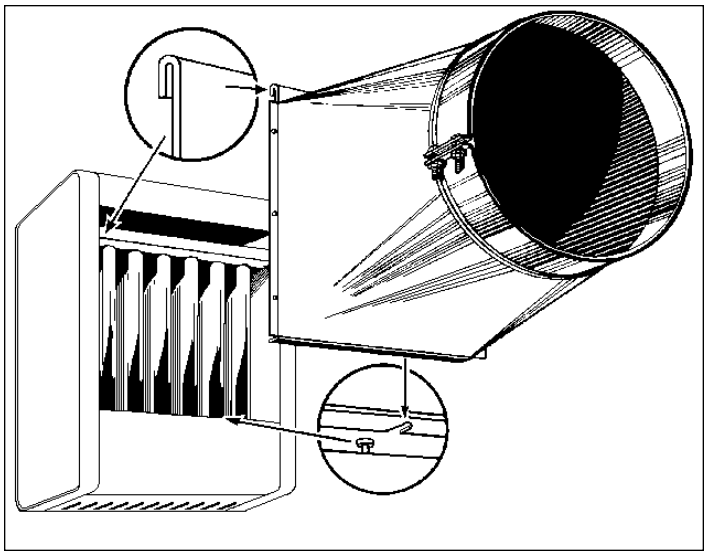


Figure 2.1
Minimum Polytube Hole Diameter

MODEL NUMBER	INPUT BTU/HR	AIR FLOW CFM	POLY-TUBE DIA., INCHES	MINIMUM POLYTUBE HOLE AREA SQ. FT. ①	MINIMUM NUMBER OF POLYTUBE HOLES		
					3" DIA.	2.5" DIA.	2" DIA.
BD/BDP 50	50,000	673	12	0.71	14	22	32
BD/BDP 75	75,000	1,010	12	1.06	22	32	50
BD/BDP 100	100,000	1,347	12	1.42	30	42	66
BD/BDP 125	125,000	1,684	18	1.77	36	52	82
BD/BDP 150	150,000	2,020	18	2.13	44	62	98
BD/BDP 175	175,000	2,357	18	2.48	52	74	114
BD/BDP 200	200,000	2,694	18	2.84	58	84	130
BD/BDP 250	250,000	3,367	18	3.54	72	104	162
BD/BDP 300	300,000	4,040	24	4.25	88	126	196
BD/BDP 350	350,000	4,714	24	4.96	102	146	228
BD/BDP 400	400,000	5,387	24	5.67	116	166	260
BAE 50	50,000	682	12	0.72	16	22	34
BAE 75	75,000	1,023	12	1.08	22	32	50
BAE 100	100,000	1,364	18	1.44	30	42	66
BAE 125	125,000	1,684	18	1.77	36	52	82
BAE 145	145,000	1,953	18	2.06	42	60	94
BAE 175	175,000	2,386	18	2.51	52	74	116
BAE 200	200,000	2,694	18	2.84	58	84	130
BAE 225	225,000	3,068	24	3.23	66	96	148
BAE 250	250,000	3,367	24	3.54	72	104	162
BAE 300	300,000	4,040	24	4.25	88	126	196
BAE 350	350,000	4,714	24	4.96	102	146	228
BAE 400	400,000	5,387	24	5.67	116	166	260
GHE 240	240,000	4,600	24	4.84	100	142	222
GHE 400	400,000	4,750	24	5.00	102	148	230
BV 50	50,000	673	12	0.71	14	22	32
BV 75	75,000	1,010	12	1.06	22	32	50
BV 100	100,000	1,347	18	1.42	30	42	66
BV 125	125,000	1,684	18	1.77	36	52	82
BV 145	145,000	1,953	18	2.06	42	60	94
BV 175	175,000	2,357	18	2.48	52	74	114
BV 200	200,000	2,694	18	2.84	58	84	130
BV 250	250,000	3,367	24	3.54	72	104	162
BV 300	300,000	4,040	24	4.25	88	126	196
BV 350	350,000	4,714	24	4.96	102	146	228
BV 400	400,000	5,387	24	5.67	116	166	260
BSH 130	130,000	1,795	18	1.89	38	56	88
BSH 150	150,000	2,071	18	2.18	44	64	100
BSH 170	170,000	2,347	18	2.47	50	72	114
BSH 225	225,000	3,068	24	3.23	66	96	148
BSH 280	280,000	3,865	24	4.07	84	120	186
BSH 340	340,000	4,636	24	4.88	100	144	224

① Based on cfm shown.

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