

A NEW SUNBEAM CATALOGUE

AMERICAN
HEATING EQUIPMENT
COSTS NO MORE THAN OTHERS

In this new loose-leaf catalogue will be found complete and detailed information on the SUNBEAM Line of Furnaces, Blower Filter Units, Air Conditioners, Blowers, Motors, Filters, Humidifiers and Controls. Thus in one compact and convenient binder, all product information, illustrations, specifications and dimensions are available for easy and quick reference.

The various products in color, plus the colorful index pages and the arrangement of material for handy reference make this attractive catalogue the finest presentation of SUNBEAM Equipment we have ever compiled.

WE ASK YOUR COOPERATION

From time to time product changes will be made and replacement of pages will be necessary. The loose-leaf feature is ideal for this purpose. New pages will be sent to you as fast as need requires. It is very important that your catalogue be up-to-date at all times, so we ask that you please insert new pages promptly as received and destroy replaced pages.

BEHIND THE SUNBEAM NAME

Behind the name SUNBEAM is the experience, resources and manufacturing facilities of the world's largest manufacturers of heating and winter air conditioning equipment. The wealth of experience is reflected in the continual improvement in SUNBEAM Products and the satisfaction they have given in hundreds of thousands of homes and buildings located in every section of the country.

Research, experiments and tests are steadily improving SUNBEAM performance. Practical experience, science and engineering combine to make SUNBEAM Furnaces and Air Conditioners outstanding values in the heating and air conditioning field.

Labor-saving machinery, mechanical handling devices and modern equipment assure the efficient production and quality of SUNBEAM Products.

SUNBEAM
WARM AIR FURNACES AND
AIR CONDITIONING UNITS

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SUNBEAM

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September 1, 1939

PLAINTIFF'S EXHIBIT

ASI-1062

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A COMPLETE LINE—FOR ALL FUELS

The SUNBEAM Line covers a wide range of requirements and prices. Whether a heating or air conditioning system is needed for a four room cottage, a mansion, a church, shop or other building, there's a SUNBEAM product that will perform thoroughly and economically. Whether the deciding factor be quality or cost, there's a SUNBEAM Furnace or Air Conditioner that will enable you to get the order. Regardless of the fuel to be burned, there is a SUNBEAM especially designed for it.

This complete SUNBEAM Line makes it possible for you to contract for your entire heating and air conditioning requirements from one source and to offer prospective buyers SUNBEAM quality in various sizes and types and for all fuels.

EASY TO INSTALL—PROFITABLE TO HANDLE

You will appreciate the careful workmanship in SUNBEAM Furnaces and Air Conditioners, whenever you make an installation. They are assembled easily and quickly—a feature that saves you time on every job.

SUNBEAM Equipment is designed to make the best in Warm Air Heating and Air Conditioning available to the greatest number of buyers—to enable SUNBEAM dealers to reach the entire market with one line of Furnaces and Air Conditioners.

EXTENSIVE ASSORTMENT OF SELLING HELPS

SUNBEAM Dealers have available one of the largest assortments of advertising and selling helps in the industry.

Attractively illustrated, interesting literature, newspaper advertisements, posters, installation signs, banners and other display material—virtually every kind of feature is provided for advertising your business and SUNBEAM Equipment and for reminding your prospects that they should come to you when in need of new Heating or Air Conditioning systems.

**AMERICAN & Standard
RADIATOR & Sanitary**

CORPORATION

NEW YORK

PITTSBURGH

ELYRIA, OHIO

SUNBEAM SERIES No. 1000 CAST IRON FURNACE
COAL BURNING



PIPE MODEL

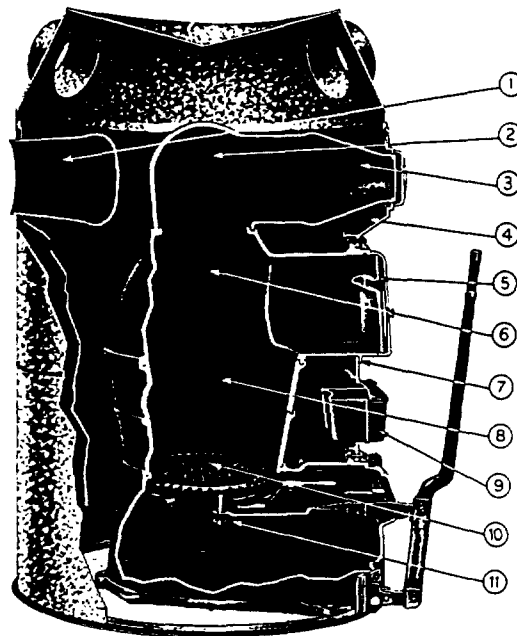
To the many time-proven construction features of the SUNBEAM Series No. 1000 furnace has been added a new beauty in design and appearance. Every line, curve and recess in the fronts is distinctively modern. From its base to the one-piece radiator, this heating plant has numerous refinements and improvements that appeal to the home owner.

The heating parts are centered, making it possible to move the radiator to any position without using extension collars and without affecting the perfect balance of the heating plant. All the openings in the heating unit are on the outside of the front and casings. The doors are attached directly to both the feed and ash pit sections, around which the front panels are placed. Doors and door openings are machine-ground resulting in air tight unions. The clean-out end of the radiator extends through the front panel; the smoke outlet extends beyond the casing at the opposite end. All joints are deeply cupped and join snugly.

The cast iron line is made in 7 sizes ranging from 18" to 30" fire pot diameters. Castings are machine moulded, assuring uniform thickness and strength. Machine moulding also assures perfect fitting castings that save installation time and costs.



SUNBEAM SERIES No. 1000 CAST IRON FURNACE
INTERIOR VIEW



CONSTRUCTION FEATURES

1. SMOKE COLLAR—cast with radiator, extends outside of casing. The radiator can be revolved to any position for convenient connection to flue.
2. RADIATOR—cast in one piece. Expert design incorporates oversize capacity for the hot gases; yet gives a maximum of air circulating space.
3. CLEAN-OUT COLLAR—cast with radiator. Both the clean-out opening and clean-out cover, are machine-ground. Cover bolts over large opening effecting gas-tight connection.
4. UPPER FRONT PANEL—slips in place over and around feed section, eliminating possibility of gas leakage from feed section into warm-air chamber.
5. HOT BLAST—air which is admitted from the outside is heated as it passes upward in the feed door. Therefore, only warm-air which will aid in combustion, mixes with the volatile gases.
6. COMBUSTION CHAMBER AND FEED SECTION—opening at top is centered above fire pot. Feed section is short. Feed door and opening are machine-ground.

7. LOWER FRONT PANEL—slips in place over and around ash pit section. It is impossible for dust from ash pit to enter warm-air chamber.
8. TWO-PIECE FIRE POT—made of heavy-weight Sunbeametal, with extra deep cup joints. Smooth design and machine molding result in castings having longer life, greater strength and resistance to the strain of expansion and contraction. Ashes cannot accumulate along the steep walls of this fire pot. Two-piece construction assures long life.
9. VAPOR PAN—extra large capacity. Located where it can be filled conveniently and evaporate necessary moisture.
10. DUPLEX GRATE—has more free area than ordinary grates. Upright shaker revolves outer ring on 4 large wheels. Can never stick. Prevents ash accumulation against fire pot walls. Grate removed by releasing one cotter pin and two bolts.
11. ASH PIT—high and spacious. Full width opening makes removal of ashes easy. Door and door openings are machine-ground.

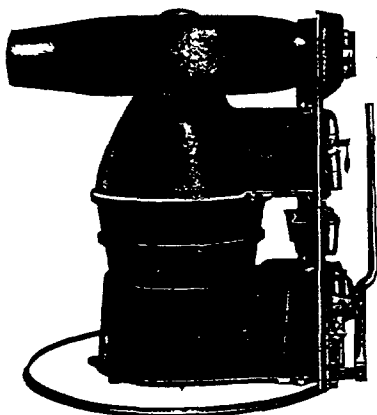
HEATING ELEMENT

SERIES No. 1000

From base ring to its one-piece radiator, the heavy, proportioned heating element has every improvement. Joints are deeply cupped and join snugly. Heating parts are durable, heavy, and centered, making it possible to move the radiator to any position without using extension collars. All openings are on the outside of the front and casings.

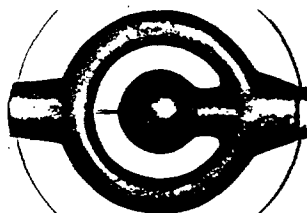
Sunbeam designers have maintained the correct ratio between grate area and heating surface and provided ample free air circulating space.

Ease and speed of assembly is an outstanding feature of this furnace—resulting in reduced installation costs.



ONE-PIECE RADIATOR

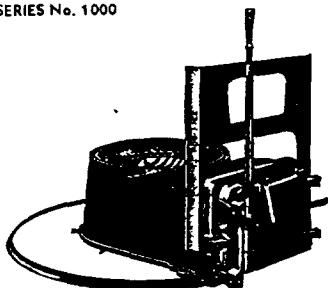
SERIES No. 1000



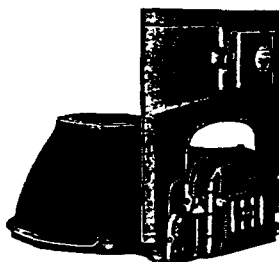
No gas or smoke from the oversize radiator can possibly enter the warm-air chamber. Smoke outlet and clean-out opening extend outside of casing and front of furnace. Clean-out opening and clean-out cover are machine-ground. Radiator can be revolved to any position for convenient connection with flue.

SLIP-ON FRONT PANELS

SERIES No. 1000



The ash pit extends through the front of furnace. The lower front panel quickly slips into place above and around the ash pit and is held rigidly and tightly in the back by a shoulder cast on the ash pit and by finishing strips on the front. In addition to keeping dust out of the warm-air chamber, this construction saves time on the job and reduces installation costs.



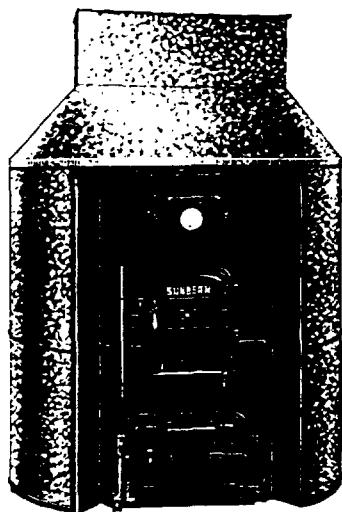
The feed section extends through front of furnace. There is no joint inside of the warm-air chamber through which gas or dust can escape. Upper front panel slips into position above and around the feed section. It is secured tightly in the back by a shoulder cast on the feed section, and in the front, by finishing strips, bolted into place.

There are no vertical joints within the air chamber of these cast iron Warm-Air Furnaces.

SUNBEAM
WARM-AIR FURNACES

SUNBEAM PIPELESS FURNACE

SERIES No. 1000



In the SUNBEAM Pipeless Furnace the same care and attention that was devoted to the design of the heating parts as shown in the preceding pages, has been accorded to the Air Circulating compartments—both return air and warm air—and the construction of casings. Insufficient space in the return air compartment, or the penetration of heat from the warm air section will so retard air circulation in a pipeless furnace that it cannot deliver its rated capacity. This cannot occur in the SUNBEAM. The return air compartment is much larger than on ordinary furnaces. The inner casing, which separates return air and warm air compartments, is effectively insulated with a lining of corrugated bright tin, backed up by a layer of asbestos paper.

To further assure unrestricted air circulation, fabricated steel registers with more than 80% free air space are standard equipment.

SUNBEAM ROOM HEATER

SERIES No. 1000

SUNBEAM Room Heaters are designed for installation in school houses, stores, small factories, shops and other buildings without basements.

Standard equipment includes Series No. 1000 Cast Iron Furnaces; Casing and Cowl of Galvanized Iron; Check Draft; Poker; Shaker Handle; Asbestos Cement; Nuts and Bolts.

These Heaters are not supported by legs and must, therefore, be placed on a floor, which has been provided with a suitable fireproof base.

SUNBEAM Room Heaters sell at the same prices as the No. 1000 Series Pipe Furnaces, equipped with casing and taps. Can also be furnished with casings and cowl of black polished iron, at a slight additional cost.



CAPACITIES AND DIMENSIONS

No.	Dia. Fire Pot Inches	BTU Capacity	Approximate Capacity Cubic Feet		Dia. of Casting Inches	Overall Height Heater Inches	Size Feet Door Inches	Size Ash Pit Door Inches	Dia. Smoke Collar Inches	Approx. Ship. Weight Lbs.
			One Story Building Exposed All Sides	Two Story Building Exposed Front and Rear						
1040	20	65,000	11,000	16,000	40	60	10½ x 13½	17 x 12	8	983
1044	22	82,000	14,000	21,000	44	60	10½ x 13½	18½ x 12	9	1092
1045	24	99,000	17,000	25,000	47	60	10½ x 13½	19½ x 12	9	1266
1052	26	122,000	20,000	30,000	52	64	10½ x 13½	21½ x 13½	10	1547
1056	28	144,000	24,000	36,000	56	64	10½ x 13½	21½ x 13½	10	1650



SERIES No. 1000—CAPACITIES AND DIMENSIONS

FURNACE NUMBER	1018CD	1040CD	1044CD	1048CD	1052CD	1056CD	130-C
Grate Area in Square Feet....	1.22	1.49	1.90	2.29	2.82	3.34	3.69
Heating Surface In Square Inches ..	4,274	5,126	5,874	6,598	7,494	8,256	9,986
Ratings in Square Inches.....	336	405	492	578	689	794	907
B.t.u. Capacity per Hour at Register	46,400	55,900	67,900	79,600	95,100	109,600	125,200
Inside Diameter of Fire Pot	18"	20"	22"	24"	26"	29"	30"
Diameter of Smoke Collar	8"	8"	9"	9"	10"	10"	9"
Approx. Distance from Floor to Center of Smoke Outlet.....	40½"	46½"	45½"	45½"	49½"	49½"	56"
Req. Ceiling Height to Bottom of Joist	6'	6'	6'	6'	6½'	7'	8'
Size of the Feed Door	9 x 11½"	10½ x 13½"	10½ x 13½"	10½ x 13½"	10½ x 13½"	10½ x 13½"	13 x 13½"
Size of the Ash Pit Door	16 x 12½"	17 x 12"	19½ x 12"	19½ x 12"	21½ x 13½"	21½ x 13½"	10½ x 21½"
Height of Ash Pit	13"	12"	12"	12"	13½"	13½"	14"
Diameter of Casing	36"	40"	44"	47"	52"	56"	60"
Height of Casings and Pitch Hood	59½"	65½"	65½"	65½"	69½"	69½"	76½"
Height of Lower Sec- tion of Casing..	21"	23"	23"	23"	25"	25"	20" Middle 20"
Height of Upper Section of Casing	24"	28"	28"	28"	30"	30"	20"
Circumference of Top Casing Ring	113½"	125½"	138½"	147½"	162½"	175½"	188½"
Over-all Length of Casing Sheets	88"	103½"	114½"	123½"	136½"	149½"	156½"
Approx. Shipping Weight Less Cas- ings, in Pounds	710	882	1,008	1,149	1,440	1,568	1,964
Approx. Shipping Weight Complete in Pounds ..	770	954	1,087	1,233	1,539	1,686	2,118

‡ The 30C furnace has two piece radiator.

STANDARD EQUIPMENT—Check draft, finishing collars, poker, draft regulator, chain and pulleys, asbestos cement, nuts and bolts.

ALL RATINGS CERTIFIED TO BY THE NATIONAL WARM AIR HEATING AND AIR CON-
DITIONING ASSOCIATION.

NOTE: When a furnace is to be used for heating rooms on the first floor only, or rooms on the second floor only, convert the square inch areas as calculated on the Standard Code Plan Sheet into B.t.u. and select the furnace size from the B.t.u. rating column. (To convert square inch into B.t.u. multiply the first floor square inch requirements by 111 (B.t.u. per square inch) and the second floor by 167 (B.t.u. per square inch).)



CAPACITIES AND DIMENSIONS—SERIES No. 1000 PIPELESS FURNACE

FURNACE NUMBER	1018BD	1040BD	1044BD	1048BD	1052BD
Grate Area in Square Feet	1.22	1.49	1.90	2.29	2.82
Heating Surface in Square Inches	4274	5126	5874	6598	7494
Number of Rooms to be Heated	3 to 5	5 to 7	7 to 10	10 to 12	12 to 14
Capacity in Cubic Feet	8,000 to 12,000	12,000 to 16,000	16,000 to 20,000	20,000 to 24,000	24,000 to 28,000
Inside Diameter of Fire Pot	18"	20"	22"	24"	26"
Size of Register	28 x 25"	32 x 32"	32 x 32"	35 x 35"	38 x 38"
Diameter of Smoke Collar	8"	8"	9"	9"	10"
Approx. Distance from Floor to Center of Smoke Outlet	40½"	46½"	45¼"	45¼"	49¼"
Minimum Cellar Height Required to Bottom of Joist	6'	6'	6'	6'	6'
Size of the Feed Door	9 x 11½"	10½ x 13½"	10½ x 13½"	10½ x 13½"	10½ x 13½"
Size of the Ash Pit Door	16½ x 12½"	17 x 12"	19½ x 12"	19½ x 12"	21½ x 13½"
Height of the Ash Pit	12"	12"	12"	12"	13½"
Diam. of Inner Casing	33¼"	40"	44"	47"	52"
Diam. of Outer Casing	41¼"	52"	56"	60"	64"
Diameter of Warm-Air Outlet	19½"	24"	24"	26"	28"
Approx. Shipping Weight Complete in Pounds	910	1156	1290	1462	1776

STANDARD EQUIPMENT—Register, check draft, poker, draft regulator, chain and pulleys, asbestos cement, nuts and bolts. Warm-air and return-air extension sufficient for 8' cellar height, is shipped with each pipeless furnace.

SUNBEAM SERIES No. 8000 STEEL FURNACE
COAL OR OIL



COAL—HAND FIRED MODEL

In this steel furnace, which is available for coal or oil burning, are incorporated all of the modern features that the science of heating has proven desirable. It is the ace of steel furnaces.

SUNBEAM steel furnaces are virtually seamless, one-piece units, without cracks or seams, or other openings through which the products of combustion can escape. When welded joints are further reinforced with riveting, as in the Series No. 8000, the result is not only a leak-proof furnace, but also a permanently leak-proof furnace.

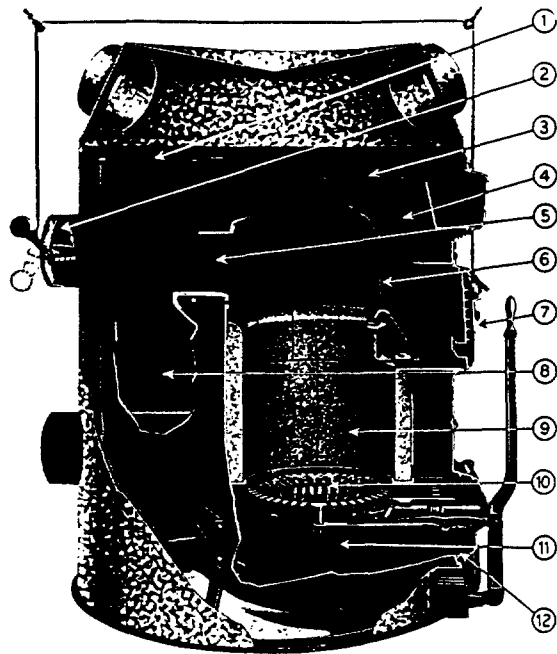
The boiler plate steel heating element rapidly transmits heat to the circulating air, yet has a rugged durability that withstands the strain of intense heat. The Series No. 8000 is the furnace for today's firing conditions whether they be hand firing of coal, off and on operation of an oil burner, or the intense heat generated by the forced draft of a coal stoker.

The finest of materials, excellence of design and over fifty years of experience in the manufacture of heating equipment, make the Series No. 8000 the outstanding steel furnace.

The Series No. 8000 is made in 6 sizes ranging from 22" to 34" drum diameter.



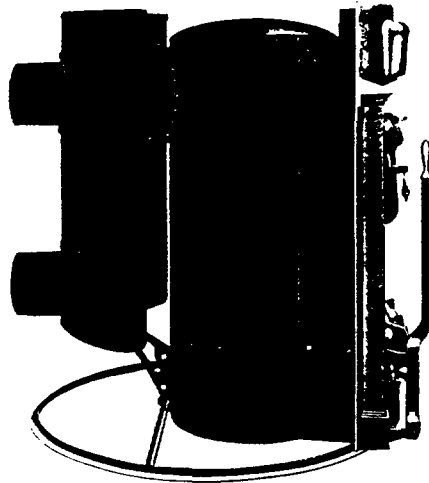
SUNBEAM SERIES No. 8000 STEEL FURNACE
 INTERIOR VIEW—COAL BURNING MODEL



CONSTRUCTION FEATURES

1. **LARGE RADIATOR WELDED and RIVETED**—seamless and leak-proof. Cast iron smoke collars are securely bolted to radiator.
2. **DIRECT DRAFT DAMPER**—located in upper smoke collar, outside of casting where it will not warp or burn out.
3. **WELDED and RIVETED HEAD**—durable and leak-proof.
4. **NO JOINT AT TOP OF POUCH**—joints are eliminated by riveting and welding.
5. **CAST IRON CONNECTING COLLAR**—resists the destructive action of the hot flames.
6. **ONE-PIECE DRUM**—eliminates two vertical joints within the warm-air chamber.
7. **LARGE FEED DOOR**—12½ inches high by 15½ inches wide at bottom.
8. **"V" TYPE BAFFLE**—causes the hot gases to heat the entire radiator uniformly before they pass into the flue. Has no moving parts; nothing to get out of order.
9. **FULL HEIGHT FIRE POT**—14½ inches high, holds twice as much fuel as ordinary steel furnaces; requires firing less frequently.
10. **DUPLEX GRATE**—outer ring is revolved by upright shaking lever, shaking ashes at edge of fire into ash pit. Clinkers move into center of "basket" of grate, where one turn of dumping handle quickly removes them.
11. **JOINTLESS ASH PIT**—welding ash pit bottom to the drum makes it impossible for dust, fumes or moisture to escape into warm-air chamber. The ash pit bottom is dished below ash pit door, a feature desirable in oil firing as oil accumulations are held in this depression and do not flow onto basement floor.
12. **NO DIRECT CONNECTION BETWEEN CASTING AND HEATING UNIT**—eliminates the possibility of gases or fumes entering the warm-air chamber. The drum is joined with the front of furnace. The casing is connected separately with the corner column.

HEATING ELEMENT
SERIES No. 8000



The drum of the heating element is constructed of durable No. 7 gauge boiler plate steel. The radiator is of No. 8 gauge steel.

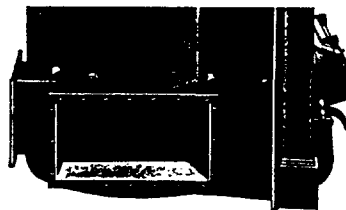
There are no joints in this advanced heating plant through which dirt, soot or fumes can escape from the combustion chamber into the air circulating compartment. Seams are sealed permanently leak-proof as they are both riveted and welded to provide strength

necessary to withstand the forces of expansion and contraction.

The cast iron collars, which connect the radiator to the drum, join with a leak-proof tongue and groove joint and are firmly locked in position and sealed. Cast iron flanges are securely bolted to the drum and radiator at close intervals. Thick asbestos gaskets are inserted to assure gas tight connections where the collars are joined to drum and radiator.

STOKER FIRED MODEL
SERIES No. 8000

The stoker can be installed in this model from front, rear or either side without any cutting by the installer. Chutes are provided at both sides and at rear of the heating element. The stoker screw tube can enter the heating element through any one of these chutes or through ash pit door opening. Metal covers and gaskets are provided to seal the chutes not used.



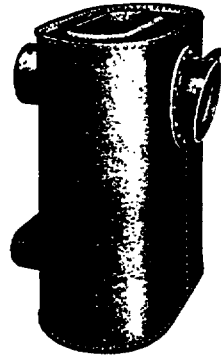
Any standard make of hopper feed or bin feed stoker (with the screw tube above base of furnace) can be accommodated. Bin feed stoker with the screw tube below base of furnace must be installed in the coal, hand fired, model.

The Stoker Fired Model also has a fire brick lining around the fire box section. Grate assembly is omitted. The standard type of coal burning doors are furnished.

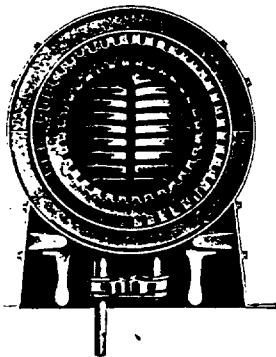
Chute openings are 17" wide by 8½" high, and bottoms of openings are 4¼" above floor level.

SPECIAL OVERSIZE RADIATOR (No. 8034-J ONLY)
SERIES No. 8000

Radiator is constructed of No. 10 gauge steel, riveted and welded. Connecting collars are cast iron. The connection between collars and drum and radiator, is made gas-tight through the use of flange collars, bolted securely. Thick asbestos gaskets also serve as additional seal against gas leakage. A vertical baffle at each side directs the passage of hot gases to the base of the radiator, utilizing these gases completely—and heating all parts of the radiator—before they rise again and pass out through the smoke collar. Radiator clean-out opening is at the bottom. No smoke tee is used.



DUPLEX GRATES
SERIES No. 8000

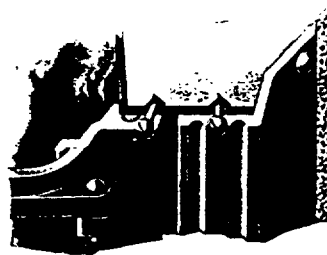


Plenty of free air space in this grate assures both long life and the efficient combustion of fuel. The outer ring, operated by the upright shaking handle, revolves on four wheel bearings and can never stick. Clinkers are moved into the grate "basket" where they are dumped without loss of live coals.

The ease and speed with which the grate can be installed and removed will appeal to dealers. Open the ash pit door, release two convenient bolts and one pin. Grasp the handle and wheel it in or out like a wheel barrow.

NO DIRECT CONNECTION BETWEEN CASING AND DRUM
SERIES No. 8000

There is no joint in the warm air chamber between casing and heating unit of this Steel Furnace. The heating unit is connected to front of furnace. Casing is bolted to the corner column, making a separate connection. Gases and fumes cannot escape through this connection into the air chamber. Interlocking joint between heating unit and front of furnace is made air-tight with asbestos rope packing.

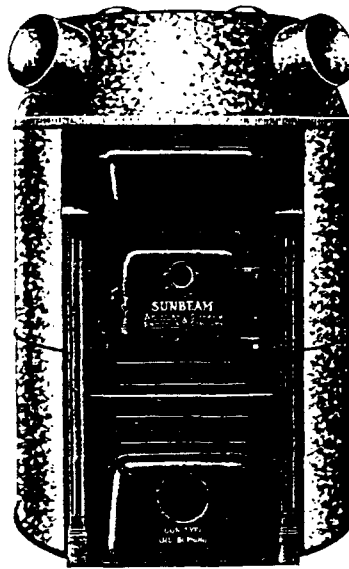


OIL BURNING MODEL—GUN TYPE
SERIES No. 8000

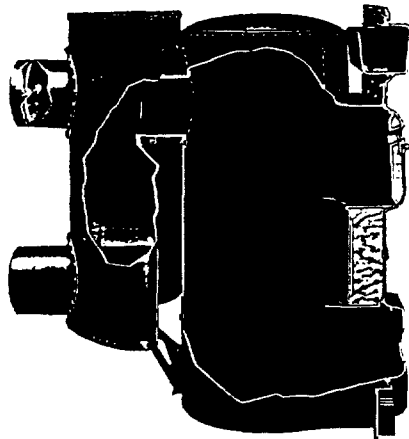
Any standard make of gun type oil burner can be accommodated in this oil burning model.

The generous area of heating surface and the long fire travel from burner to flue outlet, insure that the products of combustion are thoroughly utilized before they pass into the chimney. All joints are riveted and welded to successfully resist the constant expansion and contraction that is encountered with the intermittent firing of the oil burner resulting in gas-tight and fume-tight construction.

It is equipped with an insulated fire door provided with a glass covered observation opening, so that combustion can be observed with the door closed. The lower door has a circular opening through which the blast tube of the burner is inserted.



HEATING ELEMENT, OIL BURNING MODEL—GUN TYPE
SERIES No. 8000



Cutaway view of Gun Type Oil Burner Model showing how the space between the front casting and the shell is insulated with mineral wool, and how it is supported and kept in position by a horizontal plate and a liner of heat-resisting steel. Insulation in the fire door is also shown.

ROTARY BURNER MODELS

When the Series No. 8000 is furnished for rotary oil burners, the heating element is equipped with a hearth plate which rests on a cast ring held in position by brackets and sealed with asbestos rope. The sides of the heating element are protected from flame impingement by an inner lining of special heat-resisting steel. Special doors and insulating mineral wool are furnished as in the gun type model.

SERIES No. 8000—CAPACITIES AND DIMENSIONS

FURNACE NUMBER	15022	8024	8027	8030	8034	15034J
*Inside Diameter of Drum	22"	24"	27"	30"	34"	34"
Grate Area in Sq. Ft.	1.82	2.24	2.92	3.76	4.96	4.96
Heating Surface in Sq. In.	7171	7467	8824	9248	11232	13059
*Rating in Square Inches (Soft Coal)	526	600	750	892	1145	1207
Rating in Square Inches (Hard Coal and Coke)	421	480	600	714	916	966
B.t.u. Cap. per Hr. at Reg. (Soft Coal)	71,536	81,600	102,000	121,312	155,720	164,152
B.t.u. Cap. per Hr. at Reg. (Hard Coal and Coke)	57,256	65,280	81,600	97,104	124,576	131,376
B.t.u. Cap. per Hr. at Reg. (Stoker Fired)	78,978	90,091	112,584	133,885	171,739	181,113
B.t.u. Cap. per Hr. at Reg. (Oil)	82,269	93,845	117,275	139,463	178,895	**
Overall Height of Heating Unit	54 $\frac{1}{2}$ "	55"	57 $\frac{1}{2}$ "	58 $\frac{1}{2}$ "	61 $\frac{1}{2}$ "	61 $\frac{1}{2}$ "
Height of Radiator	38 $\frac{1}{4}$ "	39 $\frac{1}{4}$ "	39 $\frac{1}{4}$ "	39 $\frac{1}{4}$ "	41"	42"
Width of Radiator on Arc	35"	38"	42"	42"	50"	35 $\frac{1}{2}$ "
Depth of Radiator	7"	7"	7 $\frac{1}{2}$ "	7 $\frac{1}{2}$ "	9"	20 $\frac{1}{4}$ "
Height of Fire Pot	14 $\frac{1}{2}$ "	14 $\frac{1}{2}$ "	14 $\frac{1}{2}$ "	14 $\frac{1}{2}$ "	14 $\frac{1}{2}$ "	14 $\frac{1}{2}$ "
Size of Feed Door Opening	15 $\frac{3}{8}$ x 12 $\frac{1}{4}$ "	15 $\frac{3}{8}$ x 12 $\frac{1}{4}$ "	15 $\frac{3}{8}$ x 12 $\frac{1}{4}$ "	15 $\frac{3}{8}$ x 12 $\frac{1}{4}$ "	15 $\frac{3}{8}$ x 12 $\frac{1}{4}$ "	15 $\frac{3}{8}$ x 12 $\frac{1}{4}$ "
Size of Ash Pit Door Opening	19 $\frac{1}{2}$ x 12"	19 $\frac{1}{2}$ x 12"	21 $\frac{1}{2}$ x 13 $\frac{1}{2}$ "	21 $\frac{1}{2}$ x 13 $\frac{1}{2}$ "	21 $\frac{1}{2}$ x 13 $\frac{1}{2}$ "	21 $\frac{1}{2}$ x 13 $\frac{1}{2}$ "
Diameter of Smoke Outlet	9"	9"	10"	10"	10"	10"
Approximate Distance from Floor to Center of Smoke Outlet	41 $\frac{1}{4}$ "	41 $\frac{1}{4}$ "	43 $\frac{1}{8}$ "	44 $\frac{1}{4}$ "	45 $\frac{1}{4}$ "	47 $\frac{1}{8}$ "
Diameter of Casing	40"	48"	53"	56"	61"	†
Height of Casings and Hood	65 $\frac{1}{4}$ "	65 $\frac{1}{4}$ "	70 $\frac{1}{4}$ "	70 $\frac{1}{4}$ "	70 $\frac{1}{4}$ "	70 $\frac{1}{4}$ "
Height of Lower Section of Casing	25"	28"	30"	30"	30"	30"
Height of Upper Section of Casing	26"	26"	26"	26"	26"	26"
Circumference of Top Casing Ring	144 $\frac{1}{2}$ "	150 $\frac{3}{4}$ "	166 $\frac{1}{2}$ "	175 $\frac{1}{2}$ "	191 $\frac{1}{2}$ "	206"
Door Opening Required to Admit Drum (Stoker Model)	†	28 $\frac{3}{4}$ "	31"	33"	37"	37"
Distance from center of Drum to side of Casing (Stoker Model)	†	24"	26 $\frac{1}{4}$ "	28"	30 $\frac{1}{2}$ "	28"
Distance from center of Drum to rear of Casing (Stoker Model)	†	25 $\frac{3}{4}$ "	31 $\frac{3}{4}$ "	34 $\frac{1}{4}$ "	37 $\frac{1}{4}$ "	46 $\frac{1}{4}$ "
Distance from center of Drum to front of Furnace (Stoker Model)	†	18"	20"	21 $\frac{1}{2}$ "	23 $\frac{1}{2}$ "	23 $\frac{1}{2}$ "
Approx. Shipping Weight less Casing, lbs.	1045	1099	1265	1395	1526	1650
Approx. Shipping Weight Complete, lbs.	1133	1195	1370	1518	1656	1787

STANDARD EQUIPMENT—Check draft, finishing collars, poker, draft regulator, chain and pulleys, nuts and bolts.

* If stoker is to be used, determine clearance for stoker retort by deducting 3 $\frac{1}{2}$ " (required for fire brick) from inside drum diameter.

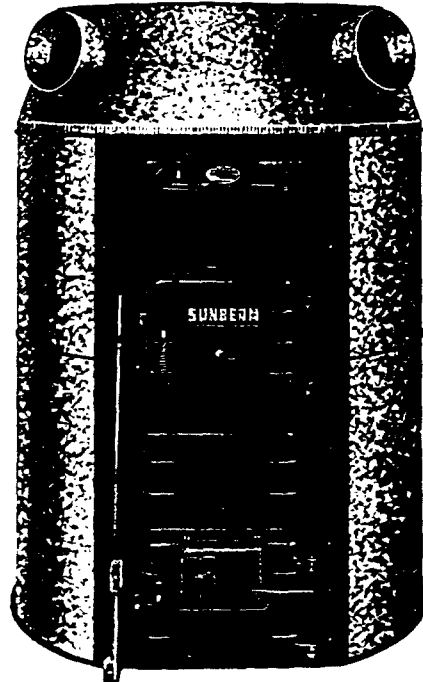
† This size is not available in the special stoker fired model.

‡ This furnace is equipped with special over-size radiator and has an oval shaped casing 71" at its greatest length and 57" at its greatest width. No smoke tee is used with this furnace.

* These furnaces are rated in accordance with the Standard Code Rating Formula of National Warm Air Heating and Air Conditioning Association.

** The No. 8034J is not recommended for oil burning.

SUNBEAM SERIES No. 500 STEEL FURNACE
COAL OR OIL



COAL BURNING—HAND FIRED MODEL

A new beauty in design and appearance has been added to the time proven construction features of the SUNBEAM Series No. 500 steel furnace. The new front castings are heavier, gracefully rounded and distinctively modern.

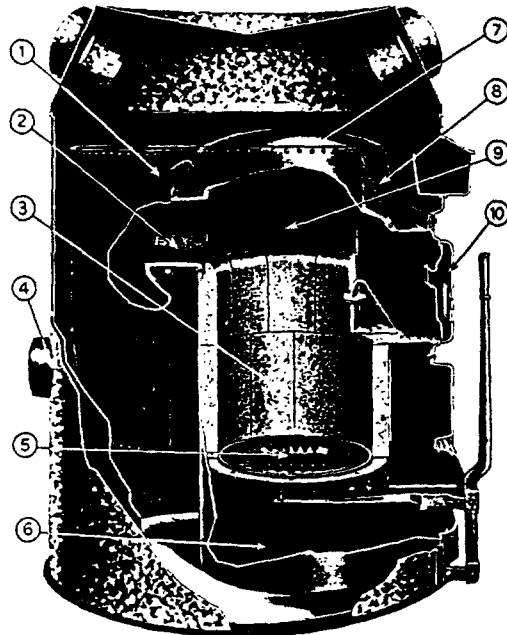
The Series No. 500 is a product designed to meet the demand for a high quality steel furnace at a low price. The design, materials and construction features of this furnace are similar to those found only in higher priced products.

The heating element is constructed of boiler plate steel approximately $\frac{3}{16}$ of an inch thick and its seams are both riveted and welded. The full height fire pot permits a long firing period and promotes efficient combustion. The basket grate is designed for convenient, efficient operation. These and other features assure years of satisfactory care-free service at an unusually low first cost and low operating cost.

The Series No. 500 is made in four sizes, ranging from 20-inch to 27-inch drum diameters.

SUNBEAM
STEEL FURNACES

SERIES No. 500 STEEL FURNACE
INTERIOR VIEW



CONSTRUCTION FEATURES

1. **RADIATOR**—is constructed of No. 12 gauge boiler plate, riveted and welded.
2. **CONNECTING COLLARS**—are of cast iron construction and are securely bolted at close intervals to form leak-proof joints. Collars join with a tight tongue and groove joint. Asbestos gaskets are inserted where collars connect to drum and radiator.
3. **FULL HEIGHT FIRE POT**—is $13\frac{1}{2}$ " high. Holds a deep bed of fuel. Permits long firing period.
4. **RADIATOR SMOKE COLLAR**—is of cast iron construction. It is connected to the radiator gas tight by the insertion of an asbestos gasket and by bolts spaced at close intervals. Notice that collar is located at the base of radiator so that the gases pass through the entire radiator before passing into the flue.
5. **BASKET GRATE**—excellent combustion and easy removal of ashes and clinkers is assured by this type of grate.
6. **JOINTLESS ASH PIT**—no gas or dust leakage can occur in ash pit, as the base is welded to the drum.
7. **RIVETED AND WELDED HEAD**—long life and leak-proof construction is obtained by riveting and welding the head to the top of drum.
8. **TOP OF POUCH**—the top of the pouch is riveted and welded.
9. **DRUM**—is constructed of No. 8 gauge boiler plate, riveted and welded. Construction of drum eliminates two vertical joints within warm-air chamber.
10. **LARGE FEED DOOR OPENING**—is approximately $13\frac{1}{8}$ " wide by $11\frac{3}{8}$ " high.

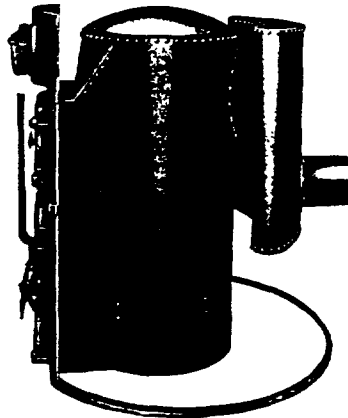
STEEL HEATING ELEMENT

SERIES No. 500

Among the outstanding features of this SUNBEAM Furnace, are the materials and methods used in the construction of the heating element. Durable No. 8 gauge boiler plate steel is used in the drum; No. 12 gauge in the radiator. This heavy metal transmits heat rapidly yet is unusually rugged and indefinitely resists the effect of flame and heat.

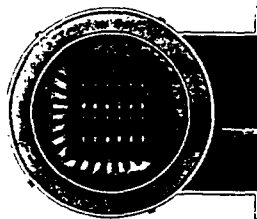
All seams are both riveted and welded so that dirt, soot and fumes cannot possibly escape from the heating element.

The radiator is connected to the drum by cast iron connecting collars which are securely bolted into place and sealed with asbestos gaskets. The two collars are joined by a tight fitting tongue and groove joint.



BASKET GRATE

SERIES No. 500



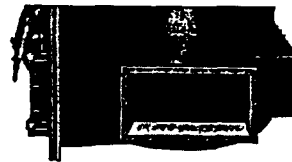
This grate keeps the fire hottest where you want it, against the walls of the fire pot. The upright shaker handle revolves grate assembly smoothly and easily on 3 rollers, shaking down ashes along the edge of grate. Clinkers settle into the center or "basket" section of the grate. They are broken and removed, without disturbing the fire, by the action of two triangular gate bars located at the bottom of the "basket" section. The large amount of free area in this grate assures plenty of air for combustion of the fuel.

STOKER FIRED MODEL

SERIES No. 500

Nos. 524 and 527 will accommodate bin feed or hopper feed stokers of any standard make. The stoker screw tube can be installed from front, rear or either side without any cutting by the installer. Chutes are provided at both sides and at the rear of the heating element. Metal covers and gaskets are provided to seal the chutes which are not used.

Where a bin feed stoker is to be installed with the screw tube below base of furnace, the coal, hand fired model must be used.



Chute openings are 17" wide by 8½" high. Bottom of opening is 4¼" above base of heating element.

Like all coal burning models, it is equipped with a fire brick lining around the fire box section. Grate assembly is omitted. Standard coal burning doors are furnished.

OIL BURNING MODELS

The Series No. 500 is available in gun type and rotary type oil burning models. Any standard make of oil burner can be accommodated.

When furnished for gun type burner, mineral wool is supplied for insulating the space between the front casting and shell. The insulation is supported and kept in place by a horizontal plate and a liner of heat-resisting steel.

The rotary oil burner model is furnished with a hearth plate which rests on a cast iron ring held in position by brackets and sealed with asbestos rope. The sides of the heating element are protected from flame impingement by an inner lining of special heat-resisting steel. Insulating mineral wool is furnished as in the gun type model.



CAPACITIES AND DIMENSIONS—SERIES No. 500

FURNACE NUMBER	520	522	524	527
Inside Diameter of Drum	20"	22"	24"	27"
Grate Area in Square Feet	1.44	1.82	2.24	2.92
Heating Surface in Square Inches	5,025	5,330	5,690	6,910
*Rating in Square Inches				
(Soft Coal)	393	461	538	683
Rating in Square Inches				
(Hard Coal and Coke)	314	369	430	546
B.t.u. Capacity Per Hr. at Reg.				
(Soft Coal)	53,400	62,700	73,200	92,900
B.t.u. Capacity Per Hr. at Reg.				
(Hard Coal and Coke)	42,780	50,160	58,560	74,320
B.t.u. Capacity Per Hr. at Reg.				
(Stoker Fired)	59,000	69,000	81,000	102,000
B.t.u. Capacity Per Hr. at Reg. (Oil)	61,000	72,000	84,000	107,000
Overall Height of Heating Unit	52 $\frac{1}{4}$ "	52 $\frac{3}{4}$ "	52 $\frac{1}{4}$ "	55"
Height of Radiator	32 $\frac{1}{4}$ "	32 $\frac{3}{4}$ "	32 $\frac{1}{4}$ "	35 $\frac{1}{2}$ "
Width of Radiator on Arc	30"	30"	30"	38"
Depth of Radiator	6 $\frac{1}{2}$ "	6 $\frac{1}{2}$ "	6 $\frac{1}{2}$ "	7"
Height of Fire Pot	13 $\frac{1}{2}$ "	13 $\frac{1}{4}$ "	13 $\frac{1}{2}$ "	13 $\frac{1}{2}$ "
Size of Feed Door Opening	11 $\frac{1}{2}$ " high 13 $\frac{1}{2}$ " wide	11 $\frac{1}{2}$ " high 13 $\frac{1}{2}$ " wide	11 $\frac{1}{2}$ " high 13 $\frac{1}{2}$ " wide	11 $\frac{1}{2}$ " high 13 $\frac{1}{2}$ " wide
Size of Ash Pit Door Opening	11 $\frac{1}{4}$ " high 14 $\frac{1}{2}$ " wide	11 $\frac{1}{4}$ " high 14 $\frac{1}{2}$ " wide	11 $\frac{1}{4}$ " high 14 $\frac{1}{2}$ " wide	11 $\frac{1}{4}$ " high 14 $\frac{1}{2}$ " wide
Diameter of Smoke Outlet	8"	8"	8"	9"
Approximate Distance from Floor to				
Center of Smoke Outlet	24 $\frac{1}{4}$ "	24 $\frac{1}{4}$ "	24 $\frac{1}{4}$ "	24"
Diameter of Casing	40"	44"	47"	50"
Average Overall Length of Casings	100 $\frac{3}{8}$ "	114 $\frac{1}{8}$ "	122 $\frac{1}{8}$ "	133 $\frac{1}{8}$ "
Height of Casings and Hood	66 $\frac{1}{4}$ "	66 $\frac{1}{4}$ "	66 $\frac{1}{4}$ "	66 $\frac{1}{4}$ "
Height of Lower Section of Casing	30"	30"	30"	30"
Height of Upper Section of Casing	22"	22"	22"	22"
Circumference of Top Casing Ring	125 $\frac{1}{8}$ "	138 $\frac{1}{4}$ "	147 $\frac{3}{8}$ "	157 $\frac{1}{8}$ "
Door Opening Required to Admit Drum				
(Stoker Model)	†	†	26 $\frac{3}{8}$ "	29 $\frac{1}{8}$ "
Dis. from Center of Drum to Side of Casing				
(Stoker Model)	†	†	23 $\frac{1}{2}$ "	25"
Dis. from Center of Drum to Rear of Casing				
(Stoker Model)	†	†	28"	30"
Dis. from Center of Drum to Front of Furnace				
(Stoker Model)	†	†	17 $\frac{3}{4}$ "	19 $\frac{1}{4}$ "
Approximate Shipping Weight Less Casing, Lbs.	798	853	897	1015
Approximate Shipping Weight Complete	874	939	955	1113

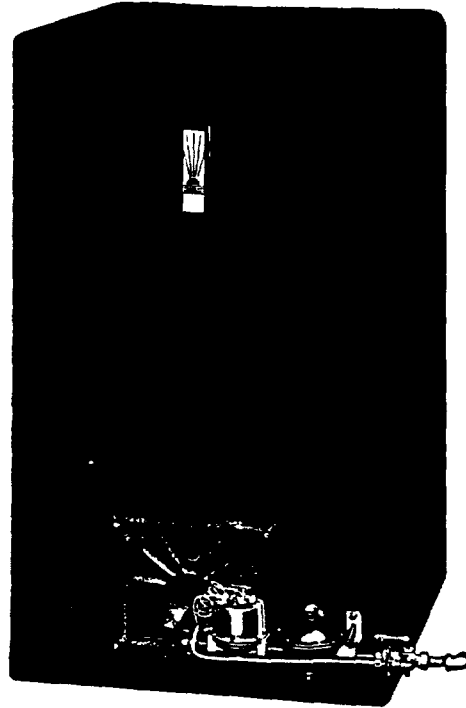
STANDARD EQUIPMENT—Check draft, finishing collars, poker, draft regulators, chain and pulleys, nuts and bolts.

* Ratings are in accordance with the Standard Code Rating Formula of National Warm Air Heating and Air Conditioning Association.

† If stoker is to be used, determine clearance for stoker retort by deducting 3 $\frac{1}{2}$ " (required for fire brick) from inside drum diameter.

‡ These sizes are not available in special stoker fired models.

SUNBEAM SERIES G GAS FURNACE



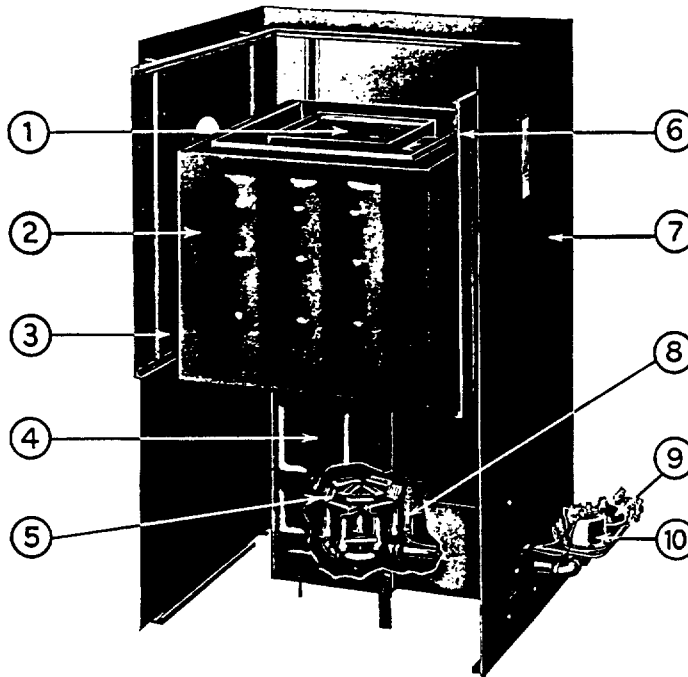
The Series G SUNBEAM is a new type of gas fired gravity furnace, with steel heating element. It is attractively modern in appearance and highly efficient in operation. There are five sizes ranging from the No. 65 G with 65,000 B.t.u. input per hour to the No. 150 G with an input of 150,000 B.t.u. per hour.

The Series G SUNBEAM Gas Fired Gravity Furnaces, because of their surprisingly low prices, bring the benefits of clean, care-free automatic gas heating within the reach of thousands of home owners with limited incomes. Fuel bills are moderate because of the highly efficient manner in which the gas burned in these furnaces is transferred into useable heat. Compact and low, the Series G SUNBEAM requires a small amount of basement space for installation.

Where gas burning gravity heating is desired, the Series G is an outstanding value both from the standpoint of low first cost and low operating cost.



SUNBEAM SERIES G GAS FURNACE
INTERIOR VIEW



CONSTRUCTION FEATURES

1. **HEATING ELEMENT**—highly efficient. Is seamless and constructed of durable heat resisting steel.

2. **RADIATOR**—welded into a seamless unit. Provides long fire travel and additional heating surface.

3. **AIR CIRCULATING SPACE**—air circulates uniformly over the ample heat-radiating surfaces.

4. **BURNER BOX**—constructed of heavy-weight heat-resisting steel. Is easily accessible at all times for burner inspection.

5. **BURNER**—consists of several individual burner heads. Each individual burner mixes its own supply of air and gas for most satisfactory combustion.

6. **INNER LINING**—Spaced one inch inside of casing. Minimizes heat loss

into basement. Securely attached to outer cabinet and will not rattle or cause noise.

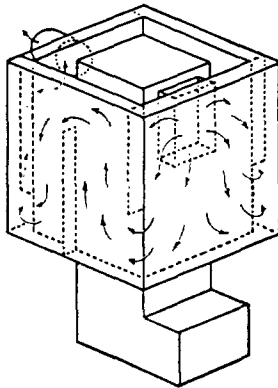
7. **OUTER CABINET**—finished in green crystalline baked enamel. Very attractive in appearance.

8. **PILOT-GENERATOR**—thermocouple type and generates $\frac{1}{4}$ of one volt which is sufficient to operate gas valve. Low voltage current passing through valve and thermostat minimizes wear on parts and pitting of points.

9. **PRESSURE REGULATOR**—maintains uniform gas pressure and constant flame at burner.

10. **GAS VALVE**—is of the electric diaphragm type and is absolutely noiseless. Operated wholly by gas pressures.

HEATING ELEMENT SERIES G



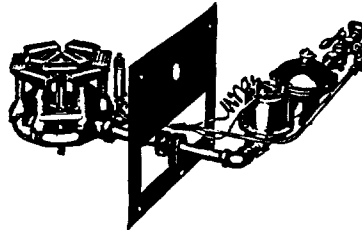
The illustration opposite shows how the products of combustion rise from the burner to the top of the heating element. They next pass through a large outlet at the front, into the upper section of the radiator. The gases divide and are drawn down to the bottom of the radiator where they pass under vertical baffles. They then rise over other vertical baffles and this upward and downward travel is repeated several times until they finally pass into the vent at the rear.

The upward and downward travel of the hot gases caused by the vertical baffles insures that the hot gases uniformly heat all surfaces of the radiator. Thus the greatest amount of useful heat is extracted from the products of combustion.

Heat, which is generally lost by radiation through the bottom of ordinary gas furnaces, is utilized in the SUNBEAM. It pre-heats the gas in the burner manifold and also the air supply before it is admitted to the burner. Thus, in this advanced heating plant, expert designers have drawn on their ingenuity and experience to increase combustion efficiency by utilizing heat that is ordinarily wasted.

BURNER—PILOT—VALVE AND THERMOSTAT SERIES G

Burner—With the SUNBEAM burner the necessary volume of gas is burned in small quantities in several individual burner heads. Each individual burner is complete and independent, has its own separate mixer and spud, draws its individual supply of gas and air, and mixes the combination for the most satisfactory combustion at the burner head. These burners are set at the factory and require no further adjustment. Air shutters are not used.



Pilot—Pilot-Generator acts as a safety pilot. When burning it generates one-fourth of one volt of electricity which is sufficient to operate the gas valve. This extremely low voltage through valve and thermostat minimizes wear on parts and eliminates pitting of points. The thermostatic control system is not wired into, and therefore operates independently of, any of the wiring circuits in the house.

Valve—The gas valve is of the electric diaphragm type and is absolutely noiseless. It is operated wholly by gas pressure above or below the diaphragm in the valve body. Line pressure keeps the valve in a closed position by exerting pressure on the bottom of the diaphragm. Gas is admitted to the top of the valve body and thence to burner, by the pilot electrically operating a small bar that opens a port in the top side of the valve.

Thermostat—This thermostat which is standard equipment with the Series G is of the flush mounting type and very attractive in appearance. The wall plate is of ivory finish. The inset is finished in gold. It has platinum iridium points and is adjustable to within one-half of one degree.



CAPACITIES AND DIMENSIONS—SERIES G

B. T. U. RATINGS

Heater Number	A. G. A. B.T.U. Input per Hour	A. G. A. B.T.U. Output per Hour at Bonnet	Net Available B.T.U. per Hour at Register (Manufacturer)	*Square Inch Ratings
65G	65,000	48,750	41,400	304
80G	80,000	60,000	51,000	375
105G	105,000	75,750	66,900	492
120G	120,000	90,000	76,500	562
150G	150,000	112,500	95,600	703

*SQUARE INCH RATINGS

Square Inches of Basement Pipe Area				Square Inches of Basement Pipe Area				Square Inches of Basement Pipe Area			
Heater Number	First Floor	Second Floor	Total	Heater Number	First Floor	Second Floor	Total	Heater Number	First Floor	Second Floor	Total
65G	373	0	373	105G	602	0	602	150G	861	0	861
	298	50	348		497	70	567		741	80	821
	222	100	322		392	140	532		621	160	781
	147	150	297		286	210	496		500	240	740
	72	200	272		181	280	461		380	320	700
	0	248	248		76	350	426		259	400	659
80G	460	0	460	120G	689	0	689		139	480	619
	385	50	435		599	60	659		19	560	579
	310	100	410		508	120	628		0	572	572
	234	150	384		418	180	598				
	159	200	359		323	240	563				
	84	250	334		238	300	538				
	0	305	305		147	360	507				
					57	420	477				
					0	458	458				

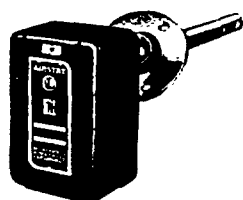
* Sq. in. ratings are based on Standard Code Formula of the National Warm Air Heating and Air Conditioning Association. If the proper combination of sq. inches of pipe is not listed in the above table, select the unit size by converting the sq. in. requirements of the installation into B.t.u. by the following method: Multiply sq. in. requirements of first floor by 111; multiply sq. in. requirements of second floor by 167; add the totals. This grand total will represent the total B.t.u. required at the registers for the installation. Refer to Column 4 of "B.t.u. Ratings" Table and select unit size which has this capacity. Example: sq. in. required for first floor 320 x 111 B.t.u.=35,520 B.t.u. Sq. in. required for second floor 230 x 167 B.t.u.=38,410 B.t.u. 35,520 + 38,410 = 73,930 B.t.u. required at register. Reference to column 4 shows that the No. 120G has the capacity at warm air registers necessary for the installation.

SPECIFICATIONS AND DIMENSIONS

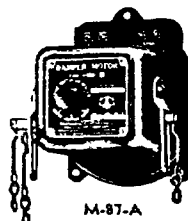
Heater Number	Width	Depth	Height	Vent Size	Gas Supply	Approximate Height from Floor to Center of Horizontal Vent Pipe	Approximate Shipping Weight
65G	28	x 28	x 48 1/4"	4"	1/2"	47 1/4"	210 lbs.
80G	28	x 28	x 48 1/4"	4"	3/2"	47 1/4"	225 lbs.
105G	30	x 31 1/2	x 52"	5"	1/2"	51 1/4"	280 lbs.
120G	32	x 34	x 52"	5"	3/4"	46 3/4"	300 lbs.
150G	36 1/4	x 43 1/4	x 52"	6"	1"	55 1/4"	385 lbs.

* 3/4" if used with 550 B.t.u. gas.

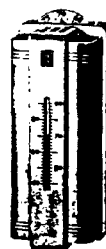
GRAVITY FURNACE ACCESSORIES— TEMPERATURE CONTROL EQUIPMENT



L-119-A



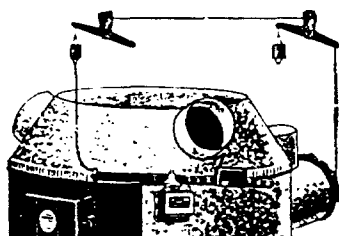
M-87-A



T-45-A

Combination A-1X—Consisting of:

- No. T-45-A—Plain Thermostat—Including 42 feet of 2-wire cable.
- No. M-87-A—Damper Motor—Including transformer, chain, S hooks and pulleys.
- No. L-119-A—Limit Switch (AIRSTAT).



METAPHRAM TEMPERATURE CONTROL— Combination M-X

No. M-504-A—Warm Air Regulator—A self-containing draft and check regulating instrument for gravity warm air furnaces. Installed on the side of furnace just below top casing ring, it automatically closes drafts when bonnet temperature rises too high and opens drafts when bonnet temperature drops too low.

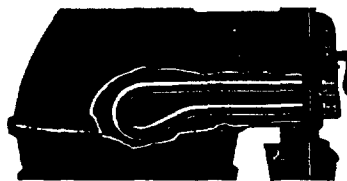
AUTOMATIC DRIP HUMIDIFIER COMBINATION W

This humidifier connects to the water line. A thermostatic element expands and contracts with the temperature in the bonnet to admit more or less water to the evaporating reservoir. Humidifier is placed in bonnet directly above the heating element. The amount of water evaporated by this humidifier is determined by temperature in bonnet.

This humidifier has a manual adjustment to vary flow of water into reservoir and is equipped with an overflow pipe to carry away any excess of water that is not absorbed by the air.



*AUXILIARY WATER HEATER COILS



No. of Coil	For Furnaces	Approx. Shipping Weight
No. 1 x 22" Straight	†No. 1018	6½ lbs.
No. 1 x 24" Straight	†No. 1040, 1044	7 lbs.
No. 1 x 26" Straight	†No. 1048, 1052, 8034, 8034J	7½ lbs.
No. 1 x 30" Straight	No. 1056	8½ lbs.
No. 1 Formed	No. 8024, 822, 824	7½ lbs.
No. 2 Formed	No. 8027, 8030, 827	7 lbs.
No. 3 Formed	No. 8022, 820	6½ lbs.

* In ordering, be sure to specify the size of coil and the furnace to which it is to be connected. For example, No. 1 x 26" Straight Coil for No. 1048 Furnace.

† The same coils are used on both pipe and pipeless furnaces.

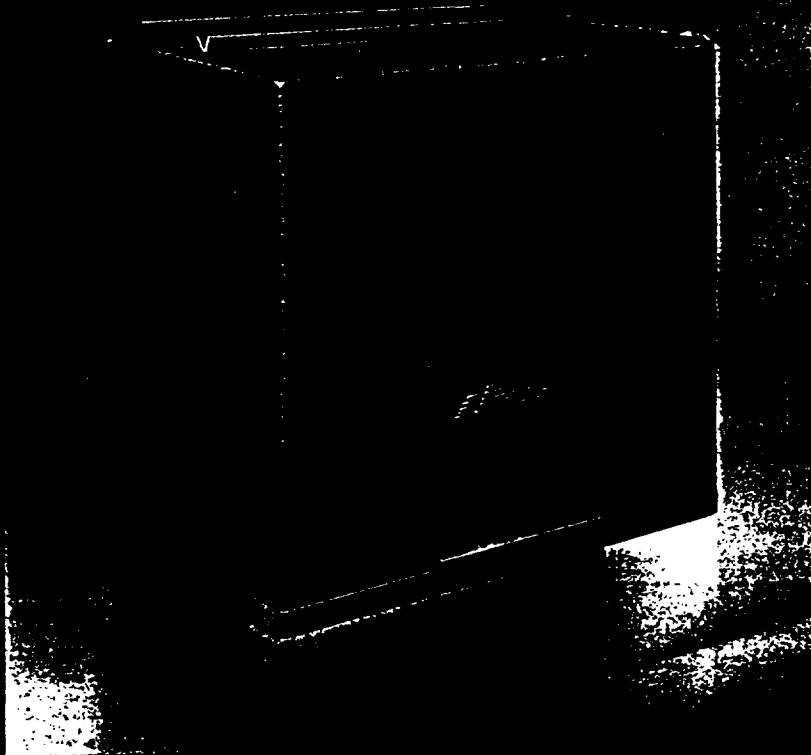


September 1, 1959

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AMERICAN
HEATING EQUIPMENT
COSTS NO MORE THAN OTHERS



Sunbeam Blower-Filter Unit

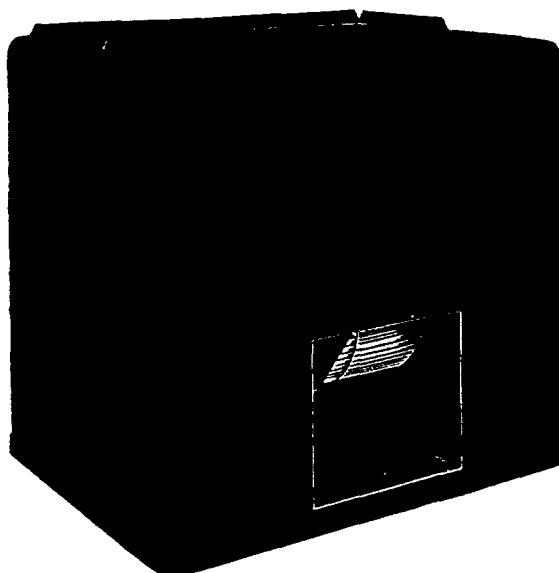
BLOWER-FILTER UNITS

BLOWER-FILTER UNITS

Sunbeam Blower-Filter
Units For Modernizing
Gravity Furnaces

AMERICAN
HEATING EQUIPMENT
COSTS NO MORE THAN OTHERS

SUNBEAM BLOWER-FILTER UNITS



SUNBEAM MODERN BLOWER-FILTER UNITS

SUNBEAM Blower-Filter Units offer owners of gravity furnaces, positive, uniform delivery of warm, clean, filtered air in winter and, in summer, cooling ventilation through the circulation of air. The SUNBEAM Blower-Filter Unit is available complete with blower, motor, pulleys—including adjustable pulley for motor—belt and filters.

THE SUNBEAM-SIROCCO Blower, and the Motor, are specially designed for operation with furnaces and possess a number of outstanding features.

Added to the mechanical superiority of the SUNBEAM Blower-Filter Unit is a handsome, newly designed cabinet. Corners are gracefully rounded. Unsightly bolts and screws are eliminated or concealed. Green crystalline baked enamel gives a most attractive finish. All parts of the heavy, No. 20 gauge cabinet are die cut and formed. Slip joints eliminate the use of screws and provide snug-fitting, air-tight connections.

SURPRISINGLY LOW IN COST

The SUNBEAM Blower handles more air per revolution than any other type of blower. Frequently, the SUNBEAM Blower, with a 12" wheel for example, actually delivers more air than an ordinary blower with a larger wheel—and costs less than the larger blower which also requires more space and consumes more power.

When you select blowers, compare them not on the size of the blower wheel, but on the basis of Certified Ratings or Capacities based on tests made in accordance with the Code of the National Association of Fan Manufacturers and The American Society of Heating and Ventilating Engineers. Hundreds of thrifty heating contractors who purchase on this basis are choosing the SUNBEAM, because its high efficiency makes it one of the most economical blowers that can be obtained.

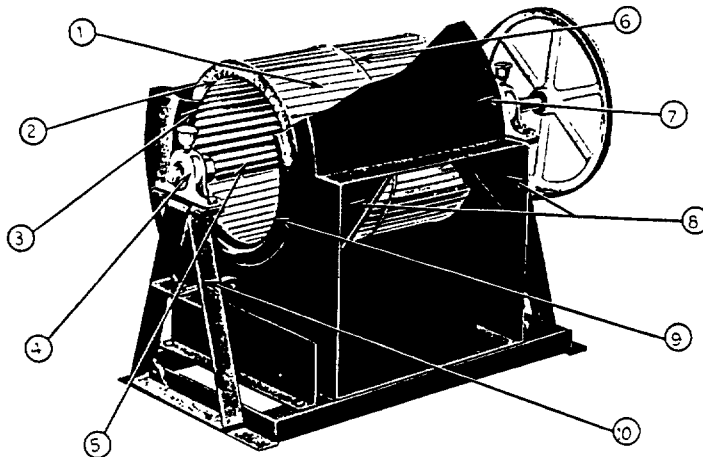
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S 23

September 1, 1939

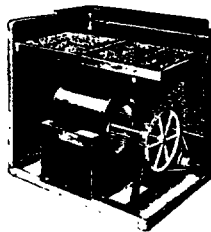
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SUNBEAM BLOWERS



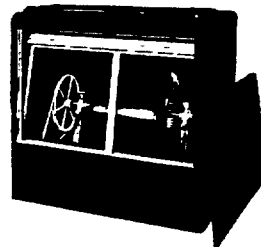
10 REASONS WHY SUNBEAM BLOWERS ARE SUPERIOR

1. **DIE FORMED BLADES**—are curved forward and each one handles a small amount of air which explains why this blower is so quiet and efficient.
2. **BLOWER WHEELS**—sides with slots where blades attach, are die-formed to insure absolute uniformity. Blades are riveted to sides of wheel so they cannot come loose or rattle.
3. **WHEEL AND HOUSING**—wheel revolves within a small fraction of an inch of the housing, so that entering air is drawn immediately into the blades and turbulence and friction are eliminated.
4. **BEARING SOCKET**—is self-aligning. Keeps bearings in alignment at all times, thereby reducing bearing wear and power consumption.
5. **SHAFTS AND BEARINGS**—extra heavy. Large oil reservoirs, which hold several months supply of lubrication insure many years of operation with practically no need for service.
6. **CENTER PLATE**—gives each SUNBEAM Blower the effect of 2 blowers. Reduces air turbulence and friction, and gives better air distribution.
7. **HOUSING IS WELDED**—provides a smooth surface that will not set up any avoidable resistance to the flow of air.
8. **CUT-OFF AT DISCHARGE OUTLET**—a new, patented feature, provides even distribution of the air at all points of the outlet.
9. **STREAM-LINED INLET**—scientifically engineered, and is die-formed. Because of this, the wheel opening is 99% effective in admitting air. Both sides of this DOUBLE-INLET, DOUBLE-WIDTH blower are equipped with stream-lined inlets.
10. **BEARING MOUNTING**—located away from blower wheel so that it offers practically no resistance to air entering blower. Bearings are rubber mounted.



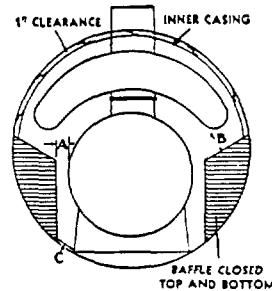
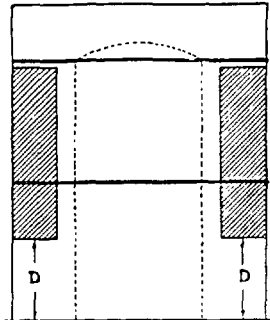
Interior view (at left) showing position of blower, motor and filters. Blower and motor are mounted on an integral, angle iron base which prevents vibration, saves time in aligning pulleys and keeps pulleys in alignment indefinitely. Note large amount of filtering surface, and how vertical row of filters extends to bottom of rear access door at right.

At right is rear view, with access door and vertical row of filters removed. In summer, cool basement air may be drawn through this opening.



SUGGESTIONS FOR BAFFLING GRAVITY FURNACES

Before a blower is connected to a gravity furnace, the heating plant should be baffled to reduce the amount of air circulating area and particularly to bring the air into intimate contact with the furnace heating element. In the illustrations below are given suggestions for properly baffling casings of both the steel and cast iron types of gravity furnaces.



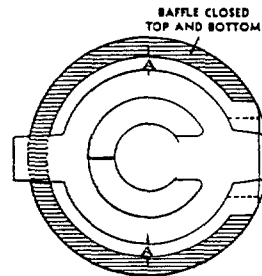
STEEL FURNACE

The sketches above show the top and front views of a steel furnace and how the shaded area should be closed, or baffled, so that no air can circulate through this space. The baffle should extend from the top of the blower outlet to the top of the upper casing sheet. It should be sized in accordance with the table below.

DIAMETER OF DRUM	20"	22"	24"	27"	30"	34"
A	4"	4"	4"	5"	5"	5"
B	3½"	3½"	3½"	4½"	4½"	5"
C	4"	4"	4"	4"	4"	4"
D	14½"	15½"	15½"	15½"	21½"	24½"

CAST IRON FURNACE

The sketch at right shows the top view of a cast iron furnace and how the area close to the casing should be closed, or baffled, so that no air can circulate through this space. The baffle should extend from the top of the blower outlet to the top of the upper casing sheet. The baffle should follow the contour of the radiator, and should be spaced in accordance with the table below.



DIAMETER OF FIRE POT	A	DIAMETER OF FIRE POT	A
16"	3"	26"	3⅝"
18"	3"	28"	3¾"
20"	3"	30"	3¾"
22"	3¼"	32"	4"
24"	3¼"		

All SUNBEAM Blower-Filter Units are equipped with GENUINE SUNBEAM—SIROCCO Blowers, manufactured by the world's largest maker of blowers with more than 50 years of experience.

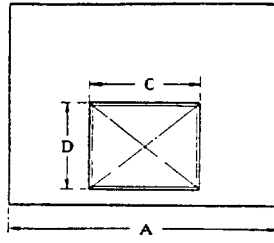
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SUNBEAM BLOWER—FILTER UNITS

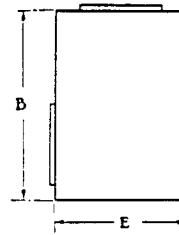
SPECIFICATIONS

No.	Diameter Blower Wheel	Pitch Diameter Blower Pulley	Number of Blowers	* Motor H. P.	Motor R. P. M.	Number of Filters
1-9	9 $\frac{1}{4}$ "	9"	1	$\frac{1}{4}$	1,725	2-(16 x 25")
1-12	12"	12"	1	$\frac{1}{4}$	1,725	4-(20 x 20")
1-15	15"	15"	1	$\frac{1}{2}$	1,725	4-(20 x 20")
1-18	18"	18"	1	$\frac{1}{2}$	1,725	5-(16 x 25")
1-21	21"	18"	1	$\frac{3}{4}$	1,725	6-(16 x 25")

* MOTORS. Motors that are especially designed for use with furnace blowers, are standard equipment. They do not cause radio interference. Each motor is equipped with a special safety device which prevents damage which might be caused by overloading or fluctuations in current.



FRONT ELEVATION



SIDE ELEVATION

DIMENSIONS

No.	A Width	B Height	E Depth	C Width of Air Discharge Opening	D Height of Air Discharge Opening	Return Air Opening
1-9	32"	25 $\frac{1}{4}$ "	26 $\frac{1}{4}$ "	11 $\frac{1}{4}$ "	9 $\frac{1}{4}$ "	25 $\frac{1}{2}$ " wide x 10" deep
1-12	40"	36 $\frac{1}{4}$ "	29 $\frac{1}{2}$ "	14 $\frac{1}{4}$ "	12 $\frac{1}{4}$ "	36 $\frac{1}{2}$ " wide x 14" deep
1-15	48 $\frac{1}{2}$ "	39"	33 $\frac{1}{4}$ "	20 $\frac{1}{4}$ "	15 $\frac{1}{4}$ "	45" wide x 16" deep
1-18	54 $\frac{1}{2}$ "	41"	36 $\frac{1}{4}$ "	24 $\frac{1}{4}$ "	15 $\frac{1}{2}$ "	51 $\frac{1}{4}$ " wide x 20" deep
1-21	58 $\frac{1}{2}$ "	51 $\frac{1}{4}$ "	42 $\frac{1}{2}$ "	28 $\frac{1}{4}$ "	21 $\frac{1}{2}$ "	55" wide x 24" deep

HOW TO DETERMINE SIZES OF BLOWERS NEEDED

The proper size blower for connection to a gravity furnace can be selected in accordance with the information given below when the Standard Code rating in square inches—or the B.t.u. capacity—is known.

Multiply the square inch rating by 2 to obtain C.F.M. (Cubic Feet of Air Per Minute) required. Multiply the B.t.u. capacity (at register) by .011 to obtain C.F.M. (Cubic Feet of Air Per Minute) required.

When C.F.M. is known, refer to tables on following pages and select blower that will provide this C.F.M.

EXAMPLES: 502 square inches x 2 = 1004 C.F.M. No. 1-12 Blower Unit (1008 C.F.M. at $\frac{1}{4}$ " SP., 1460 Tip Speed, 465 R.P.M., 144 B.H.P.)
 177,000 B.t.u. x .011 = 1947 C.F.M. No. 1-15 Blower Unit (1962 C.F.M. at $\frac{1}{4}$ " SP., 1498 Tip Speed, 382 R.P.M., 24 B.H.P.)

SUNBEAM

S 26

September 1, 1939

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BLOWER CAPACITIES *CERTIFIED RATINGS

No. 1-9 BLOWER

Volume CFM	Outlet Velocity FPM	3" SP			4" SP			5" SP			6" SP			8" SP			12" SP		
		Tip Speed	RPM	BHP	Tip Speed	RPM	BHP	Tip Speed	RPM	BHP	Tip Speed	RPM	BHP	Tip Speed	RPM	BHP	Tip Speed	RPM	BHP
584	800	935	386	.016	1130	467	.052	1290	532	.068	1460	603	.085	1817	739	.100	2064	833	.21
648	900	1075	444	.020	1243	513	.080	1394	576	.098	1558	631	.118	1700	750	.122	2105	861	.26
742	1000	1142	471	.028	1298	536	.096	1448	598	.118	1579	652	.140	1817	750	.182	2064	833	.21
816	1100	1200	508	.036	1364	564	.112	1512	624	.140	1635	675	.164	1817	750	.200	2064	833	.21
905	1200	1230	547	.124	1437	594	.140	1575	594	.166	1690	699	.195	1908	788	.24	2105	870	.30
1079	1400	1410	563	.150	1508	623	.166	1623	670	.200	1750	723	.22	1960	810	.28	2150	888	.32
1113	1500	1480	611	.178	1580	653	.200	1690	698	.220	1802	744	.26	2022	835	.32	2197	906	.36
1187	1600	1575	650	.220	1648	680	.240	1758	725	.260	1870	772	.30	2077	856	.36	2260	934	.42
1261	1700	1644	679	.260	1740	720	.280	1833	757	.300	1930	797	.34	2140	884	.40	2313	955	.46
1336	1800	1755	725	.300	1825	754	.320	1893	782	.340	2000	826	.38	2190	905	.44	2373	980	.52

No. 1-12 BLOWER

Volume CFM	Outlet Velocity FPM	3" SP			4" SP			5" SP			6" SP			8" SP			12" SP		
		Tip Speed	RPM	BHP	Tip Speed	RPM	BHP	Tip Speed	RPM	BHP	Tip Speed	RPM	BHP	Tip Speed	RPM	BHP	Tip Speed	RPM	BHP
1008	800	935	298	.062	1130	360	.088	1290	411	.114	1460	465	.144	1817	570	.28	2064	658	.40
1134	900	1075	318	.08	1187	378	.11	1333	424	.138	1480	471	.17	1790	578	.30	2064	658	.40
1260	1000	1075	342	.104	1243	396	.136	1394	444	.168	1528	486	.20	1817	578	.30	2064	658	.40
1386	1100	1142	364	.132	1298	413	.164	1448	460	.20	1579	502	.24	1817	578	.30	2064	658	.40
1512	1200	1230	392	.168	1364	434	.20	1512	481	.24	1635	520	.28	1817	578	.30	2064	658	.40
1638	1300	1325	422	.20	1437	457	.24	1575	501	.28	1690	538	.32	1908	607	.40	2150	683	.56
1764	1400	1410	449	.26	1508	480	.28	1623	517	.32	1750	556	.38	1960	624	.44	2197	699	.62
1890	1500	1430	471	.30	1580	503	.34	1690	538	.38	1802	573	.44	2022	644	.54	2260	720	.70
2016	1600	1575	501	.38	1648	524	.40	1758	559	.44	1870	595	.50	2077	660	.60	2313	756	.88
2142	1700	1644	523	.44	1740	554	.48	1833	583	.52	1930	614	.56	2140	681	.68	2373	808	.88
2268	1800	1660	573	.52	1825	581	.56	1893	602	.60	2000	636	.64	2190	696	.76	2373	808	.88

* CERTIFIED RATINGS—Air Deliveries or Capacities, are in accordance with Standard Test Code for Centrifugal and Propeller Fans adopted jointly by the National Association of Fan Manufacturers and the American Society of Heating and Ventilating Engineers.
NOTE No. 1.—Using capacities below undercurves results in noise being encountered.
SYMBOLS: SP=Static Pressure or Resistance. CFM=Cubic Feet of Air per Minute. FPM=Feet per Minute. RPM=Revolutions per Minute.
BHP=Brake Horse Power or size of Blower Motor.

BLOWER CAPACITIES *CERTIFIED RATINGS

No. 1-15 BLOWER

Volume CFM	Outlet Velocity FPM	1 1/4" SP			1 1/2" SP			1 3/4" SP			2" SP		
		Tip Speed	RPM	BHP	Tip Speed	RPM	BHP	Tip Speed	RPM	BHP	Tip Speed	RPM	BHP
1744	800	914	232	.081	1117	285	.111	1487	379	.21	1818	463	.39
1962	900	971	247	.105	1164	297	.143	1498	382	.24	1905	474	.48
2180	1000	1032	263	.135	1219	310	.18	1522	388	.27	2005	484	.555
2398	1100	1100	280	.165	1271	324	.21	1563	398	.315	2100	535	.63
2616	1200	1168	298	.225	1328	338	.255	1614	411	.36	2185	557	.84
2834	1300	1230	314	.27	1389	354	.315	1660	423	.42	2234	570	.93
3050	1400	1302	332	.33	1445	368	.375	1719	437	.495	2284	582	1.035
3270	1500	1389	354	.405	1518	387	.435	1772	451	.57	2328	593	1.14
3490	1600	1460	372	.48	1580	403	.525	1828	465	.645			
3708	1700	1540	392	.57	1643	418	.615	1880	479	.735			
3925	1800	1640	413	.68	1710	435	.72	1942	495	.825			

No. 1-18 BLOWER

Volume CFM	Outlet Velocity FPM	1 1/4" SP			1 1/2" SP			1 3/4" SP			2" SP		
		Tip Speed	RPM	BHP	Tip Speed	RPM	BHP	Tip Speed	RPM	BHP	Tip Speed	RPM	BHP
2510	800	884	187	.111	1098	233	.150	1455	311	.285	1792	380	.54
2825	900	940	199	.1275	1140	242	.193	1476	318	.315	1804	383	.60
3140	1000	999	212	.1875	1188	252	.24	1501	319	.375	1870	397	.765
3455	1100	1052	223	.24	1222	262	.285	1535	326	.435	1905	404	.855
3770	1200	1110	236	.30	1280	272	.345	1580	336	.495	1945	413	.96
4080	1300	1178	250	.375	1343	285	.42	1630	346	.57	1998	424	1.065
4395	1400	1230	261	.45	1400	297	.51	1673	355	.66	2038	433	1.145
4710	1500	1287	275	.54	1463	310	.615	1720	365	.765	2085	443	1.335
5025	1600	1363	289	.68	1510	320	.72	1768	375	.87	2150	456	1.41
5340	1700	1400	297	.765	1572	334	.855	1812	385	1.035	2196	465	1.56
5650	1800	1481	314	.915	1634	347	.99	1860	399	1.125	2280	484	1.68

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NOTE No. 1.—Using capacities below underscoring results in noise being encountered.
SYMBOLS: SP=Static Pressure or Resistance. CFM=Cubic Feet of Air per Minute. FPM=Feet Per Minute. RPM=Revolutions per Minute.
BHP=Brake Horse Power or size of Blower Motor.

BLOWER CAPACITIES *CERTIFIED RATINGS

No. 1-21 BLOWER

Volume CFM	Outlet Velocity FPM	1" SP			1 1/4" SP			2" SP			3" SP			4" SP		
		Tip Speed	RPM	BHP	Tip Speed	RPM	BHP	Tip Speed	RPM	BHP	Tip Speed	RPM	BHP	Tip Speed	RPM	BHP
3425	800	884	161	.15	1098	200	.225	1278	232	.30	1465	266	.39	1650	297	.48
3850	900	940	171	.195	1140	207	.27	1307	238	.36	1470	267	.45	1650	297	.48
4280	1000	999	181	.255	1188	216	.33	1351	246	.42	1501	273	.51	1650	297	.48
4710	1100	1052	191	.315	1232	224	.39	1390	253	.495	1535	279	.60	1650	297	.48
5135	1200	1110	202	.405	1280	233	.48	1442	262	.57	1580	287	.69	1650	297	.48
5565	1300	1178	214	.51	1343	244	.57	1480	271	.675	1630	296	.78	1650	297	.48
5990	1400	1220	224	.615	1400	254	.69	1540	280	.78	1673	304	.90	1650	297	.48
6420	1500	1297	236	.75	1463	266	.825	1583	290	.915	1720	313	1.035	1650	297	.48
6850	1600	1363	248	.90	1510	274	.975	1650	300	1.065	1768	322	1.185	1650	297	.48
7275	1700	1400	254	1.05	1572	286	1.155	1710	311	1.26	1812	330	1.35	1650	297	.48
7705	1800	1481	268	1.23	1634	297	1.35	1758	320	1.44	1880	342	1.53	1650	297	.48

No. 2-13 BLOWER

Volume CFM	Outlet Velocity FPM	1" SP			1 1/4" SP			2" SP			3" SP			4" SP		
		Tip Speed	RPM	BHP	Tip Speed	RPM	BHP	Tip Speed	RPM	BHP	Tip Speed	RPM	BHP	Tip Speed	RPM	BHP
3458	800	914	162	.165	1117	205	.235	1297	230	.315	1487	260	.42	1687	290	.50
3894	900	971	172	.21	1164	207	.285	1350	235	.375	1548	265	.48	1738	295	.54
4360	1000	1032	182	.27	1219	210	.36	1375	240	.45	1603	270	.54	1790	295	.54
4796	1100	1090	192	.345	1271	224	.435	1424	248	.525	1653	278	.63	1842	295	.54
5232	1200	1168	208	.435	1329	238	.525	1483	258	.615	1703	288	.72	1893	295	.54
5668	1300	1230	214	.54	1389	244	.63	1540	268	.735	1753	292	.84	1944	295	.54
6100	1400	1302	222	.66	1445	254	.735	1590	278	.855	1803	302	.96	2000	295	.54
6540	1500	1389	234	.81	1518	266	.885	1648	292	.99	1872	312	1.10	2051	295	.54
6980	1600	1460	242	.96	1580	274	1.05	1702	302	1.155	1928	312	1.26	2102	295	.54
7410	1700	1540	252	1.14	1643	286	1.23	1767	312	1.335	1980	322	1.44	2153	295	.54
7850	1800	1620	262	1.38	1710	297	1.44	1825	322	1.53	2031	332	1.64	2204	295	.54

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SYMBOLS: SP—Static Pressure or Resistance, CFM—Cubic Feet of Air per Minute, FPM—Feet per Minute, RPM—Revolutions per Minute.
BHP—Brake Horse Power or size of Blower Motor.

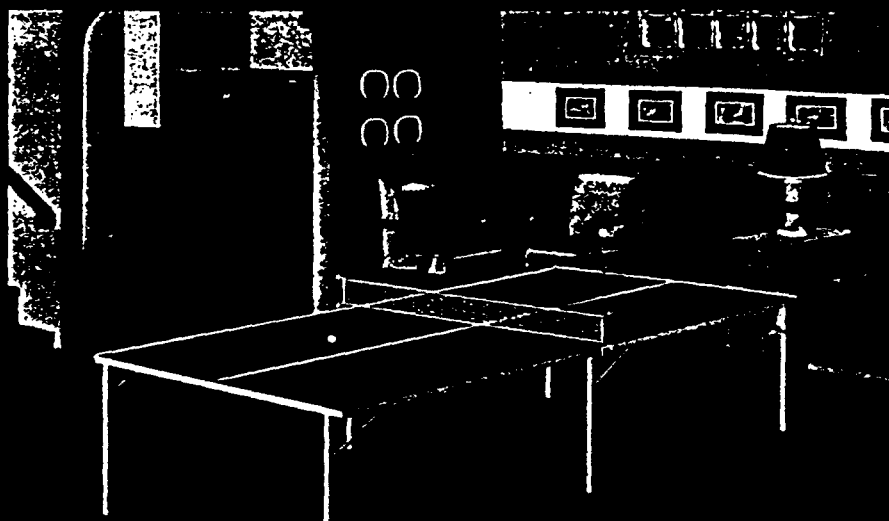
BLOWERS FURNISHED WITH SUNBEAM AIR CONDITIONERS

1-8 BLOWER			1-12 BLOWER			1-15 BLOWER			1-18 BLOWER			1-21 BLOWER			2-15 BLOWER		
Volume CFM	Outlet Velocity FPM	BHP	Volume CFM	Outlet Velocity FPM	BHP	Volume CFM	Outlet Velocity FPM	BHP	Volume CFM	Outlet Velocity FPM	BHP	Volume CFM	Outlet Velocity FPM	BHP	Volume CFM	Outlet Velocity FPM	BHP
5520	85 RB	4420	5520	85 RB	4420	5520	85 RB	4420	5520	85 RB	4420	5520	85 RB	4420	5520	85 RB	4420
5520	70 U	4420	5520	70 U	4420	5520	70 U	4420	5520	70 U	4420	5520	70 U	4420	5520	70 U	4420
700RB	85 U	5220	700RB	85 U	5220	700RB	85 U	5220	700RB	85 U	5220	700RB	85 U	5220	700RB	85 U	5220

September 1, 1939

S 30

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Sunbeam Series No. 1100
Air Conditioning Unit—Oil

AIR CONDITIONING—OIL-DRIVEN UNIT.
BLOWERS, HUMIDIFIERS,
CONTROLS, ETC.

AMERICAN
HEATING EQUIPMENT
COSTS NO MORE THAN OTHERS

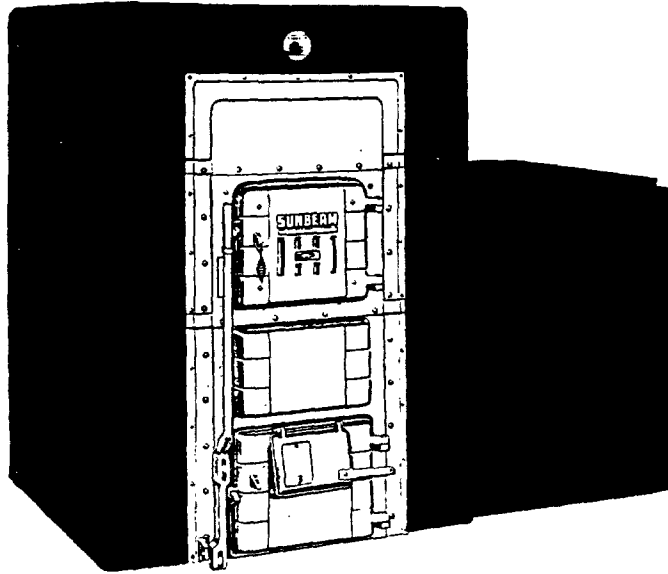
AMERICAN
HEATING EQUIPMENT
COSTS NO MORE THAN OTHERS

Sunbeam Series No. 5500
Air Conditioning Unit
Coal or Oil

Sunbeam Series No. 80
Air Conditioning Unit
Coal or Oil

AIR CONDITIONERS—COAL OR OIL
BLOWERS, HUMIDIFIERS,
CONTROLS, ETC.

SUNBEAM SERIES No. 5500 AIR CONDITIONER
COAL OR OIL



COAL BURNING—HAND FIRED MODEL

The new Series No. 5500 SUNBEAM Air Conditioning Unit supplies the demand for an air conditioner with a steel heating element—at a low price. It measures up to the high SUNBEAM standard in performance, durability and attractive appearance.

The finest of material and equipment are used in its manufacture. It has been designed by the same engineers and is constructed by the same skilled mechanics, who have engineered and built the more expensive SUNBEAM Air Conditioners which have demonstrated their superior quality through many years of actual service in all types of homes in all parts of the country.

The Series No. 5500 is made in Oil Burning models as well as Coal—Hand Fired and Stoker Models. Any standard make of gun type or rotary type oil burner can be accommodated. The attractive cabinet is constructed of No. 20 gauge steel and finished in green crystalline enamel finish.

A galvanized inner casing keeps the outer casing relatively cool. The heavy boiler plate heating element, approximately $\frac{3}{16}$ of an inch thick, is both riveted and welded.

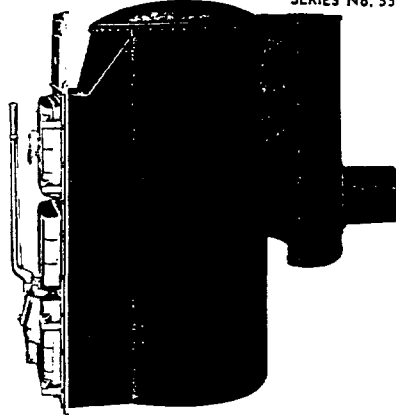
Blower, motor, filters, humidifiers and controls used with this Series No. 5500 are illustrated and described on the last few pages of this index section.



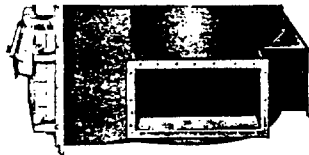
STEEL HEATING ELEMENT SERIES No. 5500

The heating element of the Series No. 5500 is built to merit the reputation for long life, high heating capacity and trouble-free service that has been established by other SUNBEAM Air Conditioners.

It is constructed of heavy boiler plate and is both riveted and welded to permanently withstand the strain of expansion and contraction, and to safeguard against gas leakage. As with other steel units this heating element is constructed in SUNBEAM's new steel fabricating plant at Elyria, Ohio. Modern equipment, skilled workmanship and the use of the finest materials assure long life and trouble-free operation of these heating elements.



STOKER FIRED MODEL SERIES No. 5500



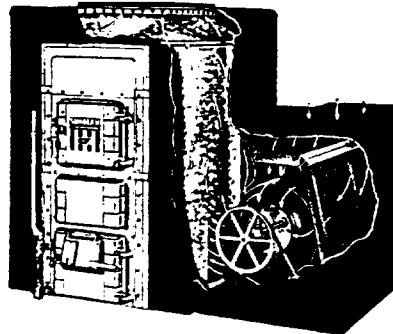
Chute openings are 17" wide by 8 1/2" high. Bottom of opening is 4 1/2" above base of heating element.

Will accommodate any standard make of hopper or bin feed stoker. Heating element is equipped with steel chutes on both sides, and at rear, so that stoker can be installed from front, (through ash pit door) rear or either side without any cutting. Metal covers and gaskets are provided to seal the chutes not used. Bin feed stoker, with screw tube below base of Unit must be installed in the coal hand-fired model. Fire brick lining around fire box section and regular coal burning doors are standard equipment. Grate assembly is omitted.

OIL BURNING MODELS—The Series No. 5500 is available in gun type and rotary type oil burning models. Any standard make of oil burner can be accommodated. When furnished for gun type burner, mineral wool is supplied for insulating the space between the front casting and shell. The insulation is supported and kept in place by a horizontal plate and a liner of heat resisting steel. The rotary oil burner model is furnished with a hearth plate which rests on a cast iron ring held in position by brackets and sealed with asbestos rope. The sides of the heating element are protected from flame impingement by an inner lining of special heat resisting steel. Insulating mineral wool is furnished as in the gun type model.

INNER CASING CONSTRUCTION SERIES No. 5500

In the side of the galvanized inner casing is a large opening which permits most of the air discharged from the blower to pass into the heating compartment. The remainder of the air circulates between the inner and outer casings and keeps the exterior of the cabinet cool. Openings at the top allow the insulating air to join the heated air. Pressure within the heating compartment is equalized through these openings.



SERIES No. 5500—CAPACITIES

No.	Soft Coal Hand Fired		Hard Coal and Coke Hand Fired		Coal Stoker Fired		Oil Fired	
	BTU Capacity at Register	C.F.M. Required at 65° F.	BTU Capacity at Register	C.F.M. Required at 65° F.	BTU Capacity at Register	C.F.M. Required at 65° F.	BTU Capacity at Register	C.F.M. Required at 65° F.
5520	76,000	515	60,000	652	83,000	888	86,000	924
5522	89,000	956	71,000	765	97,000	1041	101,000	1085
5524	104,000	1114	83,000	891	113,000	1213	118,000	1264
5527	132,000	1415	105,000	1132	143,000	1541	149,000	1605

† Air heated from 65° to 165° F. increases 19% in volume. Therefore, warm air ducts should have capacity for 19% greater C.F.M. than listed above.

* See Sunbeam Blower Capacity table for approximate R. P. M. of Blower.

— These sizes are not available in the special stoker-fired Model

BLOWER—MOTOR—FILTER SPECIFICATIONS—SERIES No. 5500

No.	Blower No.	Diameter of Blower Wheel	Pitch Diameter of Blower Pulley	No. of Blowers	Motor H.P.	Number Filters
5520	1-9	9 $\frac{1}{4}$ "	9"	1	$\frac{1}{4}$	2 (16 x 25")
5522	1-12	12"	12"	1	$\frac{1}{4}$	4 (20 x 20")
5524	1-12	12"	12"	1	$\frac{1}{4}$	4 (20 x 20")
5527	1-12	12"	12"	1	$\frac{1}{2}$	4 (20 x 20")

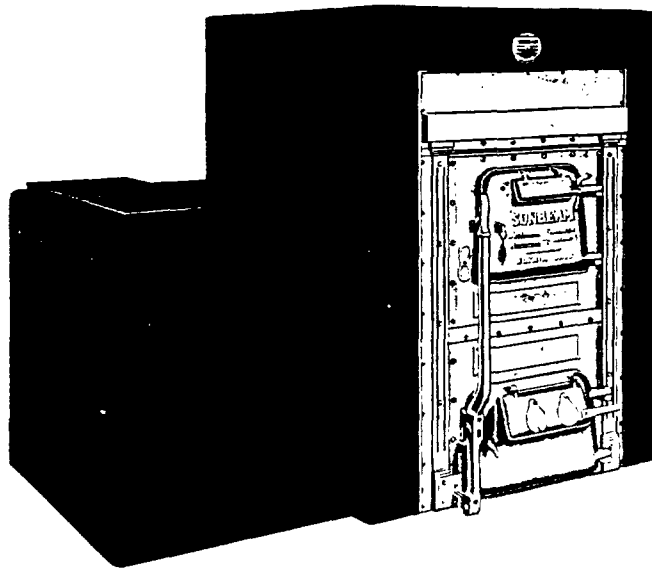
SERIES No. 5500—DIMENSIONS

No.	*Overall Width	Height Heating Compartment	Height Blower Compartment	*Width of Blower Compartment	Overall Depth	Air Discharge Opening	Air Intake Opening	Smoke Collar Diameter	Approx. Distance from Floor to Center of Smoke Collar
5520	65 $\frac{1}{2}$ "	55"	28 $\frac{1}{4}$ "	26 $\frac{1}{2}$ "	38 $\frac{1}{4}$ "	15 x 15"	10 x 28 $\frac{1}{2}$ "	8"	24 $\frac{1}{4}$ "
5522	69 $\frac{1}{2}$ "	55"	36 $\frac{1}{4}$ "	29 $\frac{1}{2}$ "	41"	20 x 20"	14 x 36 $\frac{1}{2}$ "	8"	24 $\frac{1}{4}$ "
5524	73 $\frac{1}{2}$ "	55"	36 $\frac{1}{4}$ "	29 $\frac{1}{2}$ "	43 $\frac{1}{2}$ "	22 x 22"	14 x 36 $\frac{1}{2}$ "	8"	24 $\frac{1}{4}$ "
5527	77 $\frac{1}{2}$ "	61"	36 $\frac{1}{4}$ "	29 $\frac{1}{2}$ "	48 $\frac{1}{2}$ "	23 x 23"	14 x 36 $\frac{1}{2}$ "	9"	24"

* Allow clearance at side equal to width of blower compartment for removal of filters, blower and motor.

SUNBEAM
AIR CONDITIONING

SUNBEAM SERIES No. 80 AIR CONDITIONER
COAL OR OIL



COAL BURNING—HAND FIRED MODEL

The experience of more than half a century in the heating industry, in combination with the resources of the world's largest manufacturers of heating equipment enables the SUNBEAM organization to offer this outstanding air conditioner at a moderate price.

Years of service in thousands of installations have proven the long life and high efficiency of the substantially built steel heating element with which this air conditioner is equipped. Made of heavy weight boiler steel, approximately $\frac{3}{4}$ of an inch thick, and with all seams riveted and welded this heating element provides unusually long life and leak-proof construction from which no gas, fumes, smoke, soot, dirt or dust can escape.

The green crystalline enamel cabinet with its gracefully rounded corners and with all bolts and screws concealed is handsome in appearance.

The Series No. 80 is made in four models; two for coal—hand fired and stoker; two for oil—one for gun type and one for rotary type burners.

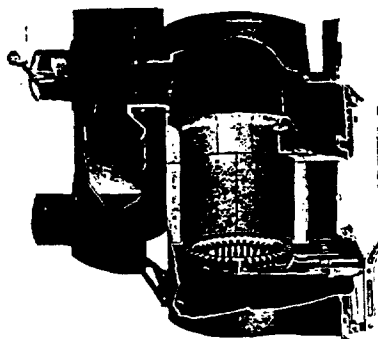
Blower, motor, filters, humidifiers and controls used with the No. 80 Series are illustrated and described on the last few pages of this index section.

STEEL HEATING ELEMENT

SERIES No. 80

The heating element of Series No. 80 is constructed of No. 7 gauge boiler plate steel, with the joints riveted and welded to produce a seamless unit from which no gas, fumes, smoke, soot, dirt or dust can escape. This leak-proof element, in combination with the filters, makes the SUNBEAM the cleanest system available. Because of its generous amount of heating surface and long fire travel, this heating element offers large heating capacity, high efficiency and economical fuel consumption with either oil or coal.

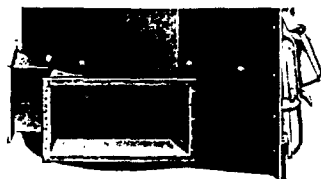
All the steps involved in manufacturing these heating elements are performed in the new SUNBEAM steel fabricating plant which is the most advanced of its kind. Only the most up-to-date and specially designed equipment, is found in this new factory.



Interior view of coal burning hand-fired heating element.

STOKER FIRED MODEL

SERIES No. 80



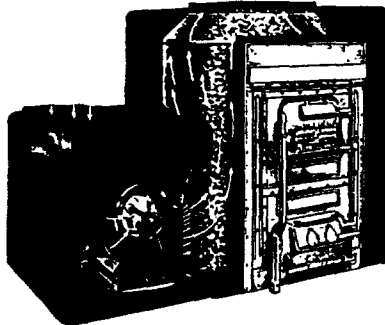
Chute openings are 17" wide by 8½" high. Bottom of opening is 4¼" above base of heating element.

Will accommodate any standard make of hopper or bin feed stoker. The heating element of this model is equipped with steel chutes on both sides, and at rear, so that stoker can be installed from front, (through ash pit door) rear or either side without any cutting on the part of the installer. Metal covers and gaskets are provided to seal the chutes not used. Bin feed stoker, with screw tube below base of Unit must be installed in the coal hand-fired model. Fire brick lining around fire box section and regular coal burning doors are standard equipment. Grate assembly is omitted.

INNER CASING CONSTRUCTION

SERIES No. 80

The casing construction of the Series No. 80 is similar to that of the Series No. 5500. In the side of the galvanized inner casing is a large opening which permits most of the air discharged from the blower to pass into the heating compartment. The remainder of the air circulates between the inner and outer casings and keeps the exterior of the cabinet cool. Openings at the top allow the "insulating" air to join the heated air. Pressure within the heating compartment is equalized through these openings.



SUNBEAM
AIR CONDITIONING

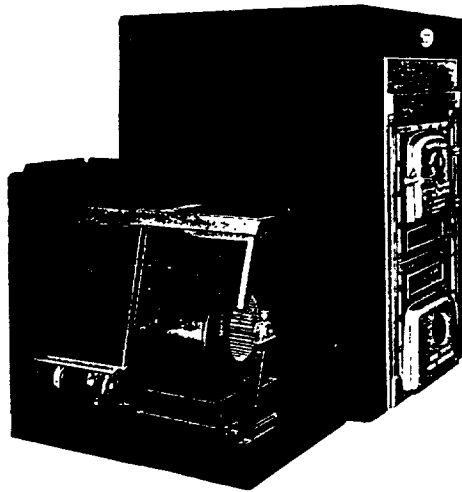
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OIL BURNING MODELS

SERIES No. 80



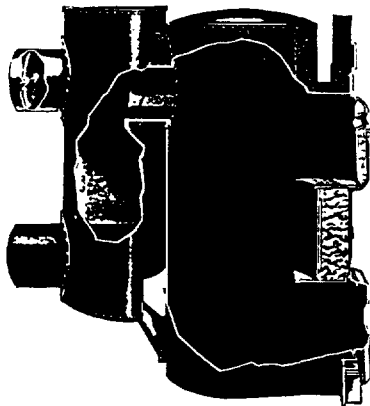
GUN TYPE OIL BURNER MODEL

The Series No. 80 is available in gun type and rotary type oil burning models. Any standard make of oil burner can be accommodated.

Special equipment which is furnished with the gun type model is illustrated and described below. When the Series No. 80 is furnished for rotary oil burners, the heating element is equipped with a hearth plate which rests on a cast ring held in position by brackets and sealed with asbestos rope. The sides of the heating element are protected from flame impingement by an inner lining of special heat-resisting steel. Insulating mineral wool is furnished as in the gun type model.

HEATING ELEMENT

GUN TYPE OIL BURNER MODEL



This model is designed for gun type oil burners. The feed or upper door is insulated, and equipped with a glass-covered observation opening. The air tube of the burner is inserted through the opening in the lower door. The base is welded to the sides of heating element forming an air-tight union through which no oil or fumes can escape.

Mineral wool is provided to insulate the space between the front casting and the front inner lining, and the upper and lower doors. It rests on a horizontal plate installed above the lower door and is held in position by a liner of heat-resisting steel, as illustrated.

SUNBEAM
AIR CONDITIONING

S 36

September 1, 1939

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SERIES No. 80—CAPACITIES

No.	Soft Coal Hand Fired		Hard Coal and Coke Hand Fired		Coal Stoker Fired		Oil Fired	
	BTU Capacity at Register	*C.F.M. Required at 65° F.	BTU Capacity at Register	*C.F.M. Required at 65° F.	BTU Capacity at Register	*C.F.M. Required at 65° F.	BTU Capacity at Register	*C.F.M. Required at 65° F.
2280	102,000	1022	81,000	873	111,000	1139	115,000	1233
2480	116,000	1245	93,000	996	126,000	1356	131,000	1412
2780	145,000	1556	116,000	1245	158,000	1694	164,000	1765
3080	172,000	1850	138,000	1480	188,000	2015	195,000	2099
3480	220,000	2366	176,000	1893	240,000	2585	250,000	2692

‡ Air heated from 65° to 165° F. increases 19% in volume. Therefore, warm air ducts should have capacity for 19% greater C.F.M. than listed above.

* See Sunbeam Blower Capacity table for approximate R.P.M. of blower.

† This size of Unit is not available in the special Stoker-Fired Model.

BLOWER—MOTOR—FILTER SPECIFICATIONS—SERIES No. 80

No.	Blower No.	Diameter of Blower Wheel	Pitch Diameter of Blower Pulley	No. of Blowers	Motor H.P.	Number Filters
2280	1-12	12"	12"	1	1/4	4 (20 x 20")
2480	1-12	12"	12"	1	1/4	4 (20 x 20")
2780	1-15	15"	15"	1	1/2	4 (20 x 20")
3080	1-18	18"	18"	1	1/2	5 (16 x 25")
3480	1-18	18"	18"	1	1/4	5 (16 x 25")

SERIES No. 80—DIMENSIONS

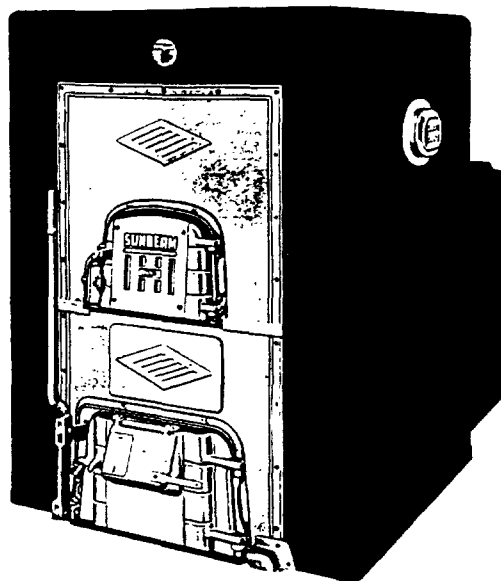
No.	Overall Width	Height Heating Compartment	Height Blower Compartment	*Width of Blower Compartment	Overall *Depth	Air Discharge Opening	Air Intake Opening	Smoke Collar Diameter	Approx. Distance from Floor to Center of Smoke Collar
2280	73 1/2"	60"	36 1/4"	29 1/2"	43 1/8"	20 x 20"	14 x 36 1/2"	9"	41 1/4"
2480	75 1/2"	60"	36 1/4"	29 1/2"	46 1/8"	22 x 22"	14 x 36 1/2"	9"	41 1/4"
2780	80 1/4"	67"	39"	33 3/4"	51 1/8"	25 x 25"	16 x 45"	10"	43 1/8"
3080	91 3/8"	67"	41"	36 1/8"	54 1/8"	27 x 27"	20 x 51 1/4"	10"	44 1/4"
3480	95 3/8"	67"	41"	35 1/8"	58 1/2"	32 x 32"	20 x 51 1/4"	10"	45 1/4"

* Smoke Pipe Tee extends out approximately 28" additional in Nos. 2280 and 2480, and 36" in larger sizes.

* Allow clearance at side equal to width of blower compartment for removal of filters, blower and motor.

SUNBEAM
AIR CONDITIONING

SUNBEAM SERIES No. 20 AIR CONDITIONER
COAL BURNING



SERIES No. 20

The Series No. 20 meets the demand of the average home owner who desires the benefits of air conditioning and is seeking a moderately priced unit to install in a new home or to replace an inefficient furnace.

The features of this unit are such as you would expect to find in a product manufactured by the world's largest makers of heating equipment. The heating element is constructed of heavy, durable cast iron. Many years of experience have proven its ruggedness and long life. A galvanized inner casing is provided to increase efficiency and reduce heat loss into the basement.

The modern cabinet—with its rounded corners, (bolts and screws being eliminated), and green crystalline enamel finish—possesses a rich beauty seldom found in moderately priced units

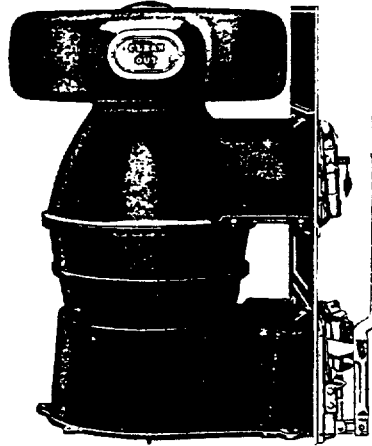
Blower, motor, filters, humidifiers and controls used with this Series No. 20 are illustrated and described on the last few pages of this index section.

HEATING ELEMENT SERIES No. 20

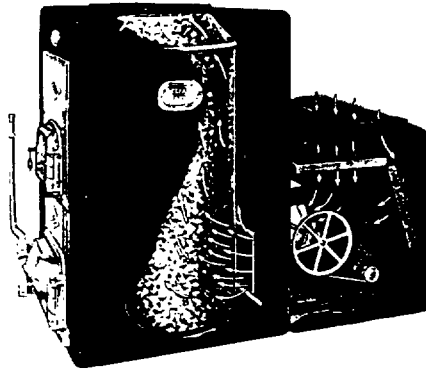
The heating element of the Series No. 20 has been designed to give the home owner three vital advantages; ample capacity, high efficiency and years of trouble-free operation. A large area of heating surface has been incorporated in its modern design without restricting the free circulation of air. It extracts the greatest amount of heat from the fuel.

This heating element has none of the objectionable, vertical joints through which gas and dust might escape. The deep fire-pot holds a large bed of fuel thus lengthening the firing periods. Ashes cannot accumulate against its steep sides. Joints are deeply cupped to assure a leak proof union.

The iron used in the construction of this heating element is the famous "Sunbeametal", a special type of furnace iron found exclusively in SUNBEAM products. Many years of experience have proved its ruggedness and long life.



INNER CASING CONSTRUCTION SERIES No. 20



Interior View showing the inner casing and the air travel within the unit.

Arrows indicate the air delivered inside of the inner casing and the circulation of "insulating" air between inner and exterior casing.

The inner casing of galvanized iron surrounds the heating element and brings the air into intimate contact with the heat radiating surfaces.

Most of the air which is drawn into the unit is forced by the blower through the opening in the inner casing, where it is warmed by the heating element. However, a space provided between

the outlet of the blower and the opening in the inner casing, allows part of the air to circulate between the inner and outer casings to keep the exterior of the cabinet cool. This "insulating" air joins the warm air through the round openings at the top of the inner casing. These openings also allow pressure within the heating compartment to equalize.

CAPACITIES—SERIES No. 20

No.	Coal Hand Fired		Coal Stoker Fired		Oil Fired	
	BTU Capacity at Register	±C.F.M. Required at 65° F.	BTU Capacity at Register	±C.F.M. Required at 65° F.	BTU Capacity at Register	±C.F.M. Required at 65° F.
4420	95,000	1020	104,000	1111	108,000	1158
4820	111,000	1195	121,000	1301	126,000	1356
5220	133,000	1426	145,000	1553	150,000	1613
5620	153,000	1644	167,000	1790	173,000	1865

† Air heated from 65° to 165° F. increases 19% in volume. Therefore, warm air ducts should have capacity for 19% greater C. F. M.

SERIES No. 20—BLOWER—MOTOR—FILTER SPECIFICATIONS

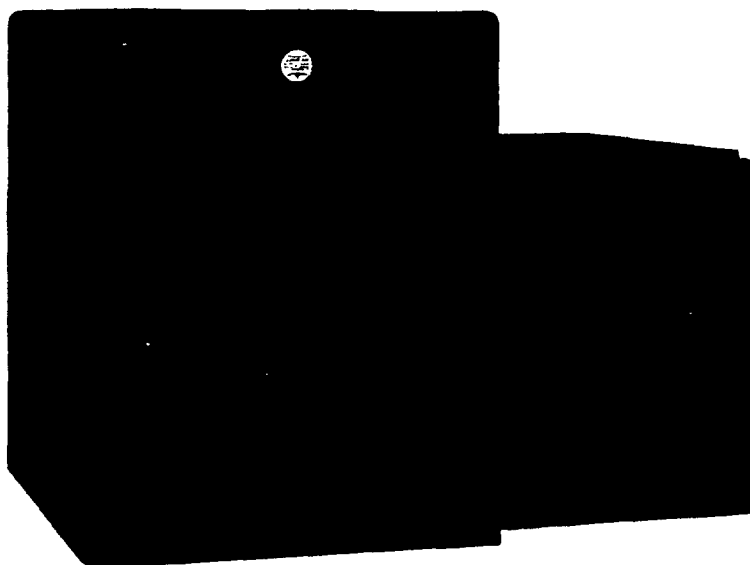
No.	Blower No.	Diameter of Blower Wheel	Pitch Diameter of Blower Pulley	Number of Blowers	Motor H. P.	Motor R.P.M.	Number Filters
4420	1-12	12"	12"	1	$\frac{1}{4}$	1725	4 (20 x 20")
4820	1-12	12"	12"	1	$\frac{1}{4}$	1725	4 (20 x 20")
5220	1-12	12"	12"	1	$\frac{1}{4}$	1725	4 (20 x 20")
5620	1-12	12"	12"	1	$\frac{1}{4}$	1725	4 (20 x 20")

DIMENSIONS—SERIES No. 20

No.	Overall Width	Height Heating Compartment	Height Blower Compartment	*Depth of Blower Compartment	*Overall Depth	Air Discharge Opening	Air Intake Opening	Smoke Collar Diameter	Approximate Distance from Floor to Center of Smoke Collar
4420	44 $\frac{1}{8}$ "	60"	36 $\frac{1}{4}$ "	29 $\frac{1}{2}$ "	67 $\frac{1}{8}$ "	20 x 20"	14 x 36 $\frac{1}{2}$ "	9"	45 $\frac{3}{4}$ "
4820	46 $\frac{1}{8}$ "	60"	36 $\frac{1}{4}$ "	29 $\frac{1}{2}$ "	71 $\frac{1}{8}$ "	22 x 22"	14 x 36 $\frac{1}{2}$ "	9"	45 $\frac{3}{4}$ "
5220	52"	64"	36 $\frac{1}{4}$ "	29 $\frac{1}{2}$ "	75 $\frac{1}{8}$ "	23 x 23"	14 x 36 $\frac{1}{2}$ "	10"	49 $\frac{3}{4}$ "
5620	56"	64"	36 $\frac{1}{4}$ "	29 $\frac{1}{2}$ "	78 $\frac{1}{8}$ "	24 x 24"	14 x 36 $\frac{1}{2}$ "	10"	49 $\frac{3}{4}$ "

* Allow clearance in rear equal to depth of blower compartment for removal of filters, blower and motor.

**SUNBEAM SERIES No. 1100 AIR CONDITIONER—
OIL BURNING**



SERIES No. 1100

The SUNBEAM Series No. 1100 represents the achievement of skilled SUNBEAM engineers whose aim has been to produce an integral, coordinated oil burning unit with the durability, efficiency and attractiveness that characterizes other SUNBEAM products, and which would, at the same time, be moderate in price.

The SUNBEAM Oil Burner which is coordinated with the No. 1100 Series is of the pressure type. One of its outstanding features is its simplicity in design and construction. There are only four main assemblies. All parts and all adjustments are conveniently accessible, making installation and service a simple matter.

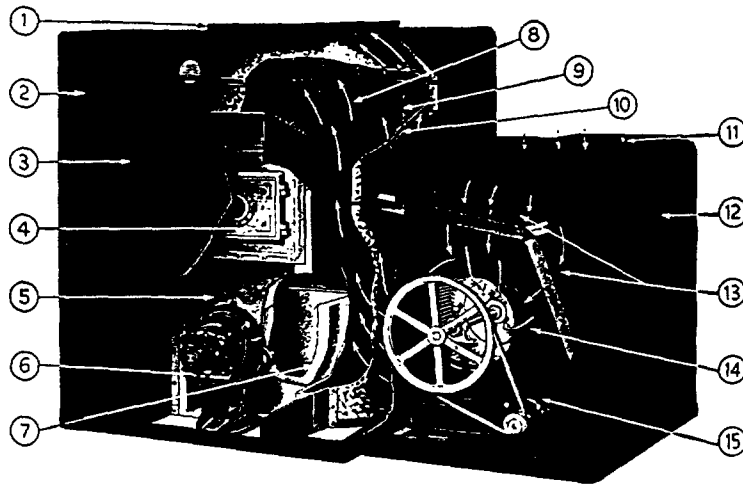
Today, home owners demand air conditioning. They also demand automatic heat. The Series No. 1100 offers both air conditioning—warm, filtered, humidified and circulated air—and carefree automatic oil heat, at a price that is most acceptable to the home owner.

The Series No. 1100 is made in six sizes with capacities from 101,000 to 331,000 B.t.u. per hour at register.

Blower, motor, filters, humidifiers and controls used with this Series No. 1100 are illustrated and described on the last few pages of this index section.



SUNBEAM SERIES No. 1100 AIR CONDITIONER
INTERIOR VIEW



CONSTRUCTION FEATURES

1. DISCHARGE—conditioned air passes through this opening to circulating air ducts.

2. EXTERIOR CABINET—constructed of No. 20 gauge steel. All parts are die cut and formed and are connected by interlocking slip-joints assuring ease of assembly and unusually air-tight seams. Pleasing proportions, rounded corners, the absence of exterior screws, and fine grained, green crystalline baked enamel finish give this Unit an outstanding appearance.

3. CABINET DOOR—conceals, and also gives convenient access to, heating element and oil burner.

4. ACCESS DOOR—has glass covered observation opening for observing combustion.

5. BURNER POUCH—welded to heating element. Simplifies assembly and permanently seals the combustion chamber.

6. OIL BURNER—is coordinated with air conditioner. Efficient, dependable, and quiet in operation. Simple to service.

7. PRE-CAST FIRE BOX—specifically designed for Series No. 1100. Fits easily and snugly into place.

8. HEATING ELEMENT—made of heavy Boiler Plate steel, with seams riveted and welded.

9. RADIATOR—extra large to provide unusually long fire travel and additional heating surface. Seams are welded leak-proof.

10. INNER CASING—of galvanized iron; increases efficiency, minimizes heat loss into the basement and keeps cabinet relatively cool.

11. INTAKE—air drawn from the rooms passes through this opening into blower compartment.

12. BLOWER COMPARTMENT DOOR—gives access to blower, motor and filters. Can be removed in summer so that cool basement air will be circulated.

13. FILTERS—effectively remove dust, dirt and other foreign matter from the air. Large filter area is provided. Filters are so arranged that basement air will be filtered when drawn into the unit for cooling ventilation.

14. BLOWER—of double-inlet type with large air-handling capacity. Unusually quiet.

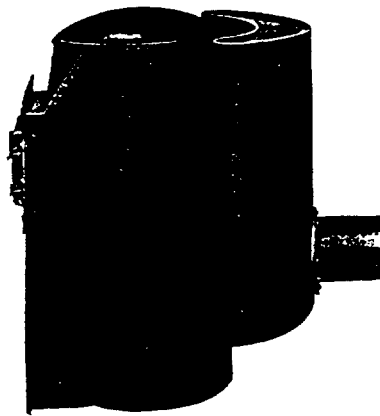
15. MOTOR—many features assure silent operation. Does not cause radio interference.

STEEL HEATING ELEMENT

SERIES No. 1100



Rear view of heating element of No. 1124 with a section of the radiator removed to show the fuel conserving baffle. Note extra large heating surface of radiator.



Side view of heating element of the No. 1124. The drum is No. 8 gauge steel with No. 7 gauge head and is riveted and welded. The radiator is of No. 12 gauge steel, welded.

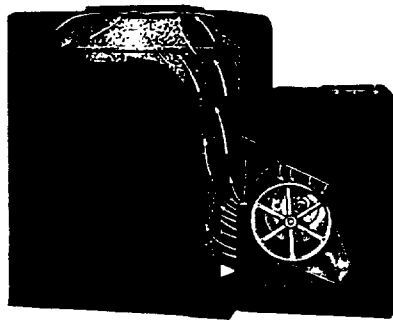
The heating element of the Series No. 1100 is designed exclusively for the efficient and economical burning of oil. The sides of the heavy, boiler plate steel drum transmit the heat quickly to the circulating air yet will resist indefinitely the action of high temperatures and the effect of frequent contraction and expansion caused by intermittent firing.

The extra large radiator, which is baffled, affords increased heating surface and unusually long fire travel. The maximum amount of useful heat is extracted from the products of combustion before gases reach the flue.

To the front of the drum is welded a steel burner pouch, in which is the opening for the burner blast tube. Since this burner pouch is a part of the heating element, assembly is simplified and the combustion chamber is permanently sealed.

INNER CASING CONSTRUCTION

SERIES No. 1100



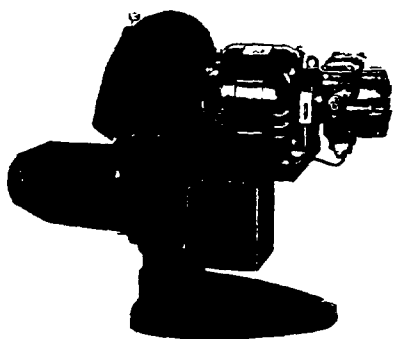
The inner casing, made of galvanized iron, surrounds the heating element and serves the dual purpose of bringing the air into close contact with the heating element and of keeping the outer cabinet cool.

Most of the air returned to the unit passes inside the inner casing through an opening provided directly opposite the blower outlet. A sufficient quantity of air from the blower is, however, diverted to the space between the inner and outer casings and, traveling upward, joins the heated air in the plenum, through a series of holes in the top of the inner casing.

In this manner, the surface of the inner casing is exposed to two currents of air; one moving within

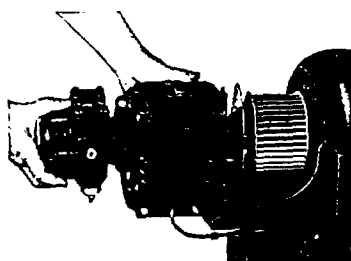
the inner casing, the other between the inner and outer casings. As a result practically no heat is lost. Since the air circulating between the inner and outer casings is of a low temperature the cabinet is relatively cool.

SUNBEAM OIL BURNER



The SUNBEAM Oil Burner is a pressure type scientifically engineered, and is coordinated with the Series No. 1100. Rigid and exhaustive tests made in the SUNBEAM Laboratory under severe conditions have proven the ability of this burner to operate silently and with a minimum consumption of fuel. Precision workmanship and the use of carefully selected materials result in substantial construction and trouble-free performance.

One of the outstanding features of the SUNBEAM is its simplicity. There are only four main assemblies: (1) Cushioned Power Unit Assembly; (2) Ignition Transformer Assembly; (3) Nozzle Line and Electrode Assembly; (4) Burner Chassis Assembly. All parts and all adjustments are conveniently accessible, making installation and service a simple matter. The Burner Chassis is attractively streamlined, and is finished in a beautiful shade of green hammerloid enamel.



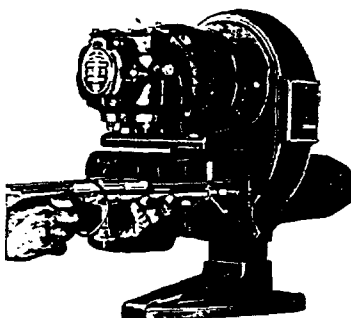
CUSHIONED POWER UNIT

Burner Motor, Fuel Unit and Fan comprise one complete assembly which is cushioned in rubber. Positively eliminates vibration.



FINGER-TIP CONTROL

Convenient knob for adjusting proper amount of air for combustion. Is tamper proof, locking in place with Allen set screw.



NOZZLE LINE AND ELECTRODE ASSEMBLY

Spring contacts make automatic connection with ignition transformer terminals. High tension cables are eliminated. Electrode tips will not burn away nor cause delayed ignition.



AIR SUPPLY SHUTTER

Instantly responsive to Burner Air Requirements . . . opens and closes automatically, thus conserving heat. Simple—effective—foolproof.

SERIES No. 1100—CAPACITIES

Number	†Oil Burner Input G.P.H.	Maximum BTU Capacities at Register	*Maximum C.F.M. Required at 65° F.	*Approximate Blower R.P.M. at ½" S.P.
1120	1.0	101,000	1,083	467
1124	1.5	151,000	1,624	354
1127	2.0	201,000	2,165	302
1134-½-18	2.5	240,000	2,550	311
1134-¾-18	3.0	285,000	3,050	314
1134-¾-21	3.5	331,000	3,500	266

* Air heated from 65° to 165° increases 19% in volume. Therefore warm air ducts should have capacity for 19% greater C.F.M. than listed above.

† Combustion rate of oil burner must conform to the heating requirements of the installation. Ratings based on oil having a calorific value of 140,000 B.t.u. per gallon. Minimum input of burner must not be less than one gallon per hour.

BLOWER—MOTOR—FILTER SPECIFICATIONS—SERIES No. 1100

Number	Diameter of Blower Wheel	No. of Blowers	Motor H.P.	Motor R.P.M.	Number Filters
1120	12"	1	¼	1725	4 (20 x 20")
1124	15"	1	½	1725	4 (20 x 20")
1127	18"	1	¾	1725	5 (16 x 25")
1134-½-18	18"	1	¾	1725	5 (16 x 25")
1134-¾-18	18"	1	¾	1725	5 (16 x 25")
1134-¾-21	21"	1	¾	1725	6 (16 x 25")

SERIES No. 1100—DIMENSIONS

Number	*Overall Width	†Overall Depth	Height Heating Compartment	Height Blower Compartment	Air Discharge Opening	Air Intake Opening	Approximate Distance from Floor to Center of Flue Outlet	Flue Vent Size Diameter
1120	67"	52¼"	58"	36¼"	20 x 20"	14 x 36¼"	24¼"	8"
1124	79¼"	59"	58"	39"	22 x 22"	16 x 45"	17½"	8"
1127	84½"	57½"	61"	41"	23 x 23"	20 x 51½"	26⅞"	9"
1134-½-18	94½"	68½"	68"	41"	32 x 32"	20 x 51½"	32⅞"	10"
1134-¾-18	94½"	68½"	68"	41"	32 x 32"	20 x 51½"	32⅞"	10"
1134-¾-21	100½"	68½"	68"	51¼"	32 x 32"	24 x 55"	32⅞"	10"

* Allow 2 Feet at side of blower compartment for removal and replacement of filter.

† Allow 2 Feet in front for opening of doors.



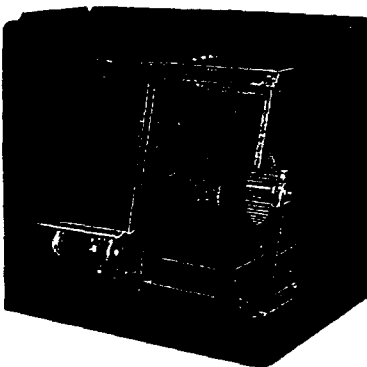
BLOWERS, MOTORS, FILTERS AND HOT WATER COILS

FOR SERIES Nos. 5500-80-20 AND 1100

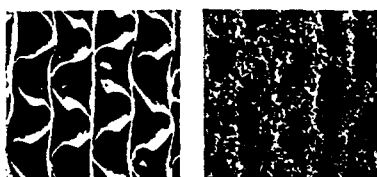
BLOWERS

SUNBEAM Sirocco blowers are large, powerful and silent. They operate at low speeds, consuming a minimum of current, and move a large volume of air at low velocities, and at comparatively low temperatures. The blower and motor are securely mounted on an integral rigid angle iron frame which prevents vibration. Because of this integral base, pulleys are quickly and easily aligned and remain in alignment indefinitely. Blowers are equipped with rubber mounted, self-aligning bearings.

Motors are specially designed for air conditioning installations; will not cause radio interference and are equipped with a special device which protects them against damage caused by overloading.



AIR FILTERS



Section of a clean Sunbeam Filter.

A similar section of a filter after a few months in use.



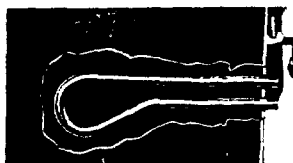
Cross section of filter showing efficient "V" angle construction.

The capacity of SUNBEAM filters to hold more dirt, dust, soot, lint, pollen and bacteria—and thus their longer life—is due to the "V" angle construction and to the fact that they can be treated with an unusually large amount of adhesive coating without filling up the passages through which the air must circulate. The accompanying illustration shows the advantages of the "V" angle construction. The air must "turn a corner" in the center of the filters. This turbulence causes all of the air to be wiped against the ample adhesive surfaces of the bottom section, thus removing a maximum of foreign matter. The openings in the top section are larger than those in the bottom section in order to give uniform distribution of dirt particles throughout the depth of the filter.

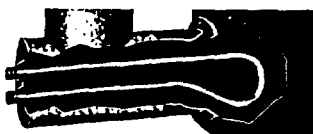
AUXILIARY HOT WATER COILS

Auxiliary hot water coils are available for installation in Series Nos. 20, 80, 5500 and 1100. These coils will furnish much, if not all, of the hot water required in a home, during the winter months when the SUNBEAM is under fire. A durable corrosion-resisting metal is used in their construction. There are no joints which might leak, as the coils are formed of one continuous pipe. In the Series Nos. 20, 80 and 5500, these auxiliary hot water coils are installed through openings provided in the front of heating element beside the fire door. Illustrated at right above.

In installing the auxiliary hot water coils in the Series No. 1100, a special plate replaces the cleanout cover in the smoke tee and the coil is installed as illustrated at right.



Hot water coil installed in 80 Series



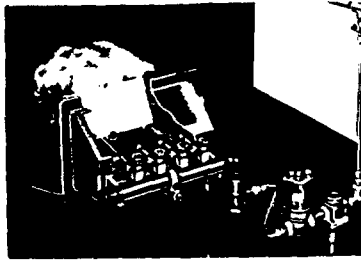
Hot water coil installed in 1100 Series

HUMIDIFIERS—ZONE CONTROL

FOR SERIES Nos. 5500-80-20 and 1100

SPRAY HUMIDIFIER

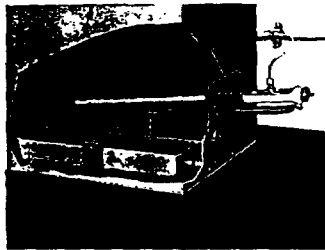
This new type of spray humidifier, automatically controlled by a room humidistat, has proven its ability to properly humidify the air even in those sections where salts, lime, and "hard" water prevent the functioning of other types of humidifiers. When one nozzle does clog, it is turned off and the next one turned on, until all are clogged. All the nozzles are cleaned at one time, in a few minutes. Cleaning is needed only a few times during a heating season.



While this humidifier has the capacity to supply satisfactory relative humidity, it also possesses another desirable feature. The amount of water atomized can be adjusted to the air's ability to absorb moisture—and thus prevent condensation in plenum chamber—by changing the position of atomizing plate. A Humidistat controls the solenoid valve in the water line and automatically controls relative humidity just as the thermostat automatically controls temperature. The solenoid valve is wired so that when Humidistat calls for moisture the solenoid valve cannot open unless blower is running. The blower cannot run unless heat is available in bonnet. Therefore, moisture is never introduced unless there is heat and air movement to absorb and carry away moisture.

The Humidistat is adjustable and can be set to maintain any desired relative humidity.

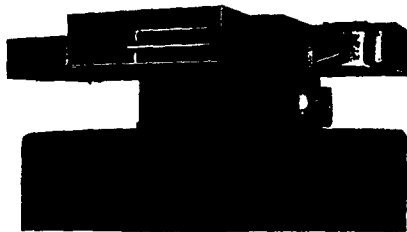
DRIP HUMIDIFIER



This apparatus connects to the water line. A thermostatic element expands and contracts with the temperature in bonnet to admit more or less water to the evaporating reservoir. Humidifier is placed directly above the heating element. The amount of water evaporated by this humidifier is determined largely by temperature in unit and not by humidity requirement of living quarters. Humidifier has manual adjustment to vary flow of water into reservoir.

ZONE CONTROL OF TEMPERATURE

In houses of many rooms, or in houses of the rambling type, it is generally difficult to maintain an even, uniform temperature in all rooms, whether the heating medium be air or water or steam, when the entire building is controlled by only one thermostat. Zone Control overcomes this difficulty. The house is divided into zones—two or more. A thermostat is placed in one of the rooms in each zone. A Trunk Line or Main Duct with branches leads directly from the SUNBEAM Air Conditioning Unit to each zone. A Damper which is operated by a motor is installed in each main duct. When a zone thermostat calls for heat, the duct damper motor opens the damper in the duct which it controls, turns on heat source and blower. When the thermostat is satisfied it closes the damper which it controls, turns off heat source and blower.



SUNBEAM
AIR CONDITIONING

CONTROL EQUIPMENT

FOR SERIES Nos. 5500-80-20 AND 1100

Temperature Control Equipment, for any degree of regulation that may be desired by any home owner, is available with SUNBEAM Air Conditioning Units. Control combinations are provided for oil or coal, hand fired or stoker fired. Where the simplest kind of regulation is wanted or where very sensitive regulation is wanted this equipment will provide it most satisfactorily and economically. The individual instruments, which are included in the various combinations, are generally considered the finest available. The proper combination of controls for each and every temperature regulation job is listed in the Price Lists for Series No. 20, No. 80, No. 5500 and No. 1100 SUNBEAM Air Conditioning Units.



No. T-45-A,
No. T-11-A and
No. T-21-A
Plain Thermostat



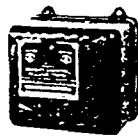
No. T-105-A and
No. 203-A Night and
Day Electric Clock
Thermostat



No. H-8
Humidistat



No. V-63
Solenoid Water Valve



No. R-155-A
Control Box



No. M-57-A
Damper Motor



No. R-19-A
Relay



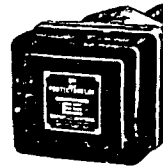
No. L-101-B
Blower, Limit and High
Cut-in Switch



No. L-101-A
Blower and Limit Switch



No. L-420-A and No. L-401-B
Blower Switch

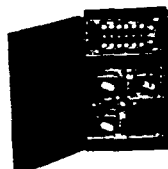


No. R-116-A Stack Control
(Protectorelay)

INSTRUMENTS FOR ZONE CONTROL



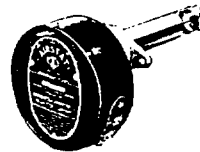
No. T-29-A Night
and Day Thermostat
(For Zone Control)



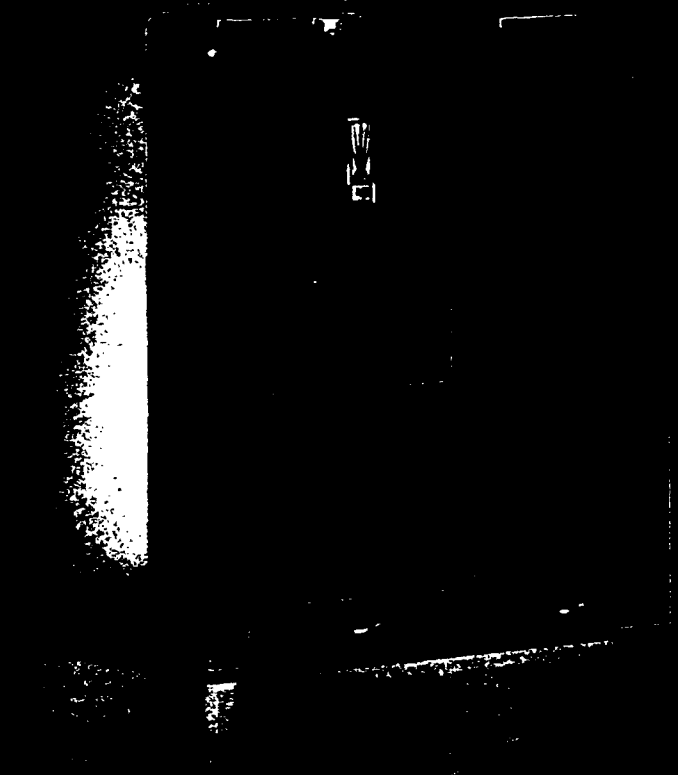
No. W-1-A and No.
W-2-A Power Box
(For Zone Control)



No. M-26-C
Duct Damper Motor
(For Zone Control)



No. L-222-A High
Cut-in Relief Switch
(For Zone Control)



Sunbeam Series RB Air Conditioning Unit
Gas Burning

AMERICAN
HEATING EQUIPMENT
COSTS NO MORE THAN OTHERS

AIR CONDITIONERS,
BLOWERS, HUMIDIFIERS,
CONTROLS, ETC.

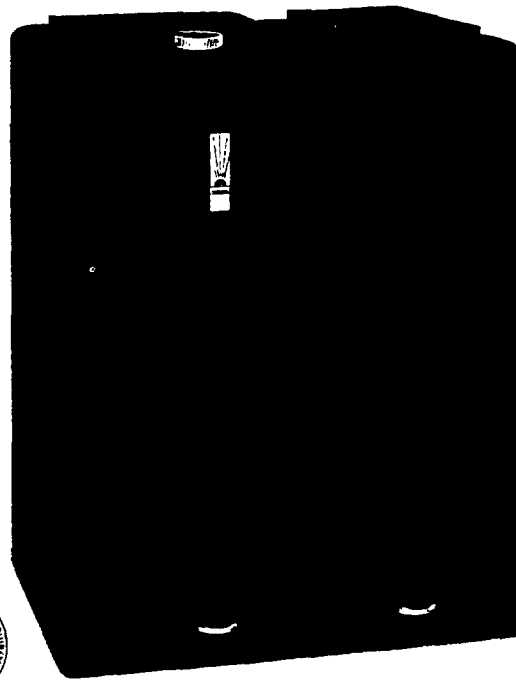
AMERICAN
HEATING EQUIPMENT
COSTS NO MORE THAN OTHERS

Sunbeam Series U
Air Conditioning Unit-Gas Burning

Sunbeam Series H
Air Conditioning Unit-Gas Burning

AIR CONDITIONERS, GAS
BLOWERS, HUMIDIFIERS,
CONTROLS, ETC.

SUNBEAM SERIES RB AIR CONDITIONER
GAS BURNING



SERIES RB

In the Series RB, SUNBEAM offers an air conditioner that is truly beautiful in appearance. The compartment which houses the blower, motor and filters is an integral part of the exterior cabinet and is the same height as the heating compartment. Wires, pipes, valves and controls (except fan-limit switch) are concealed inside the green crystal-line enamel cabinet, yet are easily accessible through the removable front panels.

The heating element is constructed of durable, heat resisting steel and is scientifically designed to extract the greatest amount of heat from the fuel burned. The advanced type of burner used has several burner heads, each drawing and mixing its own proper supply of gas and air for greatest efficiency.

The Series RB comes completely assembled in a single crate. All interior wiring is done at the factory. This means substantial savings in installation costs benefiting both home owner and heating contractor.

The Series RB is made in five sizes ranging from 70,000 to 150,000 B.t.u. input per hour.

SUNBEAM
AIR CONDITIONING

S 49

September 1, 1939

03822

SUNBEAM SERIES U AIR CONDITIONER
GAS BURNING



SERIES U

The Series U SUNBEAM has been developed to meet the growing demand for a completely automatic air conditioning unit requiring a minimum amount of space. It is designed for homes without basements or where basement space is at a premium.

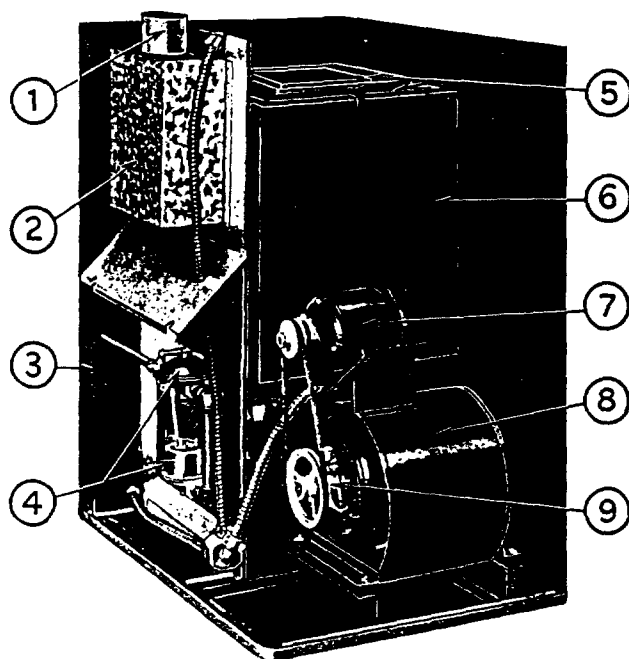
Both the RB and U Series can be installed in a corner since virtually all servicing can be done from the front, and there is no general need for access to rear and one side of unit.

The Series U has the same sturdy efficient heating element and burner as the Series RB. All controls, blowers, motor and filters are identical. They differ only in outward design, the U Series having blower, motor and filters in the base of unit.

The Series U Air Conditioner is made in five sizes ranging from 70,000 to 150,000 B t u input per hour.

With these two Series SUNBEAM Heating Contractors have high quality, low cost, gas fired air conditioning units to meet virtually every demand in the small and medium sized homes.

SUNBEAM SERIES RB AIR CONDITIONER
INTERIOR VIEW



CONSTRUCTION FEATURES

1. **FLUE OUTLET**—located in front of unit. This position permits placing rear of unit flush against wall, thus conserving space.

2. **DOWN DRAFT DIVERTER**—located inside of cabinet. Readily accessible through front door.

3. **CABINET**—heavy steel finished in green crystalline baked enamel. All corners are rounded. Conceals pipes, wires and valves. Very attractive in appearance.

4. **CONTROLS**—main shut off valve, pressure regulator; electric gas valve; thermostat; automatic pilot; and blower-limit switch are standard equipment.

5. **HEATING ELEMENT and RADIATOR**—built of durable, heat-resisting steel. The baffles in the large radiator cause gases to travel upward and downward and from rear to front of radiator before passing up the flue. This long

fire travel thoroughly utilizes the hot gases before they leave the heating element.

6. **INNER LINER**—the air space between this inner liner (welded to heating element) and cabinet minimizes heat loss into the basement and keeps the cabinet cool. Inner liner also increases heating surface and efficiency.

7. **MOTOR**—specially designed for air conditioning installations. All are equipped with special device to prevent damage by overloading. Will not cause radio interference.

8. **BLOWER**—genuine SUNBEAM Sirocco Blower. Has forward pitched, closely spaced blades that handle a large volume of air with a minimum of power consumption. Quiet in operation.

9. **BEARING MOUNTING**—bearings are rubber mounted and self-aligning. Large oil reservoirs are provided.

SUNBEAM
AIR CONDITIONING

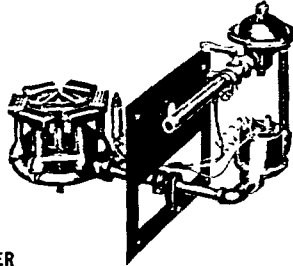
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September 1, 1939

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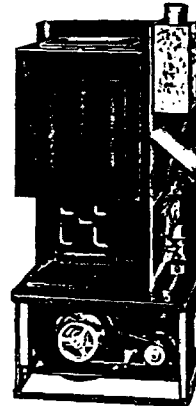
SERIES U

This view shows Series U with outer panels removed. The outstanding construction features of the Series RB also apply to the Series U since the heating element, radiator, down draft diverter, filters and all controls are identical. They differ only in location of blower, motor and filters. In the Series U these are located in the base. In the Series RB they are located in a compartment on the right side.

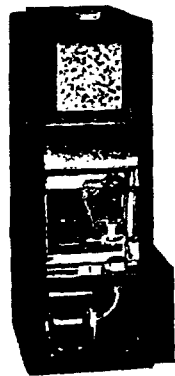


BURNER

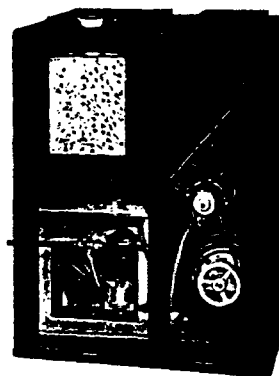
With the SUNBEAM burner for the Series RB and U, the necessary volume of gas is burned in small quantities in several individual burner heads. Each individual burner is complete and independent, has its own separate mixer and spud, draws its individual supply of gas and air, and mixes the combination for the most satisfactory combustion at the burner head. These burners are set at the factory and require no further adjustment. Air shutters are not used in this burner.



SERIES U



SERIES U



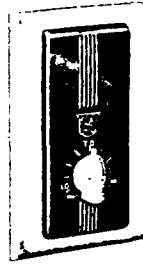
SERIES RB

ACCESSIBILITY—Views above at left and right show Series U and RB respectively, with front doors removed. Both can be serviced completely from front. By removing these doors, access is had to controls, burners, flue outlet, blower, motor—and with the Series RB, the filters.

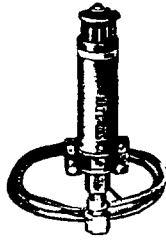
Return air enters Series U on right side when unit faces front, and on left side when unit faces rear. Where it is necessary to conserve space both series may be installed in a corner as there is no general need for access to the rear and one side of the unit.

THERMOSTAT SERIES RB AND U

The thermostat which is standard equipment with Series RB and U is of the flush mounting type. The wall plate is of ivory finish. The inset is finished in gold. It has platinum iridium points and is adjustable to within one-half of one degree.



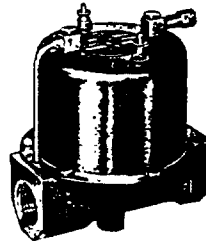
PILOT-GENERATOR SERIES RB AND U



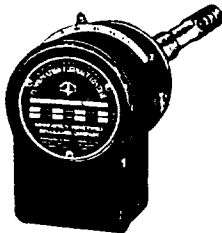
The Pilot-Generator acts as a safety pilot. When burning it generates one-fourth of one volt of electricity which is sufficient to operate the gas valve. This extremely low voltage through valve and thermostat minimizes wear on parts and eliminates pitting of points. The thermostatic control system is not wired into, and therefore operates independently of, any of the wiring circuits in the house. When pilot light is extinguished gas valve closes.

GAS VALVE SERIES RB AND U

Gas valve is of the electric diaphragm type and is absolutely noiseless. It is operated wholly by gas pressure above or below the diaphragm in the valve body. Line pressure keeps the valve in a closed position by exerting pressure on the bottom of the diaphragm. Gas is admitted to the top of the valve body and thence to burner, by the pilot electrically operating a small bar that opens a port in the top side of the valve.



BLOWER AND LIMIT SWITCH SERIES RB AND U



Prevents blower from operating until after conditioned air has been heated to blower switch setting. Acts as safety device and shuts burner off if unit overheats. Also prevents blower from delivering cool air in winter. Is installed in plenum chamber and is furnished as standard equipment.

RATINGS—SERIES RB

No.	A.G.A. BTU Input per hr.	A.G.A. BTU Output	BTU Capacity at Register (Manufacturer)	Gas Supply	Approximate Shipping Weight
70RB	70,000	55,000	50,400	1/2"	345 lbs.
85RB	85,000	65,000	61,200	3/4"	370 lbs.
105RB	105,000	84,000	75,600	1"	470 lbs.
125RB	125,000	100,000	90,000	1 1/4"	495 lbs.
150RB	150,000	120,000	108,000	1 1/2"	530 lbs.

* 1/4" if used with 550 B.t.u. Gas.

SERIES RB—DIMENSIONS AND BLOWER—MOTOR—FILTER SPECIFICATIONS

No.	Dimensions in Inches			W.A. Outlet in Inches	R.A. Inlet in Inches	Blower No.	Motor Size	C.F.M. @ 65° F.	*R.P.M. @ 1/4" S.P. in Inches	Vent Diam. in Inches	Approx. Dist. from Floor to Center of Horizontal Vent Pipe (Inches)	Number of Filters and Size in Inches
	W	D	H									
70RB	37	28	x 48	16 x 16	10 x 22	1-9	1/4 HP	700	620	4	53	1 (20 x 25)
85RB	37	28	x 48	16 x 16	10 x 22	1-9	1/4 HP	850	655	4	53	1 (20 x 25)
105RB	48	31 1/2	x 48	19 x 19	14 x 25	1-12	1/4 HP	1,050	467	5	53 1/4	3 (16 x 20)
125RB	48	31 1/2	x 48	19 x 19	14 x 25	1-12	1/4 HP	1,250	455	5	53 1/4	3 (16 x 20)
150RB	51	35 1/2	x 48	22 x 22	14 x 29	1-12	1/2 HP	1,500	515	6	54 1/4	3 (20 x 20)

* For R.P.M. required for other than 1/4" S.P.,—Refer to Blower Capacity Table.
† Allow clearance at front for access to burner, flue outlet, blower, motor, filters.

RATINGS—SERIES U

No.	A.G.A. BTU Input per hr.	A.G.A. BTU Output	BTU Capacity at Register (Manufacturer)	Gas Supply	Approximate Shipping Weight
70U	70,000	55,000	50,400	1/2"	335 lbs.
85U	85,000	65,000	61,200	3/4"	350 lbs.
105U	105,000	84,000	75,600	1"	460 lbs.
125U	125,000	100,000	90,000	1 1/4"	495 lbs.
150U	150,000	120,000	108,000	1 1/2"	520 lbs.

* 1/4" if used with 550 B.t.u. Gas.

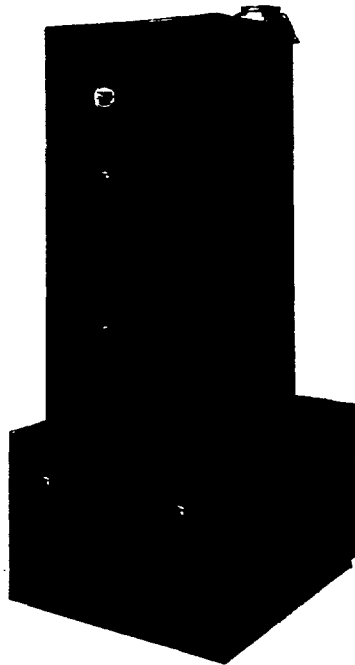
SERIES U—DIMENSIONS AND BLOWER—MOTOR—FILTER SPECIFICATIONS

No.	Dimensions in Inches			W.A. Outlet in Inches	R.A. Inlet in Inches	Blower No.	Motor Size	C.F.M. @ 65° F.	*R.P.M. @ 1/4" S.P. in Inches	Vent Diam. in Inches	Approx. Dist. from Floor to Center of Horizontal Vent Pipe (Inches)	Number of Filters and Size in Inches
	W	D	H									
70U	22	23	x 60 1/2	16 x 16	24 x 14 1/2	1-9	1/4 HP	700	620	4	66	1 (16 x 25)
85U	22	23	x 60 1/2	16 x 16	24 x 14 1/2	1-9	1/4 HP	850	655	4	66	1 (16 x 25)
105U	25	31 1/2	x 67	19 x 19	24 x 18 1/2	1-12	1/4 HP	1,050	467	5	72 1/4	1 (20 x 25)
125U	25	31 1/2	x 67	19 x 19	(2) 24 x 18 1/2	1-12	1/4 HP	1,250	455	5	72 3/4	2 (16 x 25)
150U	28	35 1/2	x 67	22 x 22	(2) 24 x 18 1/2	1-12	1/2 HP	1,500	515	6	73 1/4	2 (20 x 25)

* For R.P.M. required for other than 1/4" S.P.,—Refer to Blower Capacity Table.
† Allow clearance at front for access to burner, flue outlet, blower, motor, filters.
‡ Each Filter Rack extends 4 1/2" beyond width of cabinet.

SUNBEAM
AIR CONDITIONING

SUNBEAM SERIES H AND HV AIR CONDITIONERS
GAS BURNING



SERIES H AND HV

(HV Has Vertical Return Air Intake Through Base)

In the Series H, SUNBEAM offers at a moderate price a new high calibre gas fired air conditioner with cast iron heating element. Its capacities and features make it the ideal air conditioner for small homes, medium sized homes and other types of small buildings.

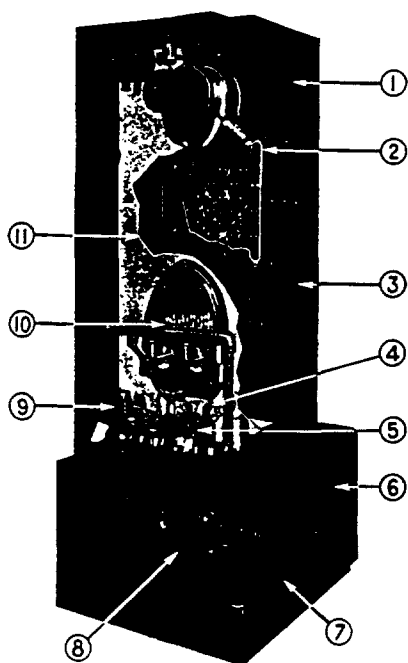
Heretofore, cast iron heating element air conditioners were out of the question for the small homes where price was the determining factor. Today, with the Series H, home owners can enjoy the many advantages of an air conditioner with a cast iron heating element and still stay within their budget requirements.

The Series H is easily installed. Heating element of air conditioner and Blower-Motor unit are assembled at the factory. Thus these on-the-job costs are eliminated. Installers simply place the Heating Section over the Blower-Motor-Filter unit and add the burners, controls and jacket.

The Series H is made in four sizes ranging from 75,000 to 150,000 B t u. input per hour.



SUNBEAM SERIES H AIR CONDITIONER INTERIOR VIEW



CONSTRUCTION FEATURES

1. **EXTERIOR CABINET**—made of No. 20 gauge steel finished in green crystalline baked enamel. Smart and modern in appearance.

2. **CAST IRON HEATING ELEMENT**—each heating unit consists of individually cored cast iron sections which are assembled to form a single gas-tight combustion chamber.

3. **AIR CIRCULATING SPACE**—scientific proportioning of heating elements and casing areas assures even distribution of air over all heating surfaces and free, unrestricted flow of air through the Unit.

4. **THERMOSTATIC PILOT**—prevents gas passing to burners unless pilot is lighted and burning properly.

5. **GAS VALVE**—automatically turns burner on and off. Controlled by room thermostat.

6. **AIR FILTERS**—efficient dust removers, yet easily and inexpensively renewed.

7. **LARGE BLOWER**—of double-inlet type with large air-handling capacity. Silent in operation.

8. **BLOWER MOTOR**—ball bearing, resilient rubber mounted type. Ample capacity. Furnished bolted in position. Automatic resetting thermal over load device helps protect and assures long life and satisfactory service.

9. **PRESSURE REGULATOR FOR MAIN GAS LINE**—provides a uniform burner flame by maintaining uniform gas pressure.

10. **BURNER**—cast iron drilled port type. Insures efficient, quiet, utilization of natural, manufactured or mixed gas.

11. **INNER CASING**—made of galvanized iron. Prevents heat from escaping into basement; brings circulated air into intimate contact with heating surfaces.

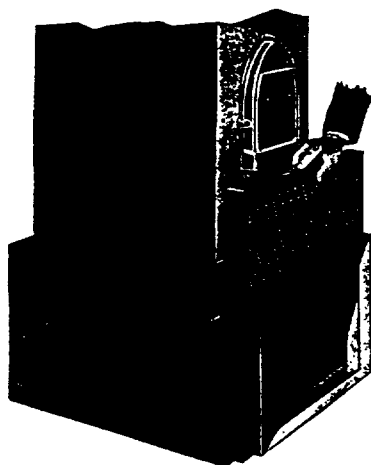
REAR VIEW SERIES H

The Series H is designed for basement installation. Return air enters the unit at the rear of the blower-filter compartment as shown at right. Filters can be easily removed for replacement by sliding them out of a convenient top access panel as illustrated.

The Warm Air outlet is at the top of unit, from which point the air is distributed through ducts to the rooms.

Blower and motor unit located in the lower compartment forces the air directly up and over the heating sections. Air then picks up moisture from the float type humidifier and travels out the top into the ducts.

All controls including the blower switch, limit switch and humidifier control are located at the front of the unit, and yet are concealed by the outer jacket. This eliminates the necessity of piercing the plenum chamber or duct work as has been customary heretofore.



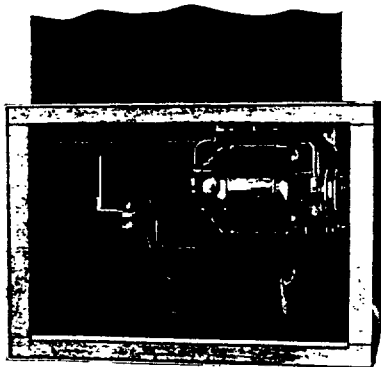
FRONT VIEW SERIES HV

The Series HV was especially designed for first floor apartments or "closet" type installations and requires no basement. It is identical with the H Series and differs only in the return air intake which is vertical through the base of the unit.

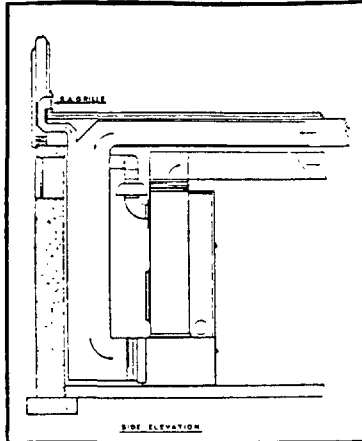
Filters are mounted in the base as shown in illustration at the left. Warm air leaves the top of the unit vertically. It is then distributed to the various rooms through ducts located, for example, in a drop ceiling above a central hall, or in an attic space.

Because of its compact, special design and ease of installation, the HV Series is also very practical for installation in kitchens, utility rooms or service porches.

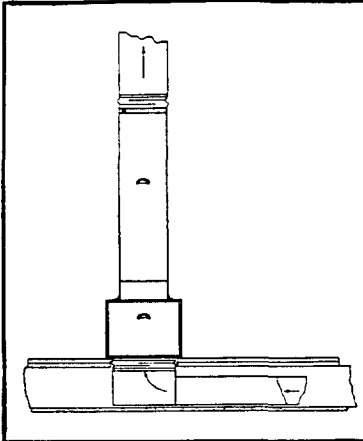
All controls including blower switch, limit switch and humidifier control are concealed as in the Series H yet are readily accessible through a removable front door.



TYPICAL INSTALLATIONS SERIES H AND HV



TYPICAL INSTALLATION—SERIES H
Return air enters rear of blower compartment.



TYPICAL INSTALLATION—SERIES HV
Return air enters through floor into bottom of blower compartment.

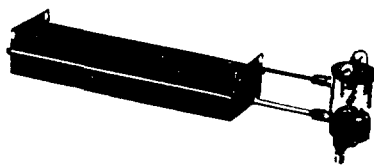
CAST IRON HEATING ELEMENT SERIES H AND HV

The heating element is built of durable, corrosion-resistant cast iron sections. These sections are assembled one to another at the factory to form a single unit with a single combustion chamber. As many as three, four, five and six sections are assembled depending on the size and capacity of the air conditioner.

The interior of each section has an extended pin heating surface which speeds transmission of heat and assures high efficiency. These surfaces are easily cleaned through clean-out openings which are accessible by removing either side panel.



FLOTROL HUMIDIFIER SERIES H AND HV



FLOTROL HUMIDIFIER

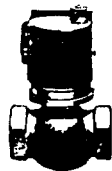
This humidifier connects to the water line. It is of the float type and automatically maintains the proper amount of water in the evaporating reservoir. Humidifier is placed directly above the heating element. The amount of water evaporated by this humidifier is determined largely by the temperature in the unit and the volume of air passing the reservoir.

CONTROL EQUIPMENT FOR SERIES H and HV

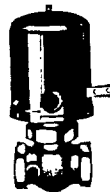
Two control combinations in two price classes for the Series H and HV are shown below with optional types of thermostats to provide temperature control from one central point. The individual instruments included in either combination are considered the finest available.

10-M EQUIPMENT

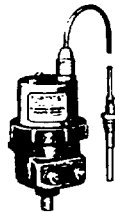
For Use with any M-H Series 10
Thermostat



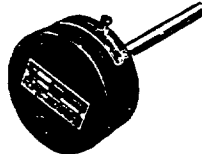
M-H 3/4" V-16A Solenoid
Gas Valve for all units except
H-5 and H-6 when they are
supplied for manufactured gas.



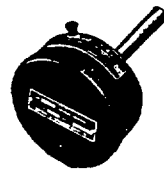
M-H 1" V-155A Gas Valve
for use on the H-5 and H-6
only when they are supplied
for manufactured Gas.



CS90A Baltimore Automatic
Gas Shut-off (Pilotstat)



Detroit Stack Fan Switch
269A (also furnished with
Detroit MT Equipment).



Detroit Air Temperature
Limit Switch 255 (also fur-
nished with Detroit MT
Equipment).

DETROIT M-T EQUIPMENT

For Use with any M-H Series
10, or Detroit Thermostat



Detroit No. 563 Relay
and Transformer.



Detroit No. 506-VP Ther-
motor Gas Valve with
included Throttling Control,
Limit Control and Thermo-
static Safety Pilot.

THERMOSTATS



Plain Thermo-
stat No. T11A
M-H Acrotherm



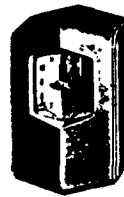
Clock Thermo-
stat No. T105A
M-H Chrono-
therm



Detroit Plain
Thermostat No.
211 CH



Detroit Day-
Night Thermo-
stat No. 211
CDN



Detroit Time Switch
No. 456 (for use with
No. 211 CDN.)

SUNBEAM
AIR CONDITIONING

RATINGS—SERIES H AND HV

No.	A.G.A. BTU Input Per Hour	BTU Capacity at Registers (Manufacturer)	No. of Burners	No. of Sections	*Gas Supply Tapping Inches	Diameter Flue Outlet	Approx. Distance from Floor to Center of Flue Outlet
H-3	75,000	54,000	2	3	3/4	5"	60"
H-4	100,000	72,000	2	4	3/4	5"	60"
H-5	125,000	90,000	2	5	3/4	6"	64"
H-6	150,000	108,000	2	6	3/4	6"	64"
HV-4	55,000	39,600	1	4	3/4	4"	51"
HV-3	75,000	54,000	2	3	3/4	5"	51"

* With manufactured gas No. H-5 and H-6 require 1" gas supply.

SERIES H AND HV—BLOWER—MOTOR—FILTER SPECIFICATIONS

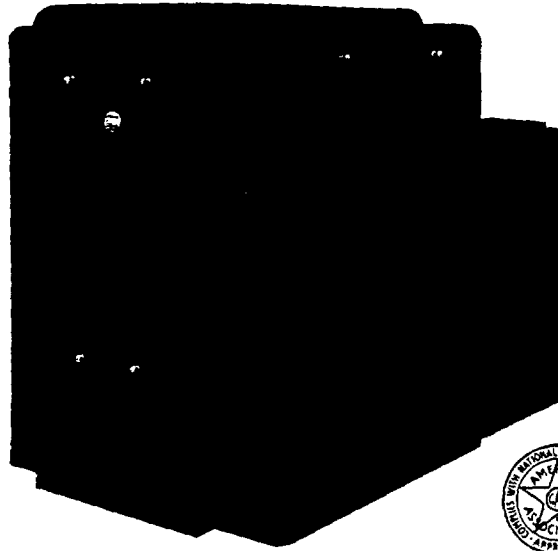
No.	Blower C.F.M. at 65° F.	Diameter of Blower Wheel	Number Blowers	Pitch Diam. of Blower Pulley	Motor H.P.	Motor R.P.M.	Filters
H-3	688	7 1/2"	1	3 1/2"	3/8	1,725	1 (16 x 25")
H-4	921	9 1/2"	1	4"	3/4	1,725	1 (16 x 25")
H-5	1,148	12"	1	6"	3/4	1,725	2 (16 x 20")
H-6	1,376	12"	1	6"	3/4	1,725	2 (16 x 20")
HV-4	505	6"	1	2 1/2"	3/8	1,725	1 (16 x 20")
HV-3	688	7 1/2"	1	3 1/2"	3/8	1,725	1 (20 x 20")

DIMENSIONS—SERIES H AND HV

No.	Width	Depth	Height	Air Discharge Opening	*Air Intake Opening
H-3	25"	25"	68"	19" x 11"	15 1/4" x 23 1/2"
H-4	25"	28"	68"	19" x 14"	15 1/4" x 23 1/2"
H-5	32"	34"	72"	19" x 17"	19 1/4" x 30 1/2"
H-6	32"	34"	72"	19" x 20"	19 1/4" x 30 1/2"
HV-4	19"	23"	60"	12 1/4" x 14"	14 1/2" x 18 1/2"
HV-3	25"	23"	68"	19" x 11"	18 1/4" x 18 1/4"

* On Nos. HV-4 and HV-3 Air Intake Opening at bottom of Unit. On other sizes Opening is in rear at floor level.

SUNBEAM SERIES D AIR CONDITIONER
GAS FIRED



Beautiful appearance has been combined with mechanical excellence in the Series D SUNBEAM De Luxe Gas Fired Air Conditioning Unit.

Heating elements are constructed of rugged, durable cast iron. The sides of each element have perpendicular ribs which provide added heating surface and facilitate absorption of heat by the air which passes upward. Each element consists of two sections. No cement or putty is used in the assembly. The faces of each section are surface ground and are bolted together at close intervals to form a tight, metal-to-metal joint. Six baffles placed horizontally above the burner insure that the products of combustion are thoroughly utilized before passing up the flue.

Cabinets are made No. 20 gauge steel and finished in green baked enamel. Corners are gracefully rounded. All bolts and screws are concealed. Valves, pipes and wiring are located inside of the cabinet, out of sight, yet are readily accessible.

The Series D is made in four sizes with B.t.u. inputs ranging from 140,000 to 350,000 per hour.

Blower, motor, filters, humidifiers and controls used with this Series D are illustrated and described on the last few pages of this index section.

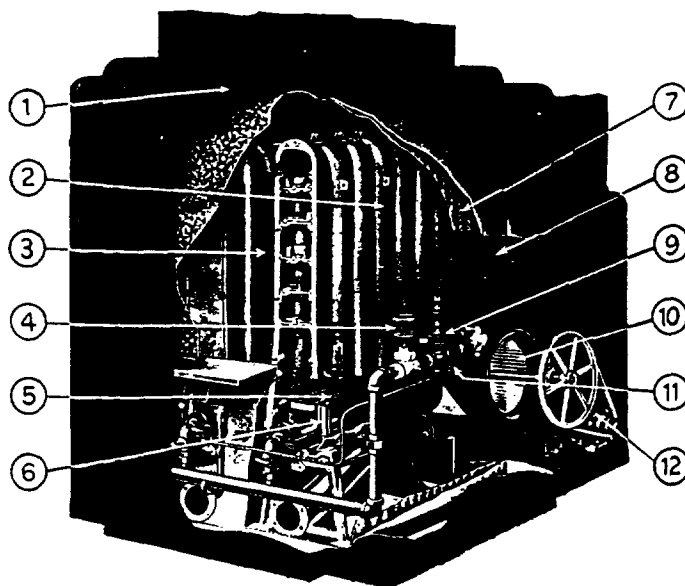
SUNBEAM
AIR CONDITIONING

S 61

September 1, 1939

03834

SUNBEAM SERIES D AIR CONDITIONER
INTERIOR VIEW



CONSTRUCTION FEATURES

1. **EXTERIOR CABINET**—made of No. 20 gauge steel and finished in green, baked enamel. The handsome appearance of this unit makes it an attractive addition to the home.
2. **CAST IRON HEATING ELEMENT**—each heating element is made in two sections, the faces of which are surface ground and specially packed to form a leak-proof joint. No cement or putty is used in the assembly.
3. **AIR CIRCULATING SPACE**—scientific proportioning of heating elements and casing areas assures that air is distributed evenly over all heating surfaces; free unrestricted flow of air through the Unit is obtained.
4. **GAS VALVE**—automatically turns burner on and off. Controlled by room thermostat.
5. **BURNER**—insures efficient, uniform distribution of natural, manufactured or mixed gas; is quiet in operation.
6. **THERMOSTATIC PILOT**—closes Gas Valve if pilot light becomes extinguished.
7. **INNER CASING**—made of corrugated galvanized iron. Prevents heat from escaping into basement; brings circulating air into intimate contact with heating surfaces.
8. **AIR FILTERS**—hold more dirt than ordinary filters.
9. **PRESSURE REGULATOR FOR MAIN GAS LINE**—provides constant flame at the burner by maintaining uniform gas pressure.
10. **LARGE BLOWER**—of double-inlet type with large air-handling capacity. Silent in operation.
11. **PILOT LINE PRESSURE REGULATOR**—provides constant flame at the pilot by maintaining uniform gas pressure.
12. **BLOWER MOTOR**—mounted on frame with blower. Equipped with special safety device which protects it against overloading.

SERIES D—RATINGS

No.	A.G.A. BTU Input per hr	BTU Capacity at Registers (Manufacturer)	Number of Burners	Gas Supply Tapping Inches	Diameter Flue Outlet Manifold	Approx. Distance from Floor to Center of Flue Outlet Manifold
D-2	140,000	107,100	2	1	7"	60 $\frac{1}{2}$ "
D-3	210,000	160,650	3	1	8"	60 $\frac{1}{4}$ "
D-4	280,000	214,200	4	1 $\frac{1}{4}$	9"	61 $\frac{1}{8}$ "
D-5	350,000	267,750	5	1 $\frac{1}{4}$	10"	61 $\frac{1}{8}$ "

BLOWER—MOTOR—FILTER SPECIFICATIONS—SERIES D

No.	Blower No.	C.F.M. at 65° F.	Approximate Blower R.P.M. at $\frac{1}{4}$ " S.P.	Diam. of Wheel	Pitch Diam. of Blower Pulley	Number Blowers	Motor H.P.	Motor R.P.M.	Number Filters
D-2	1-12	1,016	401	12"	12"	1	$\frac{1}{4}$	1,725	2 (16 x 25")
D-3	1-15	1,526	344	15"	15"	1	$\frac{1}{4}$	1,725	3 (16 x 25")
D-4	1-18	2,032	300	18"	18"	1	$\frac{1}{2}$	1,725	4 (16 x 25")
D-5	2-15	2,540	344	15"	15"	2	$\frac{1}{4}$	1,725	4 (16 x 25")

* Air heated from 65° to 165° F. increases 19% in volume. Therefore, warm air ducts should have capacity for 19% greater C.F.M. than listed above.

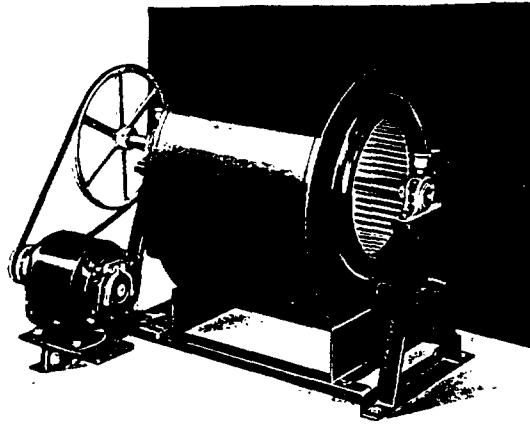
SERIES D—DIMENSIONS

No.	Width of Heating Compartment	Overall Depth	Overall Height	Width of Blower Compartment	Height of Blower Compartment	*Depth of Blower Compartment	Air Discharge Opening	Air Intake Opening
D-2	44 $\frac{1}{2}$ "	76 $\frac{1}{4}$ "	58"	39 $\frac{1}{4}$ "	41"	29 $\frac{1}{4}$ "	16 x 22"	12 $\frac{3}{4}$ x 35 $\frac{1}{4}$ "
D-3	56"	76 $\frac{3}{8}$ "	58"	48 $\frac{1}{4}$ "	41"	29 $\frac{3}{8}$ "	16 x 34"	12 $\frac{3}{8}$ x 44"
D-4	70 $\frac{1}{2}$ "	79 $\frac{1}{8}$ "	58"	65 $\frac{1}{8}$ "	41"	32 $\frac{3}{8}$ "	16 x 45"	12 $\frac{3}{8}$ x 59 $\frac{1}{4}$ "
D-5	82"	76 $\frac{1}{4}$ "	58"	86"	41"	29 $\frac{1}{4}$ "	16 x 56 $\frac{1}{2}$ "	12 $\frac{3}{4}$ x 70"

* Allow clearance in rear equal to depth of blower compartment for removal of filters, blower and motor. Allow 24 inches clearance in front for removal of baffles.

SUNBEAM
AIR CONDITIONING

BLOWERS, MOTORS AND FILTERS
FOR SERIES RB, U, H AND D.



BLOWER

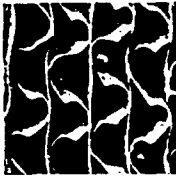
SUNBEAM Sirrocco Blowers are large, powerful and silent. They operate at low speeds consuming a minimum of current, and move a large volume of air at low velocities and at comparatively low temperatures.

The blower and motor are securely mounted on integral, rigid angle iron frames or bases which prevent vibration and its possible resulting noise. Because of these integral mountings, pulleys are quickly and easily aligned and remain in alignment indefinitely.

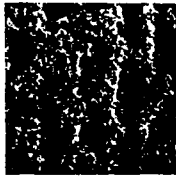
Blowers have extra capacity for summer cooling operation or to overcome greater than average resistance in the ducts. Blowers are equipped with rubber mounted, self-aligning bearings. Large oil reservoirs are provided.

Motors are specially designed for air conditioning installations. They do not cause radio interference. Each motor is equipped with a special safety device which protects it against damage which might be caused by overloading.

AIR FILTERS



Section of a clean Sunbeam Filter.



A similar section of a filter after a few months in use.



Cross section of filter showing efficient "V" angle construction.

The capacity of SUNBEAM Filters to hold more dirt, dust, soot, lint, pollen and bacteria—and thus their longer life—is due to the "V" angle construction and to the fact that they can be treated with an unusually large amount of adhesive coating without filling up the passages through which the air must circulate. The accompanying illustration shows the advantages of the "V" angle construction. The air must "turn a corner" in the center of the filter. This turbulence causes all of the air to be wiped against the ample adhesive surfaces of the bottom section, thus removing a maximum of foreign matter. The openings in the top section are larger than those in the bottom section in order to give uniform distribution of dirt particles throughout the depth of the filter. A metal gridiron support prevents the filter from sagging or warping.

SUNBEAM
AIR CONDITIONING

HUMIDIFIERS—ZONE CONTROL

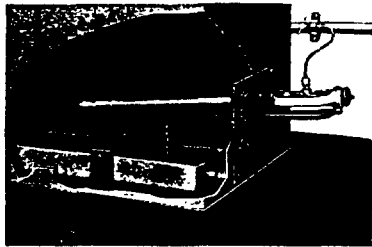
SPRAY HUMIDIFIER FOR SERIES D

This spray humidifier has proven its ability to properly humidify the air even in those sections where salts, lime, and "hard" water prevent the functioning of other types of humidifiers. When one nozzle does clog, it is turned off and the next one turned on, until all nozzles are clogged. All four nozzles are cleaned at one time—a simple operation.

While this humidifier has the capacity to supply satisfactory relative humidity, it also possesses another desirable feature. The amount of water atomized can be adjusted to the air's ability to absorb moisture—and thus prevent condensation in the plenum chamber—by changing the position of the atomizing plate. A Humidistat controls the solenoid valve in the water line and automatically controls relative humidity.



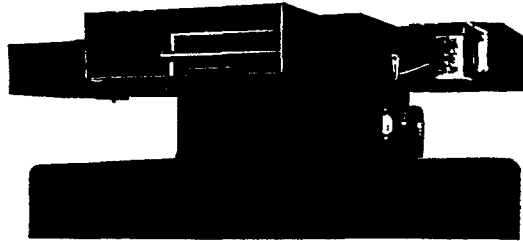
DRIP HUMIDIFIER FOR SERIES RB, U AND D



Connects to the water line. A thermostatic element expands and contracts with the temperature in the bonnet to admit more or less water to the evaporating reservoir. Humidifier is placed directly above the heating element. The amount of water evaporated by this humidifier is determined largely by temperature in bonnet and not by humidity requirement of living quarters. Humidifier has manual adjustment to vary flow of water into reservoir.

In the Series D the drip humidifier is located within the cabinet; in the Series RB and U, it is located in plenum chamber as shown.

ZONE CONTROL OF TEMPERATURE



In large houses of the rambling type, it is generally difficult to maintain an even, uniform temperature in all rooms, whether the heating medium be air or water or steam, when the entire building is controlled by only one thermostat. Zone Control overcomes this difficulty. The house is divided into zones—two or more. A thermostat is placed in one of the rooms in each zone. A Trunk Line or Main Duct with branches leads directly from the SUNBEAM Air Conditioning Unit to each zone. A Damper which is operated by a motor is installed in each main duct as illustrated above. When a zone thermostat calls for heat, the duct damper motor opens the damper in the duct which it controls, turns on heat source and blower. When the thermostat is satisfied it closes the damper which it controls, turns off heat source and blower. With Zone Control, any desired temperature can be maintained in any zone.

SUNBEAM
AIR CONDITIONING

S 65

September 1, 1939

CONTROL EQUIPMENT FOR SERIES D

Temperature Control Equipment, for any degree of regulation that may be desired by any home owner, is available with Gas Fired SUNBEAM Air Conditioning Units. Control combinations are provided with the Series D which give control of temperature from one central point in a home, or from several different rooms.

The individual instruments, which are included in the various combinations, are generally considered the finest available. The proper combination of controls for various temperature regulation is listed in the Price Lists for SUNBEAM Series RB, U, H and D.



No. T-11-A and
No. T-21-A Plain
Thermostat.



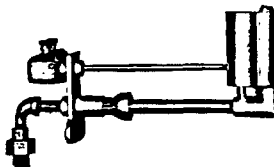
No. T-105-A and
No. 205-A Night and
Day Electric Clock
Thermostat.



No. H-8
Humidistat.



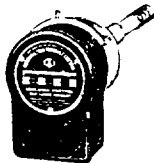
No. V-83
Solenoid Water Valve



No. C-80
Thermostatic Pilot



No. V-155
Gas Valve



No. L-101-A
Blower and Limit
Switch



No. R-155-A
Control Box

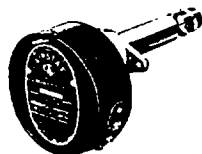


No. L-101-B Blower.
Limit and High
Cut-in Switch

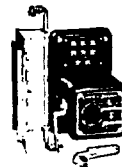
INSTRUMENTS FOR ZONE CONTROL



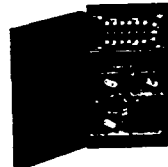
No. T-29-A Night
and Day Thermostat
(For Zone Control)



No. L-222-A High
Cut-in Relief Switch
(For Zone Control)



No. M-26-C Duct
Damper Motor
(For Zone Control)



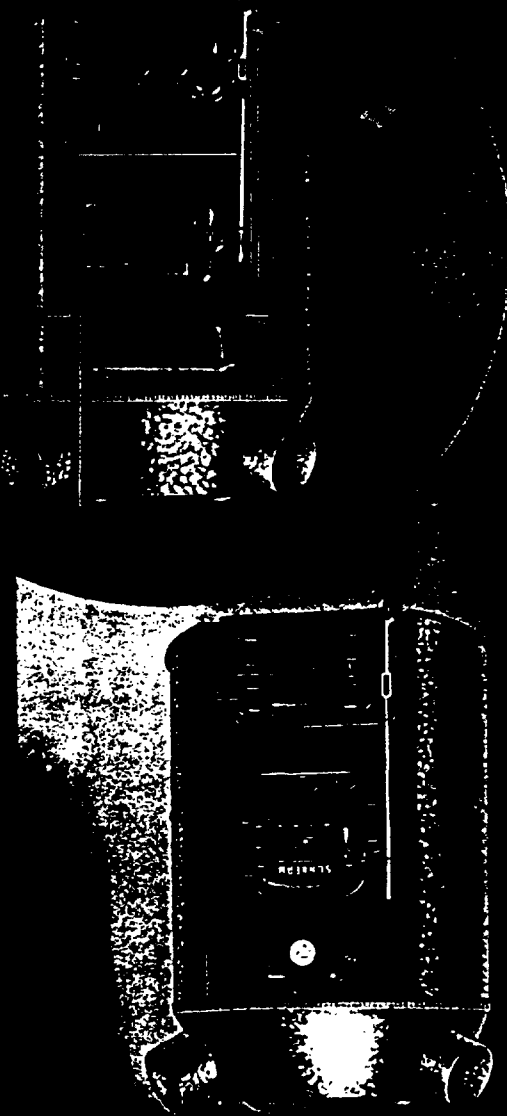
No. W-1-A and No.
W-2-A Power Box
(For Zone Control)

**GRAVITY FURNACES
CONTROLS, HUMIDIFIERS, ETC.**

AMERICAN
HEATING EQUIPMENT
COSTS NO MORE THAN OTHERS

Sunbeam Series No. 1000
Cast Iron Furnace—Coal

Sunbeam Series No. 8000
Steel Furnace—Coal or Oil



GRAVITY FURNACES
CONTROLS, HUMIDIFIERS, ETC.

Sunbeam Series No. 500
Steel Furnace—Coal or Oil

Sunbeam Series G
Gas Furnace

AMERICAN
HEATING EQUIPMENT
COSTS NO MORE THAN OTHERS

03841