



BURR KING MFG. CO., INC

1220 Tamara Lane

Warsaw, MO 65355

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BK-100 INSTRUCTION MANUAL



MADE IN U.S.A.



- * GRINDERS
- * BUFFERS
- * VIBRATORY
- * DISC GRINDERS

Grinder not included

BK-100 DUST COLLECTOR



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Safe operation and good practice use of your BK-100 dust collection system

April 2001

The BK-100 dust collection system is designed to accept up to two dust inlets. Dust is drawn into the BK-100 by its onboard air suction system. The air stream and dust is passed through a filter bank where a significant amount of the dust is removed from the air stream. The air is then ducted out of the BK-100. The following minimum safe practices should be read, understood, and practiced by all users of the BK-100, and those persons who maintain the BK-100, or are present in the BK-100 work area.

To minimize fire, explosion, health and other risks to personnel and property:

Do not use your BK-100 to collect materials prone to explosion unless it has been specifically modified to be “explosion proof”.

Do not draw debris from different alloys into the BK-100 system.

Do not use water or other electrically conductive fluid in your BK-100 unless it has been specifically modified for wet operation.

Do not mix wood, plastic, paper, or other flammable material debris with metal or other high temperature dust/debris.

Do use a spark-arresting device if your BK-100 will be used to collect debris from materials that spark or otherwise create ignition level debris when worked.

Do consult with the appropriate authorities to be certain that your BK-100 installation and its intended use comply with local, state, and federal codes.

Do use approved inhalation protective devices in conjunction with the BK-100.

Do use approved protective eye, face, hand, and body protection when grinding, polishing, or otherwise creating dust and debris that you intend the BK-100 collect.

Do disconnect all power to the BK-100 (and any equipment connected to it) prior to performing adjustments, maintenance, or other activity that involves opening any cover on the BK-100.

Do read, understand, and abide by the operating and maintenance instructions provided for the BK-100.

Do use specified replacement parts and filters.

Do maintain the BK-100 in specification compliant condition.

Do call Burr King Manufacturing at 1-800-621-2748 if you need assistance.

See our catalog at www.burrrking.com
DOC BK100OP-99 04/01

Contact us at info@burrrking.com

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DRY AIR

- 1.0 Air entering a bag house type dust collector must be dry and oil free.

DUST BAGS

- 2.0 Dust bags are made from a dacron or shaker felt filter material.
- 2.1 Dirty Dust Bags:
 - As air containing particles is drawn through the dust bag, the particles are trapped on the outside of the bag.
- 2.1.1 A certain amount of particulate matter will always remain on the outside of the bag, even after shaking. This is normal and greatly improves the efficiency of the bag as a filter. This is called a "seasoned" filter bag.
- 2.2 As particles build-up on the dust bags, the resistance to air flow will increase. When this resistance reaches a point that flow has been restricted, it hampers the operation of the system. The bags should then be shaken to remove the particle build-up.
- 2.3 Shaking Dust Bags:
 - With a manual system, move the bag rapper handle 10-12 times in such a manner that the rapper paddle strikes the bottom of the bags after eight (8) hours of operation.
- 2.3.1 Powered Bag Rapper:
 - Rap 10-15 seconds after eight (8) hours of operation or as needed.

CONTAMINATED BAGS

- 3.0 The word "contaminated" is being used to describe a dust bag that has become coated with a material outside the normal material the collector is collecting.
- 3.1 The usual materials that contaminate a dust bag are water, oil, or grease.
 - 3.1.1 A very small amount of either water, oil, or grease will contaminate all of the bags in the dust collector. This results in a complete change of dust bags.
- 3.2 Cleaning Contaminated Dust Bags:

There is no satisfactory method of cleaning contaminated bags.
- 3.3 Recognizing Contaminated Bags:
 - 3.3.1 Generally, the first sign is to observe that the amount of air passing through the dust collector is less than it should be.
 - 3.3.2 Remove panels to bag house and check dust bags. (See page 6 for dust bag assembly.)
 - 3.3.3 Rub a dust bag with your thumb and forefinger. If the residue left on your thumb or forefinger will not brush off readily, the bags are either wet, oily, or some of each.
- 3.4 Cleaning Contaminated Filter Bags:

Brushing or vacuuming is the only method that may restore contaminated dust bags to usable dust bags.

CHANGING FILTER BAGS

- 4.0 Remove plenum or plenum panels above dust bags.
- 4.1 Release clamps holding dust bags, than remove bags.

INSTALLING NEW DUST BAGS

- 5.0 Replace foam seal around bag openings before putting in new bags. (See page 7 for dust bag installation.)
- 5.1 Replace dust bags and reinstall clamps. Be sure bags are sealed together and around edges of bag modules.
- 5.2 Reinstall plenum or plenum panels.

BLOWER

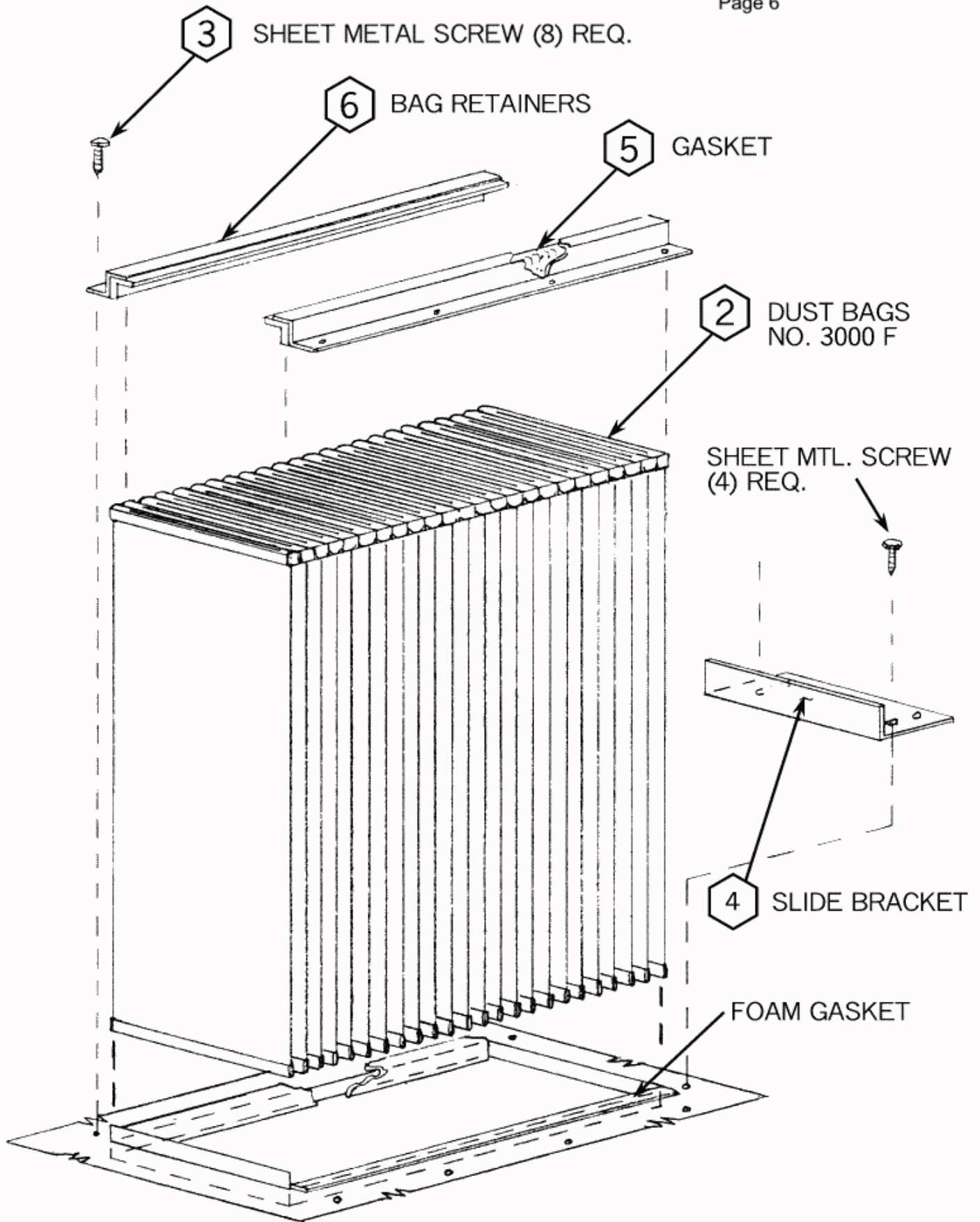
- 6.0 There are two (2) types of blowers used to operate I.C.M.'s line of dust collectors. The direct drive and the belt drive.
- 6.1 The direct drive blowers are furnished with three (3) phase totally enclosed tan cooled motors at 3450 R.P.M. and carry their manufacturers' warranty. The blades are straight radial blades of heavy cast aluminum for a self cleaning feature, dynamically balanced. The housing is steel welded 12 and 14 gauge for rigidity and long life.

BLOWER (Cont.)

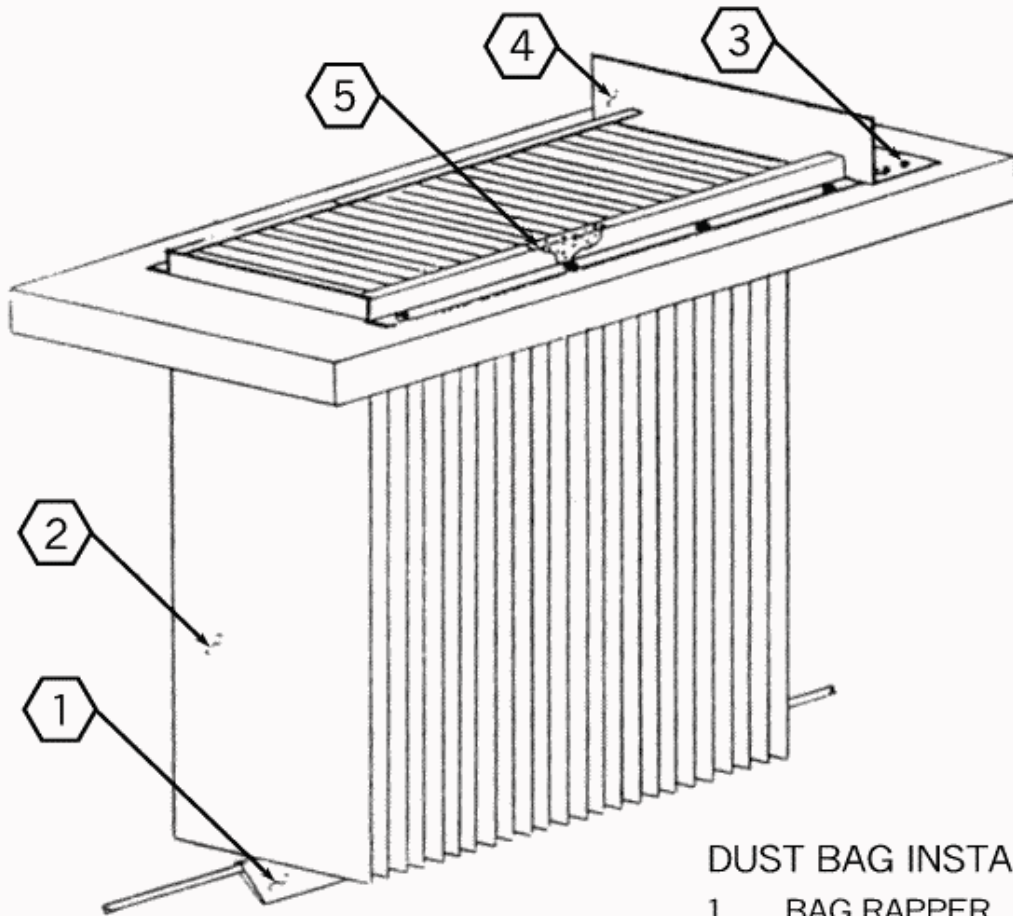
- 6.2 Standard rotation furnished is for clockwise rotation looking down at motor side. All motors must be overload protected when connected or warranty is void.
- 6.3 The belt drive blowers are furnished with three (3) phase totally enclosed fan cooled motors at 1750 R.P.M. and carry their manufacturers' warranty. The blade or wheel is constructed of all welded steel and dynamically balanced. It is designed for higher efficiency, handling fumes, gases or air containing fine particles.
- 6.4 The housings are made of prime steel plate continuously welded and rigidly braced. This construction includes standard wheel, shaft, and bearing. The pillow block bearings are heavy duty design with double row tapered roller bearings. The shaft is turned, ground and polished, and dimensioned for heavy duty construction. The motor is mounted on an adjustable motor rail base for belt tightening.

DUST COLLECTOR REPLACEMENT PARTS LIST

PART NO.	DESCRIPTION
3000F	11" X 39" DUST BAG
-----	BLOWER (Quoted Upon Request)



DUST BAG ASSEMBLY



DUST BAG INSTALLATION

1. BAG RAPPER
2. DUST BAG
3. SHEET METAL SCREWS
4. END BRACKET
5. GASKET

PART NO. 3000F DUST 11" X 39"
MFG./DIST. - ICM, INC.

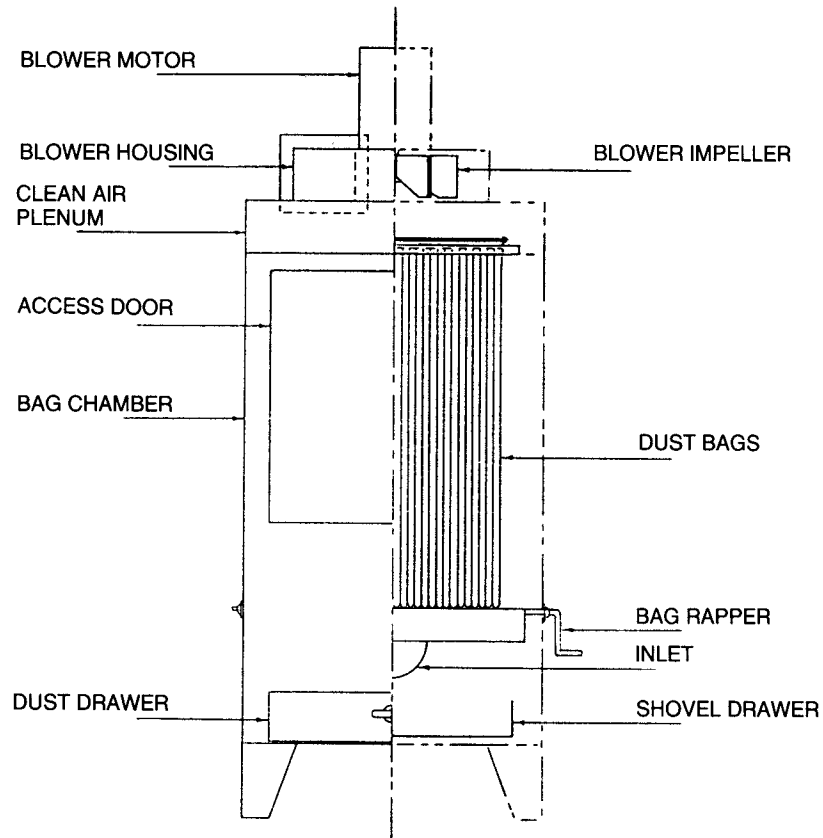
BAG INFORMATION:
10 OZ. PER SQUARE YARD
35 - 55 PERMABILITY FACTOR
100% POLYESTER FELT, SCRIM SUPPORTED

TENSIBLE: WARP 50 FILL 100

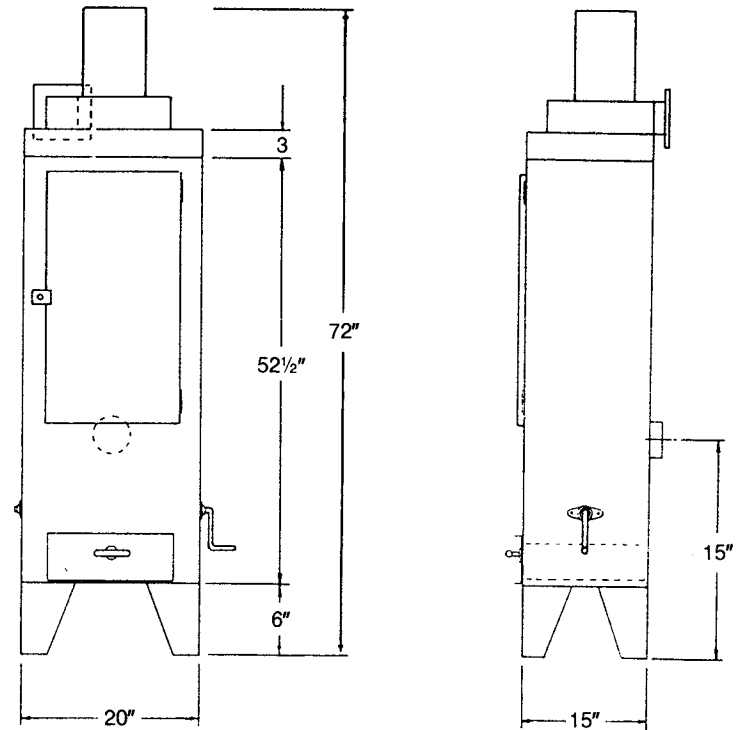
FILTER COMPOSITION 100% CELANESE
FORTREL POLYESTER STAPLE.

SCRIM COMPOSITION 100% POLYESTER,
PLAIN WEAVE.

SPACE SAVER DUST COLLECTOR



SPACE SAVER DUST COLLECTORS



BK-100 1 H.P.



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SS 100 CONTAINS 100 SQ. FT.
 DUST BAG SURFACE AREA

C.F.M.

INLET VELOCITY F.P.M.
 5" DIAMETER INLET

ACTUAL UNIT C.F.M.	C.F.M.	INLET VELOCITY F.P.M. 5" DIAMETER INLET
	740	5425
ADDITIONAL 1 INCH EXTERNAL STATIC	680	5000
ADDITIONAL 2 INCH EXTERNAL STATIC	600	4400
ADDITIONAL 3 INCH EXTERNAL STATIC	500	3675