

FORSBERG PRECISION AIR CLASSIFIER

Engineered and constructed in the traditional FORSBERG manner,
providing design strength and machine quality
at the lowest possible price.



CAPACITY: 167 bu/hr on wheat
(note: capacities vary depending on product)

WHY THE FORSBERG CLASSIFIER IS SUPERIOR:

- 14 GAUGE STEEL CONSTRUCTION
- AIR CHAMBER OBSERVATION WINDOWS
- UNIFORM AIR DISTRIBUTION
- NO JACK SHAFT
- NO LUBRICATION REQUIRED
- NO SCREENS TO CLEAN

FOR INFORMATION ON THIS AND OTHER FORSBERG MACHINERY, PLEASE WRITE OR CALL:



P.O. Box 510 — Airport Road
Thief River Falls, MN 56701

Telephone: (218) 681-1927
Cable: Forsep - TWX: 910-561-2634
FORSBERGS, THRF

FORSBERG 6 x 18 PRECISION AIR CLASSIFIER

Weight: 515 pounds with motor
Height: 10 Feet 1 inch
Blower: 15" diameter wheel
Motor: 1½ HP, 1725 RPM
Fan Speed: 870 RPM

7' Input height (product)
2' Product discharge (heavy)
4' Light product discharge

PRODUCT	CAPACITY	AIR
Shelled Corn	9,000 lbs/hr (161 bu/hr)	1/2 open
Confectionery Sunflowers	5,000 lbs/hr (208 bu/hr)	1/4 open
Pinto Beans	9,000 lbs/hr (90 bags/hr)	1/2 open
Wheat	10,000 lbs/hr (167 bu/hr)	1/3 open

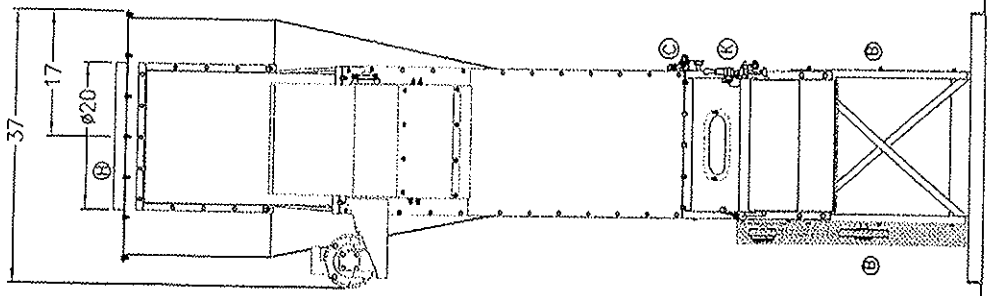
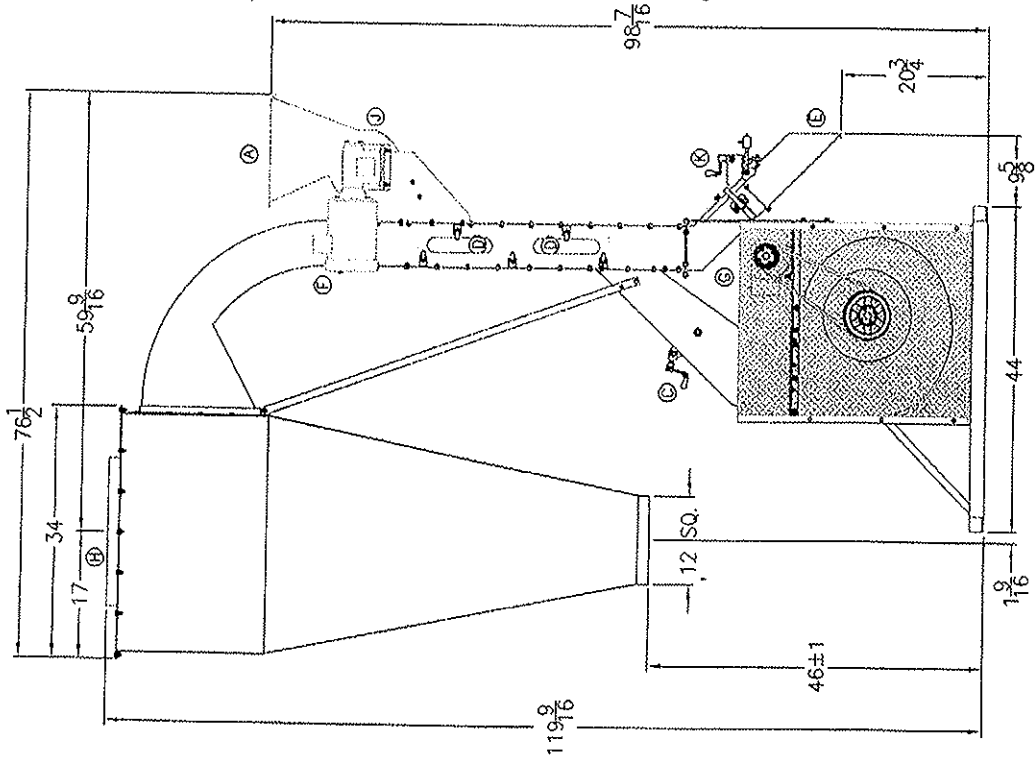
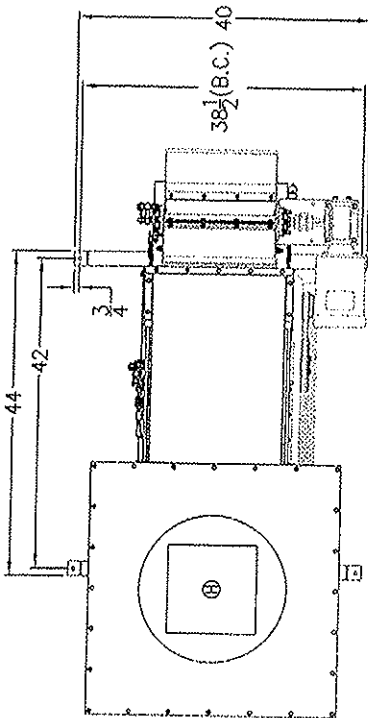
OPERATING PRINCIPLE

The principle of product separation is based on differential of lifting velocity. Lifting velocity is dependent on the shape, surface texture and density which affects the aerodynamic behavior of the product in the air stream.

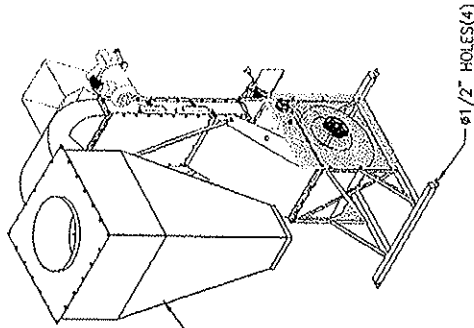
The portion of the product which is aerodynamically heavy will fall in the air stream and be discharged out the discharge density, airlock, spout. The lighter product is carried with the air stream to the settling chamber where most of this product is discharged through the light product discharge spout.

REV	DATE	BY	CHK

REVISION



CAUTION
 THIS IS A VIBRATING MACHINE. A SUITABLE CONCRETE BASE OR A SUBSTANTIAL FLOOR MUST BE USED. FLOORS MUST BE OF SOLID CONCRETE OR A SOLID STRUCTURAL BASE. IF NOT FLOORS WILL ABSORB AND TRANSMIT VIBRATIONS THROUGHOUT THE BUILDING.



[REF. #119-108B]

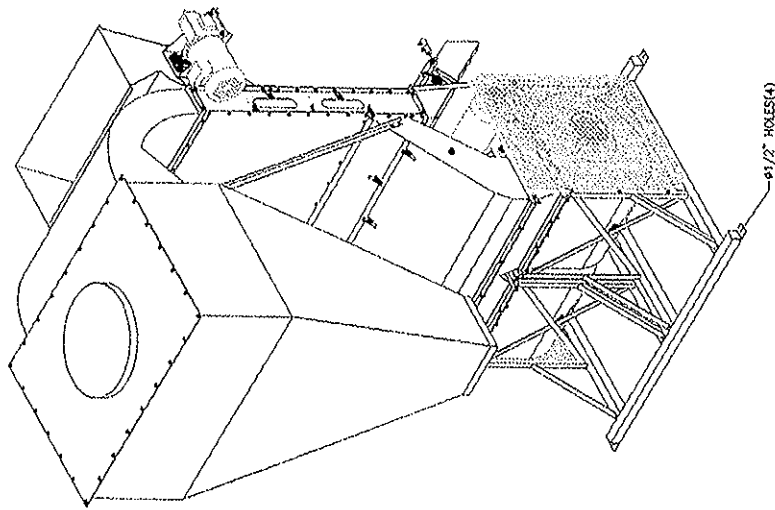
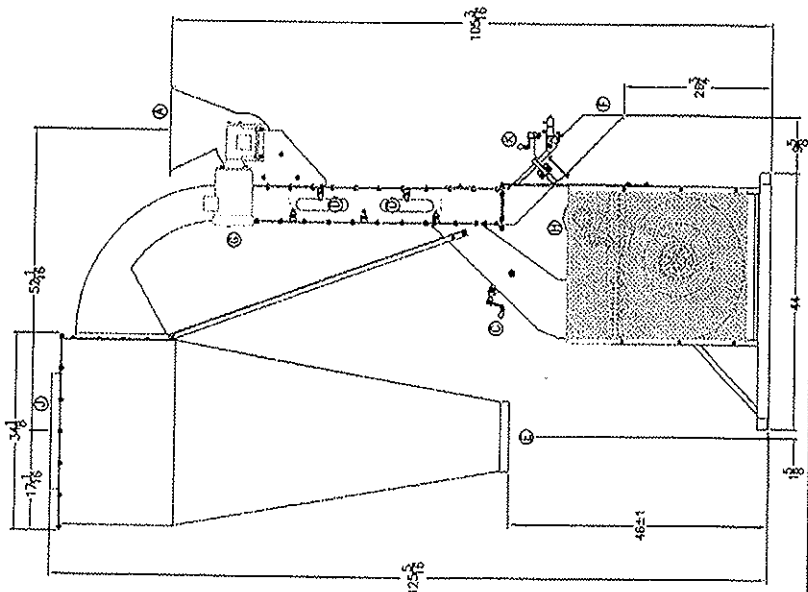
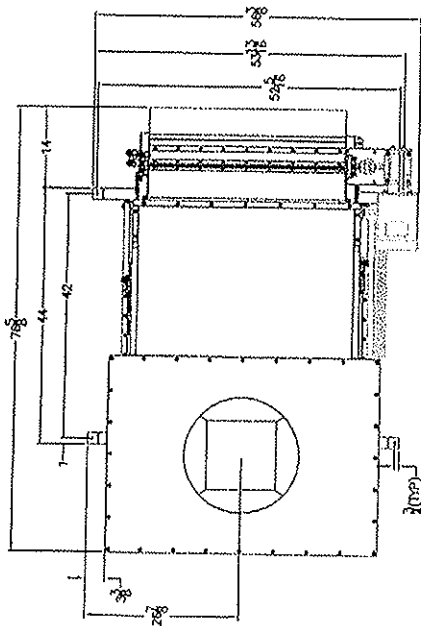
- (A) PRODUCT INLET - 15-3/8" X 14-3/16"
- (B) AIR INTAKE - BOTH SIDES
- (C) AIR CONTROL
- (D) INSPECTION WINDOWS
- (E) PRODUCT DISCHARGE SPOUT - 5" X 18-1/2"
- (F) PROVIDE FLEXIBLE ELECTRICAL CONNECTION FOR 1 HP MOTOR
- (G) PROVIDE FLEXIBLE ELECTRICAL CONNECTION FOR 2 HP MOTOR
- (H) AIR EXHAUST - Ø20"
- (I) ROTARY FEED
- (J) FULLY ADJUSTABLE OR MILL FLOATING PRODUCT DISCHARGE DOOR

REF. #119-108B FOR EXTENDED TOP CHAMBER
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FORSEBERG		FORSEBERG INC.	
DESIGNER:	FSOC	DATE:	11.12.09
DRAWN BY:	C. HARBOIT	DATE:	11.12.09
TITLE:	AIR-CLASSIFIER (SINGLE)		
REV:	ROLL FEED		
REV:	SQUARE TOP CHAMBER (EXTENDED)		
REV:	4-1989	REV:	
REV:		REV:	

REV.	DATE	REVISION	BY	CR
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- (A) PRODUCT INLET ROLL FEED - 14-1/8" x 34"
- (B) AIR INTAKE - BOTH SIDES
- (C) AIR CONTROL
- (D) INSPECTION WINDOWS
- (E) FINES SPOUT - $\phi 12"$ SQ.
- (F) PRODUCT DISCHARGE SPOUT - 5" X 36-3/4"
- (G) PROVIDE FLEXIBLE ELECTRICAL CONNECTION FOR 1 HP MOTOR
- (H) PROVIDE FLEXIBLE ELECTRICAL CONNECTION FOR 2 HP MOTOR
- (I) AIR EXHAUST - $\phi 20"$
- (J) FULLY ADJUSTABLE OR MILL FLOATING PRODUCT DISCHARGE DOOR



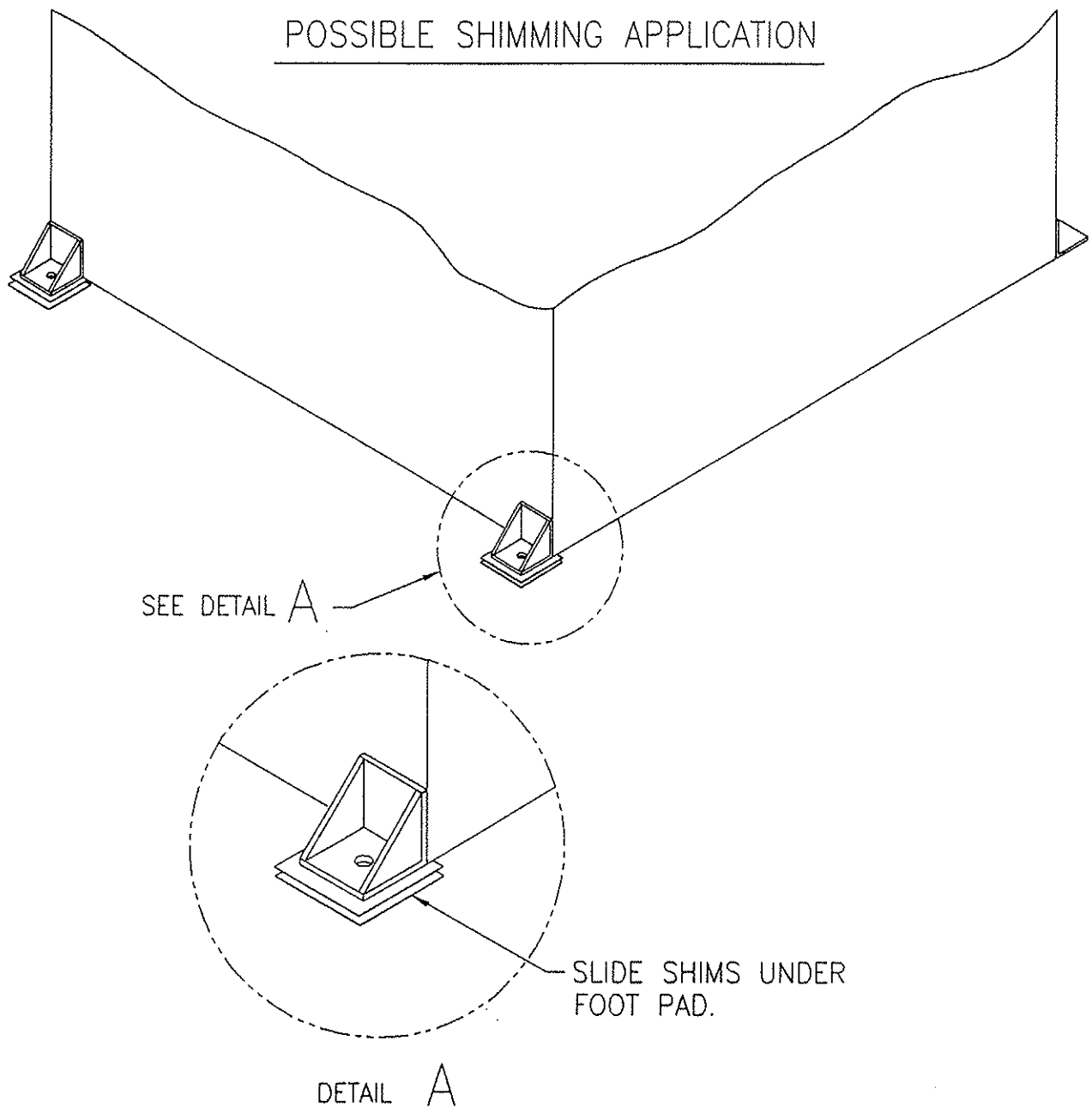
REF. #119-2058 FOR EXTENDED TOP CHAMBER
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 SUBJECT TO THE NATIONAL ARCHIVES AUTOMATIC DECLASSIFICATION
 AND DOWNGRADING SCHEDULE.

FORSEBERG		FORSEBERG INC.	
DESIGNED BY: C. HARRIS	DATE: 02.15.10	SCALE: AS SHOWN	PROJECT NO.:
CHECKED BY:	DATE:	DRAWN BY:	DATE:
TITLE:	AIR-CLASSIFIER (DUAL)		
ROLL FEED	4-1886C		
W/SQ. TOP CHAMBER (EXTENDED)	8" FULL WIDTH HEAVY SPOUT		

*

SHIMMING INSTRUCTIONS

After the machine has been set in place on solid concrete or a solid structural base, and prior to bolting the machine down – THE MACHINE MUST BE SHIMMED PROPERLY! to do this, check all four mounting locations and make sure there is equal pressure between the mounting pads of the machine and the floor. If there is difference, SHIMMING MUST BE DONE! shimming might be as light as 22 GA. or a 24 GA. SHIM, BUT IT IS NECESSARY!!!



**FORSBERGS INC.
SEPARATION SYSTEMS**

NOTE:

ANY ALTERATIONS TO

THIS

MACHINE WITHOUT

FACTORY

APPROVAL VOIDS

WARRANTY!

FORSBERG PRECISION CLASSIFIER

Engineered and constructed in the traditional FORSBERG manner, providing design strength and machine quality at the lowest possible price. Listed below are a few of the important advantages over others currently being marketed.

1. 14 gauge all steel construction
2. Air chamber observation windows
3. No jack shafts
4. Uniform air distribution
5. Pre-lubricated bushings (2)
6. No screens to clean

Input capacity up to 167 bu/hr on wheat. (Capacities will vary depending upon product.)

FOR INFORMATION ON THIS AND OTHER FORSBERG PRODUCTS, PLEASE WRITE OR CALL:

FORSBERGS, INC.
P.O. Box 510 - Airport Road
Thief River Falls, MN 56701
Telephone: (218) 681-1927
Cable: Forsep - TWX: 910-561-2634
FORSBERGS, THRF

FORSBERG PRECISION CLASSIFIER

INSTALLATION

No special foundation is required. Any floor or stand that will structurally support the machine is adequate. The machine should be leveled for best operation and drive belts, bearings, bolts, etc., should be inspected before starting. The machine should be positioned to allow access to the feed and air controls, for cleaning and maintenance. Machine installation should permit unobstructive air intake to the fan unit. Any alteration to the machine, unless approved by Forsbergs, Inc., may void the machine warranty.

OPERATION

Guards are provided for all moving parts and must be in place before starting the machine. Sound levels may exceed 85 decibels, requiring ear protection.

The principle of product separation is based on differential of lifting velocity. Lifting velocity is dependent on the shape, surface texture and density which affects the aerodynamic behavior of the product in the air stream.

The portion of the product which is aerodynamically heavy will fall in the air stream and be discharged out the discharge density, airlock, spout. The lighter product is carried with the air stream to the settling chamber where most of this product is discharged through the light product discharge spout.

FEED

Any feed system which spreads the feed evenly to within a few inches of each side of the feed hopper, to utilize the entire cleaning area, is recommended. A continued type of feed system, using either a vibrator, flat belt or roll feed is preferred. The feed rate has a definite effect on the machines cleaning ability.

REPLACEMENT PARTS

The following parts are available from this factory: fan unit and individual fan parts, including fan wheel and fan shaft. Please give part name and machine serial number when ordering. If body damage occurs, consult Forsbergs, Inc.

MAINTENANCE

The Precision Classifier requires periodic inspection and cleaning. The fan wheel is of primary concern. It is also possible to have a piece of product become lodged in any chute area, causing improper operation.

The bushings are sealed and require no lubrication.

All bolts and belts should be inspected and adjusted as necessary, prior to operation.

ADJUSTMENTS

The machine has only two adjustments, one for control of airflow and a feed control. The airflow rate can be adjusted by a simple slide lever with lock nut. The feed control lever operates a slide gate within the feed hopper. The proper airflow and feed rate will be determined by the operator, optimizing a balance of desired separation by observing the discharge of the heavy vs light particles. Adjustments must be made when the product input and air density changes.

CAUTION: Consult Forsbergs, Inc., before increasing fan speed as it may overdraw motor or damage fan wheel at excessive RPM.

VENTING THE SETTLING CHAMBER

The settling chamber will not separate dust size particles from the airstream. If such material is found in your product, venting may be required depending on volume, chemical composition and/or air pollution regulations.

Venting to the atmosphere or to the outside of the building are the most common methods. When venting, do not reduce the area of the settling chamber or top ring. Also, avoid use of small rain caps and elbows. The discharge should be directed away from prevailing winds.

INSTRUCTIONS FOR ORDERING

PLEASE BE SURE TO GIVE THE FOLLOWING INFORMATION WHEN ORDERING—*TYPE OF MACHINE, MODEL NUMBER AND SERIAL NUMBER.*

	THE FORSBERG LINE <i>"DRY GRANULAR SEPARATORS"</i>	
	TYPE <input type="text"/>	TYPE OF MACHINE
	MODEL <input type="text"/>	
MODEL NO. (I.E. 50-VMS, P-8, 34-4800, ETC.)	SER. NO. <input type="text"/>	SERIAL NO.
	FORSBERG'S INC. THIEF RIVER FALLS, MINNESOTA, U.S.A.	

BE SURE TO GIVE PART NO., ITEM NO., & PLATE NO.
THIS INFORMATION IS VERY IMPORTANT TO
INSURE PROMPT SERVICE.

SEALMASTER Ball Bearings

INSTALLATION INSTRUCTIONS

SEALMASTER Ball Bearing extended inner race, zone hardened rings are ground for a sliding fit over the shaft. They are easily and securely locked to the shaft by means of two self-locking, cup point, socket head set screws, or with two slotted head half dog point set screws and a locking wire. This positive race-to-shaft lock is attained when the hardened cup point set screws are securely tightened through the soft, extended ends of the inner race.

MOUNTING INSTRUCTIONS

1. Use clean shafting free of nicks and burrs. If old shafting is used, locate SEALMASTER bearing on an unused section.
2. Make certain set screws are clear of bore.
3. Slide SEALMASTER into position on shaft - never hammer the ends of the inner race, as they are soft and may be damaged. If necessary to apply force, use a brass bar or pipe against the inner race only to drift bearing into place. Never strike housing as it may damage the bearing.
4. Bolt housing to support.
5. Rotate shaft to make certain it turns freely.
6. Tighten self-locking, cupped point set screws securely onto the shaft. If a torque wrench is used, see Table II.
7. Do not spot drill shaft through set screw holes when using half dog point set screws. Due to zone hardening, the threads are in their original metallurgically soft state and may be injured by the drill.
8. When using half dog point set screws, position bearing, center punch through set screw holes to mark positions. Back off bearing and spot-drill hole deep enough to receive the full length of half dog points. Replace bearing, bolt in position, tighten set screws and place wires in position.

TABLE II

TORQUE FOR TIGHTENING SET SCREWS			
SET SCREW DIAM.	HEX. SIZE	RECOM. TORQUE	
	ACROSS FLATS	INCH LBS.	FOOT LBS.
1/4	1/8	66	5.5
5/16	5/32	126	10.5
3/8	3/16	228	19.0
7/16	7/32	348	29.0
1/2	1/4	504	42.0
5/8	5/16	1104	92.0

SEALMASTER BEARINGS
MORSE CHAIN DIVISION
BORG-WARNER CORPORATION
Aurora, Illinois 60507

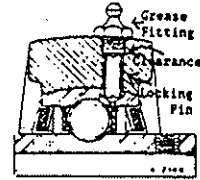
Factory Representatives & Dealers
In All Principal Cities



LUBRICATION INSTRUCTIONS

All SEALMASTER bearing units are prelubricated with grease chosen for its chemical and mechanical stability. SEALMASTER bearings are designed for lubrication with grease. Units furnished with a grease fitting should be periodically relubricated. The relubrication interval depends on bearing operating conditions: speed, temperature, and environment. (See Conditions in Table I below for typical relubrication schedules.)

Figure 1 shows the locking pin and dimple feature of the SEALMASTER relubricable units. This feature provides positive means for relubrication while allowing several degrees of misalignment. If the grease fitting supplied with the unit is replaced, make certain the same length of thread engagement is maintained. Adaptor fittings are available for this purpose and also for extended line systems.



RELUBRICATION

1. Add grease slowly with shaft rotating until a slight bead forms at the seals.
2. Relubrication is generally accompanied by a slight rise in operating temperature until the bearing chamber is stabilized with the proper amount of grease.
3. If necessary to relubricate while bearing is stationary, refer to SEALMASTER catalog for maximum grease capacity for the size bearing.
4. For abnormal operating conditions of high temperature or abnormal environments, consult SEALMASTER Engineers.

TABLE I

CONDITIONS			
SPEED	TEMPERATURE	CLEANLINESS	GREASING INTERVAL
100 RPM	Up to 120° F	Clean	8 to 12 Months
500 RPM	Up to 150° F	Clean	2 to 6 Months
1000 RPM	Up to 210° F	Clean	2 Weeks to 2 Months
1500 RPM	Over 210° F	Clean	Weekly
Any Speed	Up to 150° F	Dirty	1 Week to 1 Month
Any Speed	Over 150° F	Dirty	Daily to 2 Weeks
Any Speed	Any Temp.	Very Dirty	Daily to 2 Weeks
Any Speed	Any Temp.	Extreme Conditions	Daily to 2 Weeks

For normal operating conditions, relubricate with a grease conforming to NLGI No. 2 penetration, free from chemical impurities, such as dust, rust, metal particles or abrasives.

Browning Ball Bearing Units

MOUNTING AND LUBRICATION INSTRUCTIONS

BROWNING Bearing Unit performance is dependent on proper installation and lubrication where required. Failure to follow instructions may result in poor performance and short bearing life.

MOUNTING INSTRUCTIONS

1. For best results use turned and ground shafting, free of rough spots and burrs. If old shafting is used, locate bearing on a smooth unworn section.
2. Clean shaft and bearing bore. Coat shaft with a small amount of oil.

A - Eccentric Collar Bearings

- 3a. Slide bearing unit and collar on the shaft. (If projecting side of bearing is to be mounted toward the machine, put the locking collar on first.) Collar should be opposing thrust load. **DO NOT HAMMER THE ENDS OF THE INNER RACE.** If necessary to apply force in mounting, use a soft metal bar or pipe against the inner race only. Tap the bearing unit into place.
- 4a. Fit the eccentric locking collar on the projecting inner race. **TURN IT IN THE DIRECTION OF SHAFT ROTATION.** Tighten the collar securely, using a spanner or setscrew wrench. Tighten the setscrew against shaft.

B - Setscrew Lock Bearings

- 3b. Slide the bearing unit on the shaft. **DO NOT HAMMER THE ENDS OF THE INNER RACE.** If necessary to apply some force in mounting, use a soft metal bar or pipe against the inner race only. Tap the bearing unit into place. Tighten the two setscrews securely to lock bearing to shaft.

LUBRICATION INSTRUCTIONS

All BROWNING Bearing Units are factory lubricated and ready for use (except for unusually severe applications). Lubricated-for-Life Bearings have no grease fitting and require no additional lubrication while in use. Re-lube Bearing Housings have a lubrication fitting mounted on the housing and should be lubricated when used in wet or dirty applications. Experience will determine the best interval for each specific application, but the following table provides a guide.

Lubrication Guide

Conditions	Grease Intervals
Dusty	1 - 4 weeks
Moisture	Daily - 1-week

When lubricating bearings, add grease slowly while shaft is rotating. When grease begins to come out of the seals, the bearing will contain the correct amount of lubricant. For general use, relubricate with one of the following greases or equivalent:

- Alvania #2
- Texaco Multifak #2
- Sun Prestige #41
- Humble Lidok #2
- Sinclair Litholine—Multi-Purpose

Bearings should not run in steady operation over 200° F. and should not exceed 225° for intermittent operation.

For unusual or severe applications write Browning Mfg. Division Emerson Electric., Maysville, Kentucky 41056.

REPLACEMENT BEARINGS IN BEARING UNITS

All BROWNING Bearing Units are fitted with self-aligning bearings which can be replaced in case of wear or damage to the original bearing. To replace bearing:

1. Loosen Setscrew in locking collar or bearing.
2. Loosen Locking Collar, if any, from shaft by turning in direction opposite to shaft rotation.
3. Remove Unit from shaft.
4. Remove Collar, if any, from inner race of Bearing Unit.
5. Rotate Bearing 90° in the housing.
6. Withdraw along the slots in the sides of the housing.
7. Inspect housing for wear or damage and replace if necessary.
8. Clean inside of housing with lint-free cloth or paper towel.
9. Insert Bearing in the slots.
10. Rotate Bearing 90° in the housing to operating position. If the fit between the Housing and Bearing is loose, the Housing should be replaced.
11. Replace Collar, if any.
12. Remount Unit on shaft.
13. Tighten Locking Collar, if any, on shaft by turning in direction of shaft rotation.
14. Tighten Setscrew in locking collar or bearing.

BROWNING MANUFACTURING DIVISION
EMERSON ELECTRIC CO.
MAYSVILLE, KENTUCKY 41056 Form No. 4773-D
Printed in U.S.A.

INSTRUCTION MANUAL FOR

Dodge SC, SCB and SCM Ball Bearings and Dodge Ball Bearing Fan and Blower Pillow Blocks

IMPORTANT NOTICE: Bearing performance depends on proper installation, lubrication and maintenance. Therefore, all instructions in the manual must be carefully followed.

INSTALLATION INSTRUCTIONS

1. Clean shaft and bore of bearing.
2. Slip bearing into position. In the case of screw conveyor hanger bearings, mount so flow of material is against locking collar.
3. If the bearing has a flanged collar, push it against end of race while tightening set screws to prevent possible collar wobble.
4. For bearings with collars, tighten set screws to recommended torque given in table below; or using a piece of pipe on wrench, tighten until screw stops turning and wrench starts to spring. **CAUTION:** For bearings without collars do not exceed recommended torque.

Set Screw Diam.	Hex. Size Across Flats	Recommended Wrench Torque [▲] (Pound-Inches)	▲ When a torque wrench is not available it is possible to approximate these torque values by using an ordinary wrench and piece of pipe on wrench. For example, to obtain 140 pound-inches wrench torque, pull 20 pounds at 7" distance from center of pull to center of screw, or pull 10 pounds at a 14" distance, etc.
No. 10	3/32	30	
1/4	1/4	70	
3/16	3/32	140	
3/8	1/4	220	
1/2	3/8	350	

LUBRICATION INSTRUCTIONS

Storage or Special Shutdown — If exposed to wet or dusty conditions or to corrosive vapors, extra protection is necessary: Add grease until it shows at the seals; rotate the bearing to distribute grease; cover the bearing. After storage or idle period, add a little fresh grease before running.

High Speed Operation — In the higher speed ranges too much grease will cause over-heating. The amount of grease that the bearing will take for a particular high speed application can only be determined by experience — see "Operating Temperature" below. If excess grease in the bearing causes over-heating, it will be necessary to remove grease fitting to permit excess grease to escape. The bearing has been greased at the factory and is ready to run. When establishing a relubrication schedule, note that a small amount of grease at frequent intervals is preferable to a large amount at infrequent intervals.

Operation in Presence of Dust, Water or Corrosive Vapors — Under these conditions the bearing should contain as much grease as speed will permit since

(Continued on Reverse Side)

(Continued from Reverse Side)

a full bearing with consequent slight leakage is the best protection against entrance of foreign material. In the higher speed ranges too much grease will cause over-heating — see "High Speed Operation" above. In the lower speed ranges it is advisable to add extra grease to a new bearing before putting into operation. Bearings should be greased as often as necessary (daily if required) to maintain a slight leakage at the seals.

Normal Operation — This bearing has been greased at the factory and is ready to run. The following table is a general guide for relubrication. However, certain conditions may require a change of lubricating periods as dictated by experience. See "High Speed Operation" and "Operation in Presence of Dust, Water or Corrosive Vapors" above.

Operating Temperature — Abnormal bearing temperature may indicate faulty lubrication. Normal temperature may range from "cool to warm to the touch" up to a point "too hot to touch for more than few seconds", depending on bearing size and speed, and surrounding conditions. Unusually high temperature accompanied by excessive leakage of grease indicates too much grease. High temperature with no grease showing at the seals, particularly if the bearing seems noisy, usually indicates too little grease. Normal temperature and a slight showing of grease at the seals indicate proper lubrication.

Kind of Grease — Many ordinary cup greases will disintegrate at speeds far below those at which Dodge bearings will operate successfully if proper grease is used. Dodge bearings have been lubricated at the factory with No. 2 consistency lithium base grease which is suitable for normal operating conditions. Relubricate with lithium base grease or a grease which is compatible with original lubricant and suitable for ball bearing service. In unusual or doubtful cases the recommendation of a reputable grease manufacturer should be secured.

Special Operating Conditions — Refer acid, chemical, extreme or other special operating conditions to the Dodge Manufacturing Corporation, Mishawaka, Indiana.

Lubrication Guide

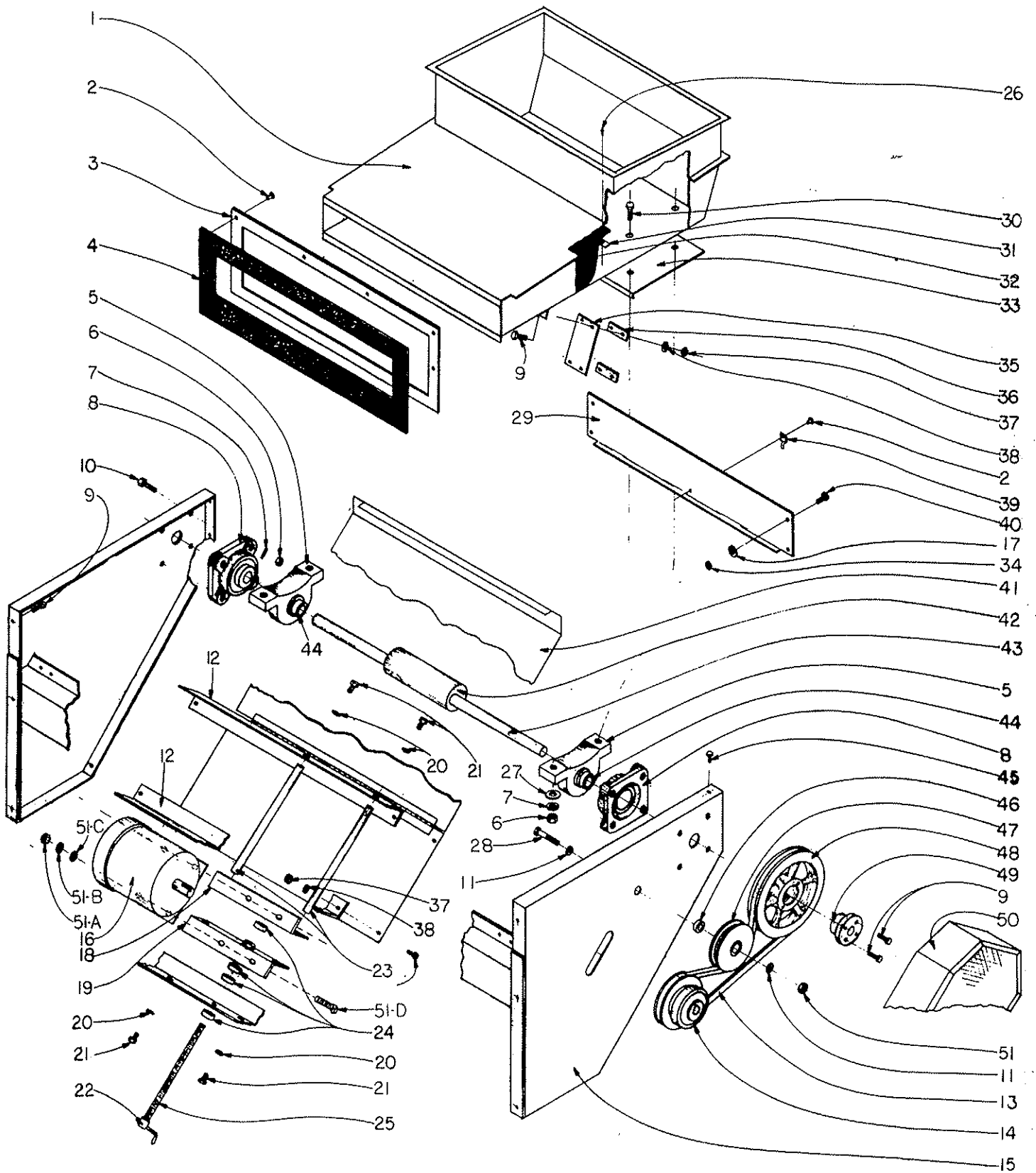
Read Preceding Paragraphs Before Establishing Lubrication Schedule.

Hours Run Per Day	Suggested Lubrication Period in Weeks							
	1 to 250 RPM	251 to 500 RPM	501 to 750 RPM	751 to 1000 RPM	1001 to 1500 RPM	1501 to 2000 RPM	2001 to 2500 RPM	2501 to 3000 RPM
8	12	12	10	7	5	4	3	2
16	12	7	5	4	2	2	1	1
24	10	5	3	2	1	1	1	1

DODGE MANUFACTURING CORPORATION
DIVISION OF RELIANCE ELECTRIC CO.
Mishawaka, Indiana

Printed in U.S.A.

February, 1968 Issue of 499551



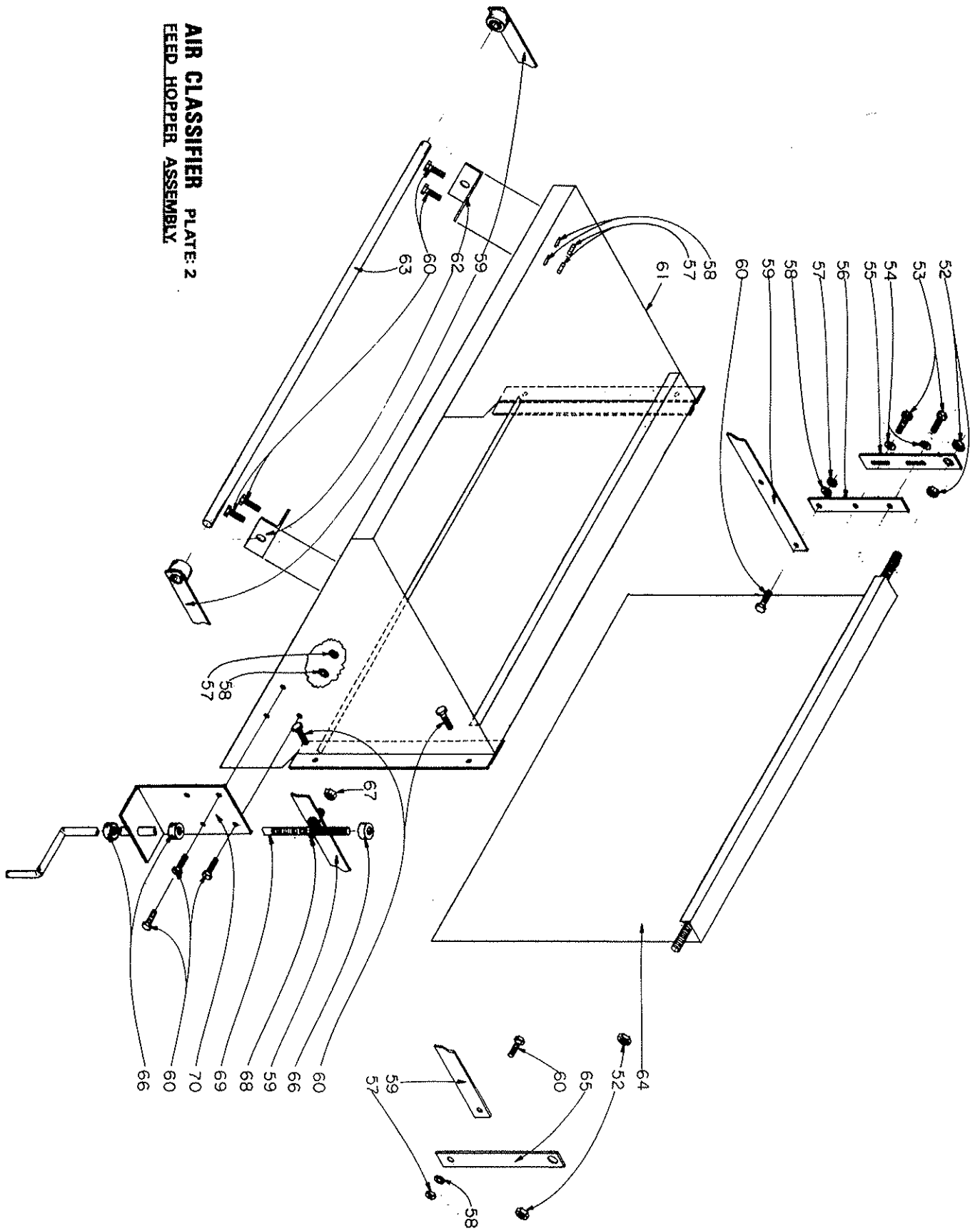
AIR CLASSIFIER PLATE: 1
PAN FEEDER ASSEMBLY.

Plate 1 - Pan Feeder Assembly

<u>ITEM NO.</u>	<u>PART NO.</u>	<u>QUANTITY</u>	<u>DESCRIPTION</u>
1	119-110-A	1	PAN
2	12-139-P68	10	RIVET, POP
3	119-110-16	1	FLANGE, C.R.S.
4	119-110-15	1	GASKET, RUBBER
5	12-104-19	2	BEARING, BLOCK
6	12-120-6C	8	NUT, HEX
7	12-114-6R	8	WASHER, LOCK
8	12-335-13	2	BEARING, FLANGED
9	12-123-3	20	BOLT
10	12-123-56	8	BOLT
11	12-122-10	2	WASHER, FLAT
12	119-110-18	2	IRON, ANGLE
13	12-126-A	1	BELT
14	12-244-4-10	1	DRIVE, PULLEY
15	119-110-B	1	DRIVE, FRAME
16	12-331-1/2-1725-56	1	MOTOR
17	12-114-010R	4	WASHER, LOCK
18	119-110-19	1	IRON, ANGLE
19	119-110-20	1	IRON, ANGLE
20	12-114-5R	4	WASHER, LOCK
21	12-123-28	4	BOLT
22	12-069-2	1	CRANK
23	119-110-24	2	SHAFT
24	12-125-08	4	COLLAR, SET
25	119-110-27	1	ROD, THREADED
26	12-139-P48	5	RIVET, POP
27	12-122-6	4	WASHER, FLAT
28	12-123-149	1	BOLT
29	119-110-11	1	PANEL, BACK
30	12-123-57	4	BOLT
31	119-110-8	1	IRON, FLAT
32	119-110-7	1	NEOPRENE
33	119-110-2	1	PLATE, REINF
34	12-120-3C	4	NUT, HEX
35	119-110-10	2	SPRING, FIBER
36	119-110-9	4	IRON, FLAT
37	12-120-4C	8	NUT, HEX
38	12-114-4R	8	WASHER, LOCK
39	12-127-S	1	CLIP, LUDWIG
40	12-123-187	4	BOLT
41	119-110-A	1	DRIVE, PANEL
42	119-110-28	1	ECCENTRIC
43	119-110-26	1	SHAFT
44	12-246-002M	2	ECCENTRIC
45	12-393	4	TAP, SCREW
46	12-125-10	1	COLLAR, SET
47	119-116	1	PULLEY, IDLER
48	12-225-69H	1	PULLEY, DRIVEN
49	12-225-H13/16	1	BUSHING
50	119-110-C	1	GUARD, BELT
51	12-110-10C	1	NUT, HEX
51-A	12-120-6C	4	NUT, HEX
51-B	12-114-5R	4	LOCK, WASHER
51-C	12-122-4	4	FLAT, WASER
51-D	12-123-5	4	BOLT

WHEN ORDERING PARTS, SERIAL NUMBER OF MACHINE MUST BE INCLUDED

AIR CLASSIFIER PLATE: 2
FEED HOPPER ASSEMBLY

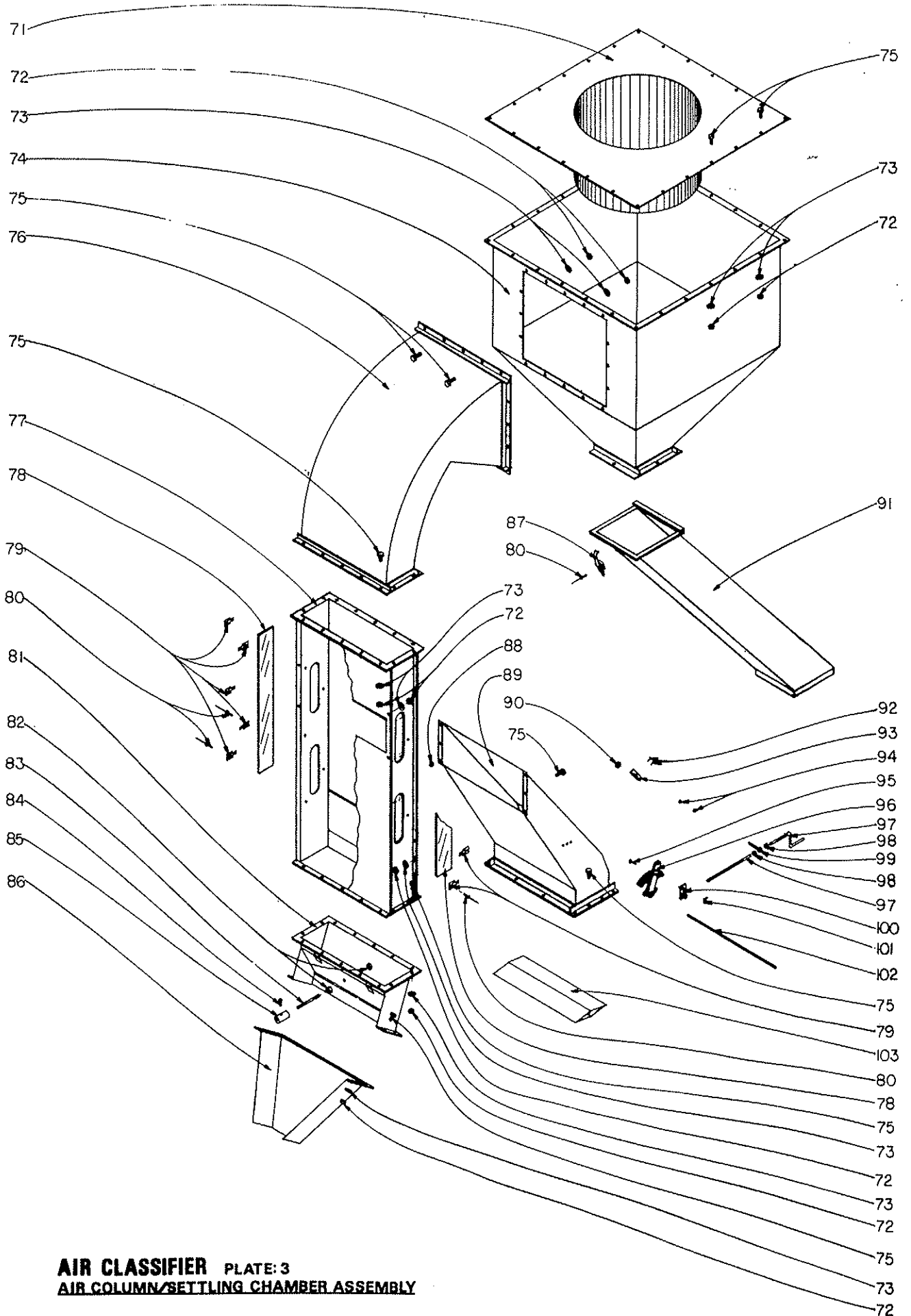


FORSBERG AIR CLASSIFIER

Feed Hopper Assembly - Plate 2

<u>ITEM NO.</u>	<u>PART NO.</u>	<u>QUANTITY</u>	<u>DESCRIPTION</u>
52	12-118-6C	4	NUT
53	12-123-1	2	BOLT
54	12-122-4	2	WASHER, FLAT
55	119-107-11	1	LINK, ADJUSTMENT
56	119-107-09	1	LINK, CONNECTOR
57	12-120-4C	9	NUT, HEX
58	12-114-4R	9	WASHER, LOCK
59	119-10-02	2	CONTROL, HOPPER
60	12-123-3	13	BOLT
61	119-107-01	1	HOPPER, FEED
62	119-107-08	2	CONTROL, BRACKET
63	119-107-06	1	SHAFT
64	119-107-03	1	FD, RESTRICTOR, PANEL
65	119-107-110	1	LINK-CTRL-SIDE
66	12-125-6	3	COLLAR, SET
67	12-118-4C	1	NUT, LOCK
68	119-107-07	1	BOLT, NUT, WLDMT.
69	119-107-13	1	CRANK
70	119-107-14	1	CRANK, BRACKET

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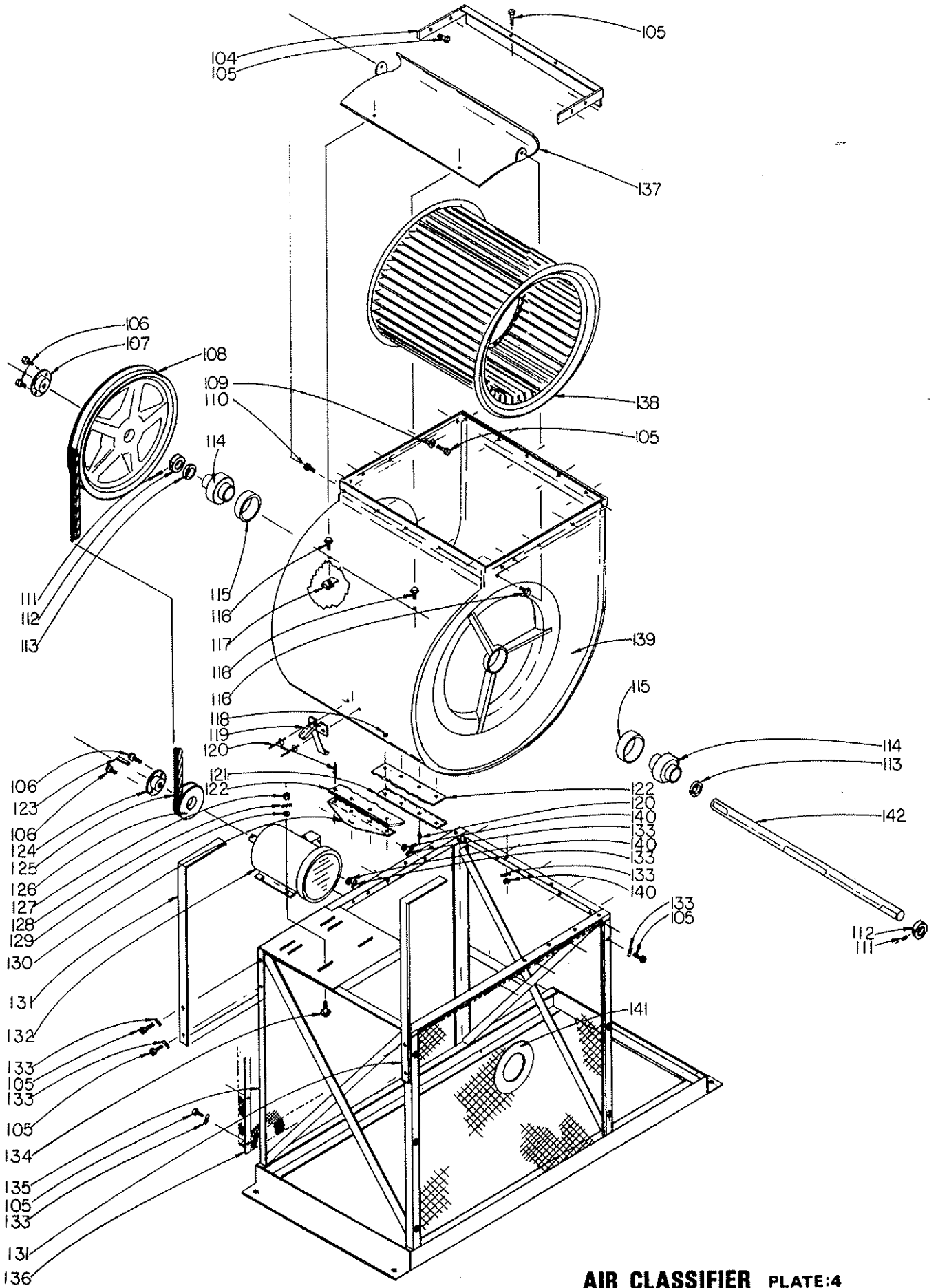
AIR CLASSIFIER PLATE: 3
AIR COLUMN/SETTLING CHAMBER ASSEMBLY

FORSBERG AIR CLASSIFIER

Air Column/Settling Chamber Assembly - Plate 3

<u>ITEM NO.</u>	<u>PART NO.</u>	<u>QUANTITY</u>	<u>DESCRIPTION</u>
71	119-108-01	1	PANEL, TOP
72	12-120-4C	87	NUT, HEX
73	12-114-4R	87	WASHER, LOCK
74	119-108-02	1	DUST, COLLECTOR
75	12-123-3	87	BOLT
76	119-108-03	1	CHAMBER, AIR
77	119-106-01	1	TUBE, AIR
78	119-106-07	2	PLEXIGLASS
79	12-127-S	10	LUDWIG, CLIP
80	12-139-P68	14	RIVET, POP
81	119-104-01	1	SPOUT, DISCH.
82	12-120-5C	2	NUT, HEX
83	119-102-08	1	WEIGHT, ROD
84	12-112-4	1	SCREW, THUMB
85	119-102-07	1	WEIGHT
86	119-103-01	1	TROUGH, DISCH.
87	12-214-1	1	CLAMP, BASSICK
88	12-125-8	1	COLLAR, SET
89	119-105-01	1	AIR, COLUMN
90	12-118-5C	1	NUT, LOCK
91	119-118	1	CULL, DISCH.
92	12-393	2	SCREW, TAP
93	119-105	1	IRON, ANGLE
94	12-122-5	2	WASHER, FLAT
95	12-195-04	1	BOLT
96	12-195	1	CONTROL, QUAD.
97	119-105	1	HANDLE, CRANK
98	12-125-06	2	COLLAR, SET
99	119-105	1	PIVOT, CRANK
100	119-105	1	CRANK, BRACKET
101	12-182-4D-C	1	NUT, WING
102	119-105-02	1	SHAFT, AIR-GATE
103	119-105-03	1	GATE, AIR

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AIR CLASSIFIER PLATE:4
FRAME ASSEMBLY

FORSBERG AIR CLASSIFIER

Frame Assembly - Plate 4

<u>ITEM NO.</u>	<u>PART NO.</u>	<u>QUANTITY</u>	<u>DESCRIPTION</u>
104	119-101-13	1	FAN, FILLER
105	12-123-3	42	BOLT
106	12-123-5	4	BOLT
107	12-109-16H	1	FAN, BUSHING
108	12-107-72	1	PULLEY, DRIVEN
109	12-122-4	20	FLAT, WASHER
110	12-393	2	TAP, SCREW
111	12-390	2	SET, SCREW
112	12-390	2	THRUST, COLLAR
113	12-391	2	THRUST, WASHER
114	12-392	2	SLEEVE, BEARING
115	12-281-7	2	BRG., ISOLATER
116	12-174-04-14	4	SCREW
117	12-394	4	U-NUT
118	12-239-05	4	BACKING, WASHER
119	12-215-HR1	1	BASSICK, CLAMP
120	12-139-P66	10	RIVET
121	119-101	1	LATCH, PLATE
122	119-101	1	RUBBER, DOOR
123	12-395	1	KEY
124	12-109-10H	1	MOTOR, BUSHING
125	12-126-5L48	1	BELT
126	12-107-34	1	MOTOR, PULLEY
127	12-120-5C	4	NUT, HEX
128	12-114-5R	4	LOCK, WASHER
129	12-122-4	4	FLAT, WASHER
130	119-101	1	LATCH, HANDLE
131	119-101-14	2	FLAT, IRON
132	12-331-1/2-1725-145T	1	MOTOR
133	12-114-4R	2	FLAT, IRON
134	12-151-4-5	4	CARRIAGE, BOLT
135	119-101-01	1	FRAME
136	119-104	1	MOTOR, GUARD
137	12-281-10	1	PLATE, AIR CTRL.
138	12-281-2	1	WHEEL, FAN
139	12-281-1	1	HOUSING
140	12-120-4C	36	NUT, HEX
141	119-104	1	AIR, GUARD
142	119-114	1	SHAFT

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DAMAGE CLAIMS AND WARRANTY

A. Damage Claims

1. Thoroughly examine the enclosure as soon as it is received. If damaged, write on the face of the freight bill a complete and detailed description of the damage. Have the carrier's agent sign the description.
2. Immediately notify the delivering carrier of the damage or loss. This notification may be given either in person or by telephone. Written confirmation must be mailed within 48 hours. Railroads and motor carriers are understandably reluctant to make adjustments for damaged merchandise unless inspected and reported promptly.
3. Risk of loss of, or damage to merchandise remains with the buyer. It is the buyer's responsibility to file a claim with the carrier involved.
4. Immediately advise your FORSBERG representative, distributor, or the factory so that we may assist you.

B. Warranty and Conditions

1. **WARRANTY.** We Warrant that this product will be free from defects in material and workmanship for a period of one year from the date of shipment thereof or the product's total rated life, whichever first occurs. Within the warranty period we shall repair or replace such products which are returned to us with shipping charges prepaid and which are determined by us to be defective. This warranty will not apply to any product which has been subject to misuse, negligence, or accident; or misapplied or modified or repaired by unauthorized persons; or improperly installed.
2. **INSPECTION.** Buyer shall inspect the product promptly after receipt and shall notify us at our office in writing of any claims, including claims of breach of warranty, within thirty days after the buyer discovers or should have discovered the facts upon which the claim is based. Failure of the buyer to give written notice of a claim within the time period shall be deemed to be a waiver of such claim.
3. **DISCLAIMER.** The provisions of paragraph 1 are our sole obligation and exclude all other remedies or warranties, expressed or implied, including warranties of **MERCHANTABILITY** and **FITNESS FOR A PURPOSE**, whether or not purposes or specifications are described herein. We further disclaim any responsibility whatsoever to the customer or to any person for injury to person or damage to or loss of property or value caused by any product which has been subject to misuse, negligence, or accident; or misapplied; or modified or repaired by unauthorized persons; or improperly installed.
4. **LIMITATION OF LIABILITY.** Under no circumstances shall the company be liable for any incidental, consequential or special damages, losses, or expenses, arising from the contract for this product, or in connection with the use of, or inability to use, our product for any purpose whatsoever.

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