

other facial and head injuries.

We are in the business of farming, the compressor was used to inflate tires on farm equipment used on our farm.

We were wondering if perhaps there were other cases like this with this type of compressor, this same compressor is being sold in Farm & Fleet Stores at present but this model has safety relief valve installed on tank.

We would appreciate any comments you have and perhaps you could instruct us where we could have an impartial examination and test of what remains of our compressor to determine why it exploded.

Thank you,

Sincerely Yours,

Leon Podrez
R. 2 - Box 48A
BUTTERNUT, WI.
54514

Leon Podrez

Tel. # 715-769-3437

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~~mitt - FYT~~ file

UNITED STATES GOVERNMENT

U.S. CONSUMER PRODUCT
SAFETY COMMISSION
WASHINGTON, D.C. 20207

Memorandum

TO : Paul E. Phillips, Compliance Officer
 : Midwestern Regional Office - Hazard Assessment Committee JUN 11 1982
 Thru: Milton J. Schulz, Deputy Regional Director
 Thru: David W. Thome, Director, CACA ¹⁹⁰⁰

FROM : Kevin C. O'Brien, Compliance Officer, CACA ^{KOB}

SUBJECT: Hazard Assessment Committee Decision
 RE: Air Compressors - Sanborn Mfgr. Co.

Please reference your memo (Copy attached) regarding air compressors manufactured by Sanborn Manufacturing Company, Springfield, MN. CACA concurs with your recommendation.

We wish to thank Midwestern Regional Office personnel for their excellent efforts regarding this product.

Attachment

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EJH

March 31, 1982

CACA - Room B-0230

ATTN : Dave Thome

MWRO - (CHI)
Hazard Assessment Committee
Hazard Assessment of Air Compressors

Mfr.: SANBORN MANUFACTURING CO.
Box 129, 118 West Rock
Springfield, MN 56087

Inspection at this manufacturer of air compressors was conducted on 3/4/82 in follow-up to Investigation #811214CEP2049, involving explosion of a 22 gallon compressor tank.

Firm was not aware of any widespread problem.

MWRO (CHI) will continue to monitor incoming surveillance, but no further follow-up is planned at this time.

PEP

Paul E. Phillips
MWRO - (CHI)
Hazard Assessment Committee

O+lcc - CACA w/attachment
(ATTN: D.Thome)

lcc - PEP (FYI)
lcc - DLD (FYI)
lcc - E/F

PEP:kc

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UNITED STATES GOVERNMENT

U.S. CONSUMER PRODUCT
SAFETY COMMISSION

Memorandum

TO : James A. Miersch, Supervisor

DATE: 4-29-82

FROM : Jerome R. Boog, Investigator, Twin Cities RP

SUBJECT: Sanborn Manufacturing Company
Inspection Report

On 4-29-82 I received the TWRP copy of my inspection of the above firm on 3-4-82. I found several problems with the way this report was processed at the CHI-RO.

First, the report was dictated and sent to the CHI-RO on 3-8-82. Even considering mail time this means it took nearly 50 days to type, process, endorse and send it back to the investigator. This time lag causes two problems. It takes away the "freshness" of the inspection as the investigator strives to include all pertinent information in the report. Also, if per chance the inspection was violative this would inhibit our compliance staff.

Secondly, the quality of the report is lacking in two specific areas. The report I dictated and the finished report I rec'd is different in that it lacks nine (9) sections of 9010.30. This includes areas such as the firm's quality control program, manufacturing operation, distribution, etc. Also it's quite obvious that the endorser paid little attention to reviewing the rough draft as there are numerous sections of the report that make no sense or include inaccurate information.

It's known to all that we were having some problems with our new dictating equipment. However, if a report was rec'd that missed key elements or was unreadable, all it would take is a call to the investigator. If this is done in a "prompt" manner the necessary changes can be made.

Jerome R. Boog
Jerome R. Boog
Investigator
Twin Cities RP

*JRB was
to dictate report
on 5-10-82.
JAM.*

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INSPECTION-INVESTIGATION COVERSHEET

1. AREA OFFICE Twin Cities RP	2. OPERATION Insp. <u>XX</u> Inv. _____	3. DATE 3-4-82	4. REPORT NO.
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5. ESTABLISHMENT NAME Sanborn Manufacturing Co.	6. FIRM IDENTIFICATION NO.
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7. ESTABLISHMENT ADDRESS Box 129, 118 West Rock Springfield, Mn. 56087	8. RELATED FIRMS None
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9. PRODUCTS INSPECTED Air Compressors	10. OTHER REGULATED PRODUCTS N/A
--	-------------------------------------

11. ESTAB. TYPE Manufacturer	12. ANN. SALES	a. PRODUCTS INSPECTED \$18 million Units _____	b. OTHER REG. PRODS. \$ _____ Units _____	c. TOTAL (Inc. non-reg.) \$ 18,000,000
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13. I.S. BUSINESS Rec. <u>70</u> % Sold <u>95</u> %	14. SAMPLES COLLECTED None	15. PROJECT 95163	16. HOURS 10 6 - travel
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17. REASON FOR INSPECT./INVEST.--DOC. REF.
Request for inspection under monthly workplans. F/U to IDI# 811214CEP2049. Possible hazard with air compressor.

18. EMPLOYEE'S NAME Jerome R. Boog	19. TITLE Investigator	20. SIGNATURE <i>Jerome R Boog / RBJ</i>
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21. ENDORSEMENT

This inspection was done as a F/U to an IDI where a 22 gal. air compressor exploded. The firm makes industrial air compressors ranging in size from 2.2 to 200 gal. The 2.2 gal is a consumer unit. The firm claims no liability cases except one where a compressor, also 22 gal., exploded but had been modified by the user. The firm has no complaints on the consumer air compressor.

F/U: As Needed

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22. ENDORSER'S NAME Robert B. Johnston	23. TITLE A.S.P.S.I.	24. SIGNATURE <i>Robert B Johnston</i>
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25. ENDORSEMENT DATE	26. DISTRIBUTION 0: MWRO, cc: TWRP, MWRO-COMPLIANCE
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Sanborn Mfg. Co.
Box 129
1118 W. Rock
Springfield, MN 56087

SUMMARY

This inspection was assigned under my monthly Work Plans as a follow-up to Investigation No. 811214CEP2049. This investigation involved a 22 gallon air compressor, manufactured by this firm, which exploded while sitting in a machine shed. During the explosion there was damage done to two walls, the roof and some nearby equipment. There were no injuries during this incident. As we have not previously visited this firm I was asked to visit it to ascertain whether or not this was an isolated incident along with obtaining some general information in respect to the firm's operation.

My inspection revealed that the firm is a manufacturer of air compressors and venting equipment for farm buildings. This includes ventilating fans from 12 inches to 24 inches and air compressors from 2.2 gallon tanks to 200 gallon tanks. The firm estimated that approximately 50% of their customers are industrial, 45% farm and 5% consumer oriented. They said the only product they manufacture which would really be considered a consumer product is their Model 19M33-2 Portable Electric Air Compressor. The brand name of this product is their, "Air Wagon" and is specifically designed for blowing up bicycle tires, car tires and other light air compressor needs around the home.

In their 19 years of existence they have had only one product liability case. It was with their Model 104A200-22 Air Compressor. Reportedly, it was being used off of the back of a pick-up truck and exploded. Although the case has not been settled, their preliminary findings were that the tank had been modified. Management said the owners had modified the filler valve which rendered the pressure valve inoperable.

Also, since their existence they have had about a half dozen complaints of compressor tanks exploding. They said the follow-up investigation usually reveals that after using the tank the customer fails to properly drain the tank. This can, over an extended period of time, cause a corroding problem as the rust attacks the inner liner which eventually causes pinhole leaks. They said the only other problem they experienced was that if the customer mishandles the tank and bangs it up, they can sometimes cause a stress point somewhere on the tank. This also can cause an explosion problem. They noted that they have never had any complaints in respect to explosions that involve their "Air Wagon" Air compressor which is designed for consumer use.

STRUCTURE AND TYPE OF BUSINESS

The firm was originated in 1963 in Sanborn, Minnesota. At that time they started with a small line of air compressors and ventilating equipment for farm buildings. In 1965, because of their rapid growth, it was moved to its current location which is:

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Sanborn Manufacturing Company
P. O. Box 129, 118 W. Rock St.
Springfield, Minnesota 56087
Phone No. 507-723-6211

Since its conception, the firm has continued to be involved in the manufacture and distribution of air compressors and ventilating equipment for farm buildings. Their entire operation is housed at their Springfield, Minnesota address with the exception that some of their electrical components and those air tanks over 30 gallons are fabricated at other locations and sent to the firm.

The firm's product line is manufactured and distributed under their Sanborn Manufacturing Company (60%) brand name and their private labels (40%) such as John Deere, Fleet Farm, etc. The firm stated that approximately 50% of their customers are industrial, 45% are farm related and 5% are consumer oriented.

COMPLIANCE HISTORY

This is the first inspection by CPSC of the firm. There is no prior record at the Twin Cities Resident Post of the firm.

INDIVIDUAL RESPONSIBILITY

The officers of the corporation are:

George Besse - Chairman of the Board
Jerald Kretsch - President
William Besse - Vice-President/Treasurer
Robert Besse - Vice-President/Secretary

Mr. George Besse and Mr. Jerald Kretsch are the founders of this company. Even though all of them have a limited involvement with the firm's operation, over the years these day-to-day responsibilities have been passed on to other corporate officers. Currently the individual most responsible for the firm's operation is Mr. William Besse. He watches over the day-to-day activities and is in overall charge of the firm's quality control program.

PERSONS INTERVIEWED

During my inspection, I was joined by Mr. William Besse, Executive Vice-President, Mr. George Besse, Chairman of the Board and Mr. Jerome Pederson, the firm's attorney. Credentials were shown and a written Notice of Inspection was issued to Mr. George Besse. All three individuals participated in the inspection although most of the information with respect to the firm's operation was discussed with Mr. William Besse. He supplied all the information and attachments which are included with this report.

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COMPLAINT FILE

The firm stated that since their existence they have had only one product liability case. This was a case in Missouri involving a Model 104A200-22 Twin Cylinder Air Compressor. This is a 22 gallon unit powered by a two horsepower motor. In this particular case the firm found that it had been modified with a filler valve which is inappropriate for this unit. The filler valve which rendered the pressure release valve inoperable in all probability caused the explosion. The firm said they expect to hear from the attorney representing the injured party shortly in respect to having their name dropped from the suit.

Mr. William Besse said, with concurrence from his father, that since their existence they have probably had six or seven complaints involving exploding tanks. He said these cases are similar to the one that prompted this inspection. He said their follow-up investigation usually found that the explosion was caused by one of two reasons. One, the customer failed to properly drain the tank after use which can cause a potential problem. This allows the water to sit at the bottom of the tank which can over time corrode the metal and cause a rusting problem. The second most common case is where the customer misuses the compressor. At those times, the compressor is thrown in the back of a pick-up and banged around. This misuse can cause a dent in the tank which actually causes a stress point which in time can cause a problem, such as an explosion.

PRODUCT GUARANTEES

The firm gives a limited warranty on their product line. A copy of this guarantee is part of the sales brochures which cover their product line. Exhibit 4 will show you an example of the sales brochure and the copy of the limited guarantee is included in this booklet.

QUALITY CONTROL PROGRAM

Mr. William Besse said because of the type of product they distribute they are very concerned about quality control with respect to the product line. He said as the product is being manufactured each unit is tested several times during the manufacturing process.

He said initially, as the tank is being welded together, it is visually examined for the proper type of weld. He said each tank is tested at 150 lbs. psi. In this test, what happens is that the tank is submerged in water and the tank is subjected to 150 lb. per square inch of air. If there are any leaks, the tank is immediately marked and is sent back to the welding area to be re-welded. Mr. Besse said that before any of the controls are installed on the tank to make the compressor they are individually checked. Then, as the finished air compressor is assembled and headed for the packing crates, it is once again subjected to tests to assure that it does not contain any leaks. He said at this time the valves are also tested during their final assembly stage.

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He said off the assembly line there are several other tests the firm utilizes. One is that each shipment of steel they receive, which is used in making their air compressor tanks, is checked for the proper hardness and thickness. He said that also every six to eight weeks they take one each of the different size air tanks and subject them to a stress test. In this test they place the tank in an isolated room and continue applying air pressure inside the tank until it actually ruptures. Mr. Besse said it is through tests such as this that they are able to see where there might be a potential for any future problems of the manufacture of their air compressor line.

He also said recently they have begun a new test which includes actually cutting out a section of an assembled air compressor tank and sending the seam to a metallurgist for examination. He said this and other means they use to try to keep ahead of any potential problems that might arise in their welding techniques.

Mr. Besse said they have a full time quality control manager at the plant who is Mr. Ted Watkins. It is his sole responsibility to monitor the firm's activities in respect to quality control. He said that although there are specific guidelines they have always followed none of their procedures is in any sort of written text. He said that one of Mr. Watkins' first duties is to compile a quality control manual that will outline the firm's policies in respect to quality control in the manufacture of their product line. He said this quality control manual will be available when orienting new employees. He said Mr. Watkins is also going to develop some format for tabulating results of their day-to-day quality control efforts. Mr. Besse said that they hope within the next two to three months that this new documented quality control system will be implemented at the plant.

MANUFACTURING OPERATION

The firm's entire manufacturing operation is housed at their Springfield, Minnesota location. The only exception to this is that their air tanks over 30 gallons are manufactured by different jobbers and sent to Sanborn Manufacturing for final assembly.

A portion of our inspection was spent walking through the entire manufacturing plant as the firm's product line was being fabricated, welded, painted, assembled and packaged for shipment.

PRODUCT LABELING

The majority of the product line is manufactured and distributed under their own "Sanborn Manufacturing Company" label. This includes between 60 and 70% of their product line. The remaining 30% of their product line is distributed under private labels such as John Deere, Fleet Farm, etc.

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DISTRIBUTION

The firm's product line is distributed directly from their plant located in Springfield, MN. They utilize their own trucks and guess that approximately 95% of their product line leaves the State of Minnesota.

PROMOTION AND ADVERTISING

The firm utilizes two systems for marketing their product line. They have their own in-house sales force who work with some of their major accounts. They also have a network of sales representatives nationwide for developing new customers.

VIOLATIVE CONDITIONS OR PRACTICES

None.

DISCUSSION WITH MANAGEMENT

During the initial stages of my inspection, I told management the reason for my visit. They said they were aware of the complaint and even had visited the gentleman to examine the damaged air compressor.

He said that this particular case is like one of six or seven they have received since they have been in business. They had an explosion of the tank and it appears that it is either from the individual neglecting to drain the tank after each use which can cause the bottom to rust out or from abusing the tank by bouncing it around in the back of a pick-up or in a shed causing dents or stress points on the tank. Their findings to date have found that one half of the complaints of explosion were caused by improper draining of the tank and the other 50% caused by abusing the air compressor.

Mr. George Besse, Chairman of the Board, said he actually went down to visit the gentleman in respect to this complaint. After some debate, he allowed them to take the tank back to their plant for examination. They tore the tank apart and found that there was a water line approximately three inches up from the bottom of the tank. So, they feel that the cause of the problem was the improper draining of the tank which could have caused the rusting situation which caused the pinhole leak which in turn would cause the explosion. He said there is also some other alterations to the controls for the air compressor, however, they feel the improper drainage of the tank caused the problem.

He said that because of these problems and potential for problems from improperly using or maintaining the equipment they have taken several steps to inform the customer how to use their product. On each individual air compressor there is specific information which instructs the user to drain the tank after each use. A copy of this is attached to this report as Exhibit 2. Also the proper operation instructions is listed on the individual tank along with a detailed information/instruction manual.

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~~individual tank along with a detailed information/instruction manual.~~
They said they have taken all steps they felt possible to properly instruct the user on the operation of the product.

When discussing the firm's product line that is intended for consumer use they said the majority of their product line is not intended for a consumer. They said approximately 50% of their product line is sold for industrial use, 45% is sold for farm use and at most 5% is sold for home use. Realistically, the only product they manufacture for consumer use is their "Air Wagon" which is a portable air compressor which with a 2.2 gallon tank. This particular unit is portable enough for use around the home or garage and is designed for filling bicycle tires, car tires and other light air compressor needs. They said they have never received a complaint on this particular product. They felt that the rest of their product line because of size and cost would make it somewhat prohibitive for use around the home.

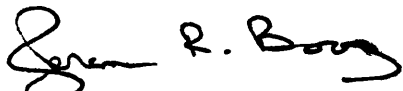
SAMPLES COLLECTED

None.

EXHIBIT DESCRIPTION

- Exhibit 1- Copy of the operating and safety instructions which is put on their air compressors
- Exhibit 2- Copy of the warning sticker with respect to draining the tank after each use
- Exhibit 3- Example of the operation manual covering one of their air compressors
- Exhibit 4- Sales brochure of firm's product line

Notice of Inspection



Jerome R. Boog
Investigator
Twin Cities Resident Post

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U.S. CONSUMER PRODUCT SAFETY COMMISSION

NOTICE OF INSPECTION

1. DATE	3. FROM (Area Office and Address)
2. TIME _____ A.M. _____ P.M.	
4. TO	A. NAME AND TITLE OF INDIVIDUAL
	B. FIRM NAME
	C. NUMBER AND STREET ADDRESS
	D. CITY, STATE AND ZIP CODE

Notice of Inspection is hereby given pursuant to:

- Flammable Fabrics Act (15 U.S.C. 1191 *et seq.*);
- Federal Trade Commission Act (15 U.S.C. 41 *et seq.*);
- Sections 16, 19 and 27 of the Consumer Product Safety Act (15 U.S.C. 2065, 2068 and 2076)
- Section 704(a) of the Federal Food, Drug, and Cosmetic Act (21 U.S.C. 374(a)) [Authority for inspections in connection with the Poison Prevention Packaging Act of 1970 (15 U.S.C. 1471 *et seq.*)] and/or
- Section 11(b) of the Federal Hazardous Substances Act as Amended (15 U.S.C. 1270(b)).

Refer to the back of this form for a discussion of inspectional authority and for pertinent statutory language.

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(a) To gather and compile information concerning, and to investigate from time to time the organization, business, conduct, practices, and management of any person, partnership, or corporation engaged in or whose business affects commerce, excepting banks and common carriers subject to the Act to regulate commerce, and its relation to other persons, partnerships, and corporations.
 (b) That for the purposes of this Act, the Commission, or its duly authorized agent or agents, shall at all reasonable times have access to, for the purpose of examination, and the right to copy any documentary evidence of any person, partnership, or corporation being investigated or proceeded against.
 (c) For purposes of implementing this Act, or rules or orders prescribed under this Act, officers or employees duly designated by the Commission, upon presenting appropriate credentials and a written notice from the Commission to the owner, operator, or agent in charge, are authorized

Section 9 of the Federal Trade Commission Act, (15 U.S.C. 49):

Sections 16(a) and (b) of the Consumer Product Safety Act (15 U.S.C. 2065(a) and (b)):

Pursuant to Section 5(d) of the Consumer Product Safety Act, as amended (15 U.S.C. 2079(d)), the Commission by rule (16 CFR 1605.1(d)) supplemented the authority granted to it under the Flammable Fabrics Act (15 U.S.C. 1191 *et seq.*) and the Federal Trade Commission Act (15 U.S.C. 41 *et seq.*) by making Sections 16 and 27 of the Consumer Product Safety Act (15 U.S.C. 2065 and 2076) applicable to products regulated under the Flammable Fabrics Act.
 The term "Secretary" in the Federal Hazardous Substances Act section and in the Federal Food, Drug, and Cosmetic Act section should be substituted by the term "Consumer Product Safety Commission".

Section 9 of the Federal Trade Commission Act, (15 U.S.C. 49):


(a) To obtain samples of such materials or packages (hereof, or of such labeling, A separate notice shall be given for each such inspection, but a notice shall not be required for each entry made during the period covered by the inspection. Each such inspection shall be commenced and completed with reasonable promptness.
 (b) The functions of the Federal Trade Commission in the administration and enforcement of the Flammable Fabrics Act were transferred to the Consumer Product Safety Commission pursuant to Section 20(b) of the Consumer Product Safety Act (15 U.S.C. 2079(b)).
 Pursuant to Section 5(d) of the Consumer Product Safety Act, as amended (15 U.S.C. 2079(d)), the Commission by rule (16 CFR 1605.1(d)) supplemented the authority granted to it under the Flammable Fabrics Act (15 U.S.C. 1191 *et seq.*) and the Federal Trade Commission Act (15 U.S.C. 41 *et seq.*) by making Sections 16 and 27 of the Consumer Product Safety Act (15 U.S.C. 2065 and 2076) applicable to products regulated under the Flammable Fabrics Act.
 The term "Secretary" in the Federal Hazardous Substances Act section and in the Federal Food, Drug, and Cosmetic Act section should be substituted by the term "Consumer Product Safety Commission".

Sandern Mfg Co.
#IR 3-4-82 SRB
Exh. S. I # 1

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This unit (has been inspected and tested) carries a 1-Year written warranty (see back side of instruction manual). If a problem or question should arise, such as information on local service centers or dealers, machine operation, replacement parts information, etc., contact by phone 800-533-0365, or if in Minnesota 800-722-9363 (In Canada 507-723-6211), Customer Service Department, or by writing to DEPARTMENT WCB, P.O. Box 129, SPRINGFIELD, MN 56087. Our people are trained and very willing to help, so please let us hear from you.

Before operating--note these helpful hints listed below. These steps will benefit you with safe operating practices and more trouble-free efficient service.

1. DRAIN MOISTURE FROM TANK DAILY (see  Warning Label).
2. WHEN UNIT IS NOT IN USE, ALWAYS REMOVE CORD FROM OUTLET.
3. DO NOT OPERATE UNIT WITHOUT BELT GUARD.
4. CHECK COMPRESSOR OIL LEVEL FREQUENTLY. NEVER RUN UNIT LOW ON OIL. Refer to operator's instruction manual for grade, type and proper oil level.

elow. These
es and more

e  Warning

OVE CORD

UARD.
QUENTLY.
o operator's
il level.

Do not use unit in immediate area while paint spraying or in dirty dusty conditions. The air intake filter should be inspected frequently and replaced as needed. A dirty filter will reduce the efficiency of your compressor.

The check valve is a very important part of your air compressor's operation. Refer to your operator's manual for further details and instructions (periodic inspection and/or cleaning is beneficial).

If the machine does not start at kick-in pressure, cuts out before obtaining kick-off pressure or starts lugging, it is very possible that the electrical circuit is inadequate. Dimming or flickering of lights indicates low voltage and an inadequate circuit. Low voltage can cause the motor to burn out. Keep extension cord as short as possible. Use a longer air hose rather than an extension cord. See back-side of instruction manual for recommended wire sizes if an extension cord is necessary.

Refer to your operator's manual for additional pertinent information and trouble-shooting suggestions.

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Sanderson Mfg Co.
Springfield, Mo
ER 3-4-82 SRB
Exhibit # 2



WARNING



PREVENT TANK CORROSION

- After each usage, remove drain plug and drain all moisture from tank.
- All warranties are void if above instructions are not followed.

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INSTRUCTION MANUAL

- OPERATION
- MAINTENANCE
- REPAIR PARTS

- MODELS
- 64A100-10 USA
 - 64A100-14
 - 64A100-22
 - 64A100-12 S.M.E.
 - 64A100-20 S.M.E.
 - 102A200-10 USA

CAUTION:
Read rules for safe operation carefully.



*Sandain Mfg. Co.
Springfield, Ma.
EIR# 3-4-82*

SRB

**TWIN CYLINDER,
VEE-TYPE PUMP
ELECTRIC MOTOR
AIR COMPRESSOR**

Record the model and serial number of this product in the space below. The model and serial numbers are located on the model plate below the pump. Retain this manual with these numbers for future reference.

Model No. _____

Serial No. _____

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MAINTENANCE

CAUTION: Always disconnect the power source and de-pressurize the tank before attempting to service the air compressor or any component utilized in the air system.

A periodic inspection of the air compressor should be made. Some of the things to look for when you inspect your compressor are . . .

- 1. LUBRICATION** — Check the oil level frequently to be certain that you have sufficient oil. SMC air compressors are shipped with break-in oil. Change the break-in oil after running the new compressor for about 8 hours. After the first oil change, a 50 hour oil change is recommended. Make sure the unit is level when checking the oil. Never overfill or underfill the compressor.
- 2. DRAIN TANK — CAUTION:** To prevent possible injury, disconnect the power source and de-pressurize the tank before attempting to drain moisture from the tank. Make sure the unit is setting level or tilted slightly toward the drain plug end. To drain the tank, simply remove the drain plug, located on the bottom of the tank. Ideally, the tank should be drained at the end of every working day. A clean, dry receiver will help guard against corrosion and extend the life of the compressor tank.
- 3. CLEAN AIR FILTER** — Dirty air filters reduce the compressor's performance and life so check the air filters frequently. Foam type filter elements can be taken out and washed periodically with a household detergent and blown dry. **DO NOT OIL.** Felt-pad filters can not be washed but should be blown out with air. Replace filters if they are filled with oil or paint.
- 4. TIGHTEN BELT AND PULLEYS** — Drive belts must be kept tight enough to prevent slipping. If the belt slips or squeaks, the motor should be loosened and adjusted until a slight pressure on the belt midway between the pulleys will cause a total deflection of 1 inch. Pulleys should be properly and carefully aligned and all set screws should be kept tight. Loose motor or compressor pulleys are a very common cause of compressor knocking.
- 5. TEST FOR LEAKS** — Be sure all connections are tight. A small air leak in the hose or any connections will make a big difference in the performance of the compressor. If a leak is suspected, take a small amount of soapy water and brush around the connection. If bubbles appear, tighten or reseal the connection and retighten. In time, the ball seat (no. 079-0002) may become worn. If leakage of the ball seat from the tank, back into the pump is suspected, replace this ball seat.

MOTOR OVERLOAD PROTECTION

This unit is equipped with an over-load protector to help prevent motor burn outs. If the motor overheats and stops, let it cool 10 to 15 minutes and depress the overload protector button. As proper voltage is important, we suggest the use of the following electrical chart.

If an extension cord is used, the following size is recommended:

25' cord — Not less than 14 gauge wire.
50' cord — Not less than 12 gauge wire.
100' cord — Not less than 10 gauge wire.

Your new compressor will draw nearly two times it's name tag rating momentarily when starting.

DIAL-O-MATIC Control

Let's you dial the amount of air needed for the job.

Designed for safety, convenience, and trouble-free operation, both for the operator and the machine. This unique trouble-free control makes it possible to dial the proper amount of air needed for applications where regulated air pressure is necessary. This includes paint spraying, tire testing, air operated tools of all kinds, drills, sanders, nailers blow-guns and so on.



The Dial-O-Matic Control is designed with fewer parts to help eliminate air leaks. The control includes the Dial-O-Matic control knob, plus air gauge which shows regulated pressure, safety relief valve and pressure switch.

To control the line pressure turn the knob clockwise until the desired pressure is reached on the gauge. When the knob is turned completely counter clockwise, the air pressure to the air hose is completely shut off.

How to obtain parts and service.



Parts and service are available from your local SMC dealer or direct from the factory. When ordering parts or needing service from the factory, mail to . . . **Compressor Parts — Dept. WCB**
P.O. Box 129
Springfield, Minnesota 56087

or call 507-723-6211.

In Canada mail to . . . **City Machinery Limited**
318 McDermot Ave.
Winnipeg, Manitoba R3A 0A2

or mail to **1150 Northside Road**
Burlington, Ontario L7M 1H4

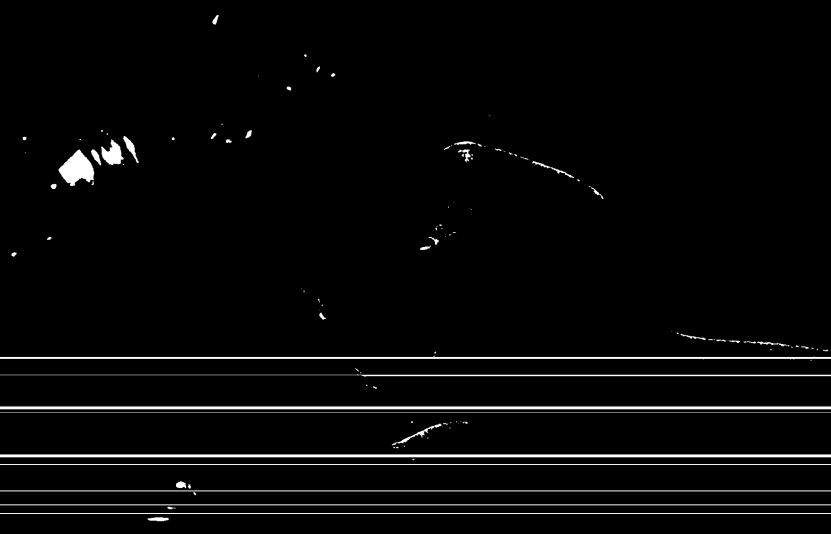
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Sears Mfg Co
Springfield, Mo
EIR 3-4-82

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SRB

ACCESSORIES



MERCHANDISERS

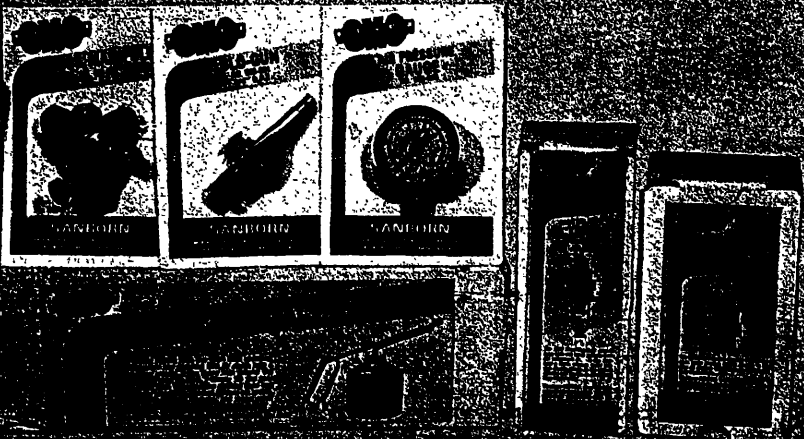
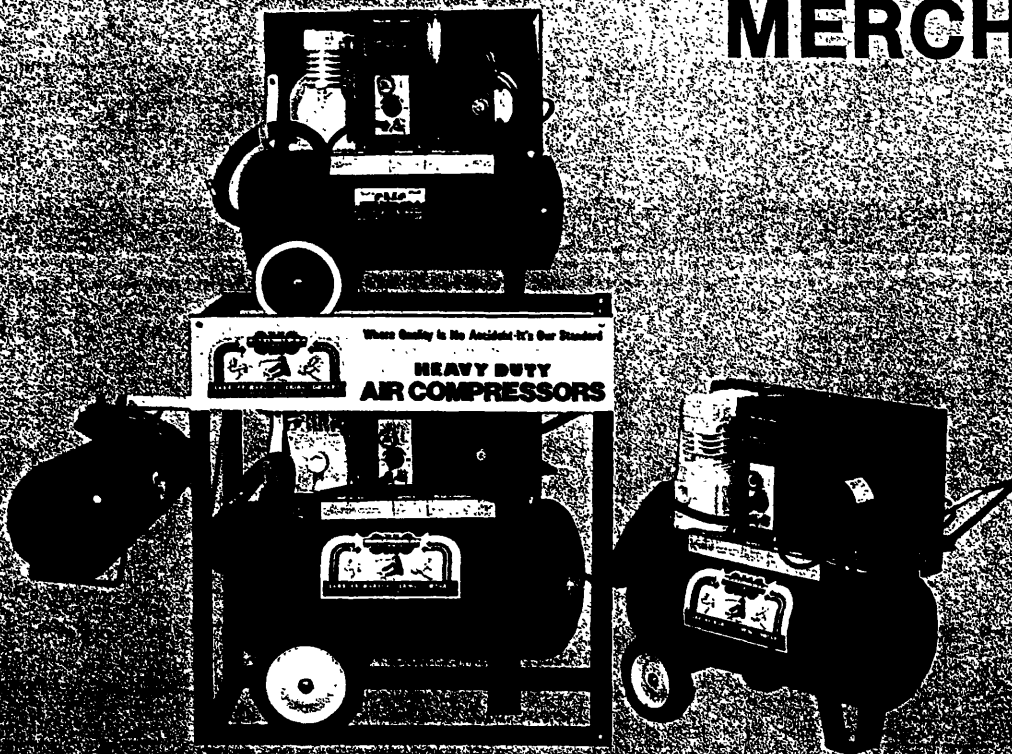
"SMC DISPLAY CENTER" 2 UNIT DISPLAY

Display center features include: room for two air compressors and two portable air tanks, SMC display sign and, upon request, can be fitted with your personal logo, handy storage for literature and handouts, and is available in several color changes.

Check with SANBORN or your SANBORN Sales Representative for more details and prices.

Shipping Weight - 50 lbs. (rack only)

Measurements - 36" x 18" x 35" (rack only)



Each unit is attractively packaged with color illustration of unit and card showing the various size and identification type and numbers for easy identification. Contact your nearest compressor distributor for the SMC display rack.

AIR COMPRESSOR OIL



Especially formulated oil for air compressor pumps is available in handy one quart, graduated containers. Ask for SAE 100 or 100W. Lot SAE 100.



SANBORN MANUFACTURING COMPANY
SPRINGFIELD, MINNESOTA 56087
PHONE: (507) 723-6211

DISTRIBUTED BY:

Handwritten signature and initials



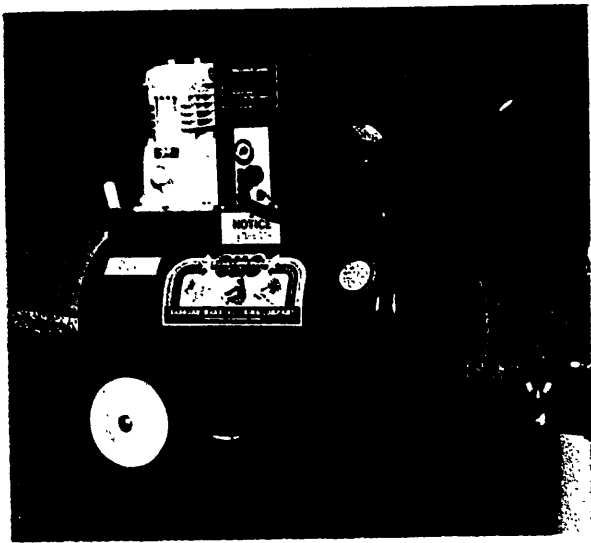
INDUSTRIAL HORIZONTAL & VERTICAL AIR COMPRESSORS

Sandoran Mfg Co.
Springfield, Ma
EIR 3-4-82

249
SRB

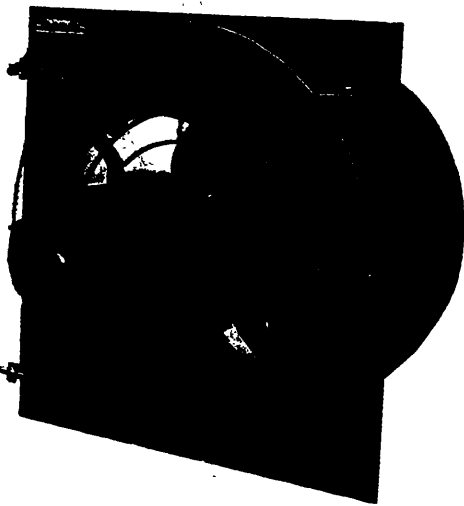
AIR
SANDORAN
AIR COMPRESSORS

Built in accordance with the requirements of
the ASME Boiler and pressure vessel code.



SMC AIR COMPRESSORS - Designed for long-life without complicated service. They're simple, strong and efficient.

SMC builds a complete line to meet the requirements of farm, home, and industry. Single and Twin cylinder pumps with motor sizes to give you the air capacity you want and need.



SANBORN MANUFACTURING COMPANY
P.O. BOX 129 - 118 WEST ROCK
SPRINGFIELD, MINNESOTA 56087
PHONE: (507) 723-6211

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PRINTED IN U.S.A.



AIR WAGON

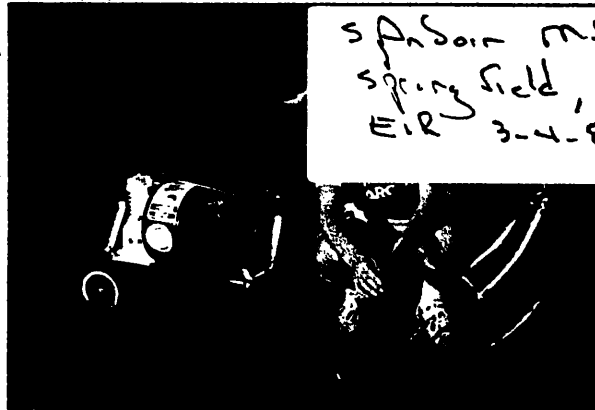
Now anyone can afford the conveniences of owning your own air compressor. The SMC "AIR WAGON" offers many of the features of much larger compressors but in a ~~much~~ smaller size AND price.

This lightweight unit is ideal for those who can't justify the cost of owning a large compressor but would be able to do many jobs around the house or shop if one were available. Once you realize some of the benefits of "AIR POWER" you will wonder how you ever got along without your "AIR WAGON" before.

FEATURES

- Compact
- Lightweight
- Portable
- Versatile
- Operates:

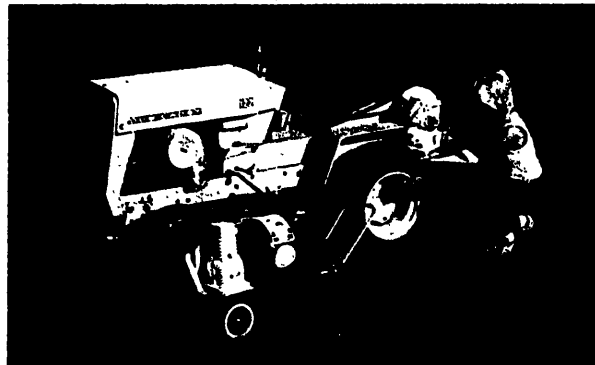
- AIR DUSTER GUN
- AIR STAPLE GUN (small)
- BLO-GUN
- AIR BRUSH
- AIR DRILL
- INFLATOR



Works great for inflating bicycle tires.



AIR WAGON makes cleaning a breeze



Large enough to inflate tractor tires.



Hobbyists will find unlimited uses

SPECIFICATIONS

MODEL.....	19M33-2
ELECTRIC MOTOR	1/3 H.P.
PUMP	SMC Model 340
PUMP DISPLACEMENT (cubic feet per minute)	
0 P.S.I.	Displacement C.F.M. — 1.9
40 P.S.I.	Free Air Delivery C.F.M. — 1.4
80 P.S.I.	Free Air Delivery C.F.M. — 1.0
TANK SIZE	2.3 Gallon / 8.32 Liters
MAX. WORKING PRESSURE ..	80 P.S.I.
HOSE	1/4" Double-braided, 6 ft. length with air chuck
WHEELS	Durable 6" diameter with hub cap
HANDLE	Extra strength with cadmium plating
BELT GUARD	Heavy-duty, 18 gauge steel
WEIGHT	75 pounds

All specifications are subject to change without notice.



SANBORN MANUFACTURING COMPANY
P.O. Box 129 — 118 West Rock Street
Springfield, Minnesota 56087
Phone: (507) 723-6211

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THE PERFORMANCE LEADER IN air power

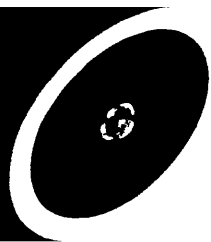


SANBORN MANUFACTURING COMPANY



AIR WAGON

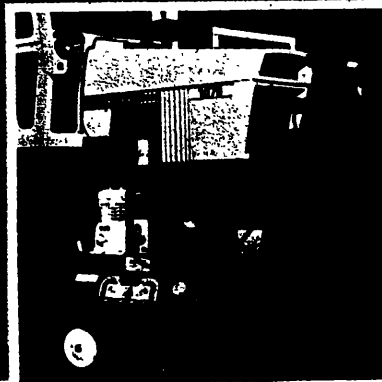
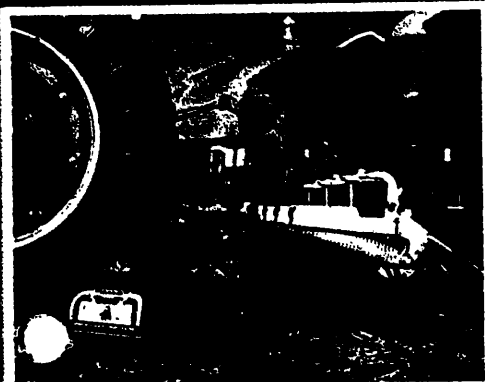
PORTABLE AIR COMPRESSOR



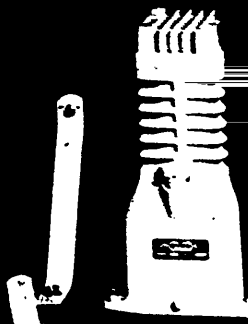


PORTABLE AIR COMPRESSORS

For the FARM, HOME, & SHOP



Sansborn Mfg. Co.
Springfield, MA
AIR 3-4-85
SRB 2/5/9



NOTICE
The following information is for your information only. It is not intended to constitute an offer of insurance or any other financial product. Please read the actual policy or contract carefully before you decide whether to purchase or accept it. Only the actual policy or contract can describe the actual terms, coverages, conditions, exclusions, and limitations of the actual policy or contract.

Small text label, possibly a warning or instruction.

