

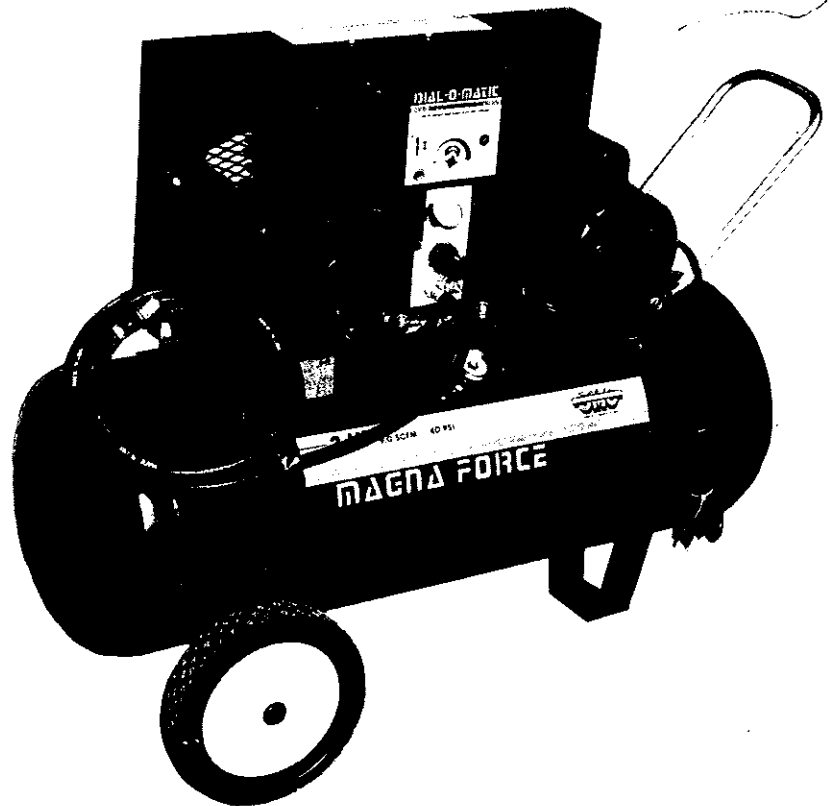
# SANBORN

## AIR COMPRESSORS

### OPERATOR'S MANUAL

- OPERATION
- MAINTENANCE
- REPAIR PARTS

**SERIES**  
**112A300**



## TWIN CYLINDER, ELECTRIC MOTOR AIR COMPRESSOR

### CAUTION:

Read the operator's manual carefully before attempting to operate or service this unit! **FAILURE TO COMPLY WITH INSTRUCTIONS COULD RESULT IN PERSONAL INJURY AND/OR PROPERTY DAMAGE!** SANBORN Air Compressors are precision built from the finest materials and with proper care and maintenance will perform efficiently.

Please record the model and serial number and the date the unit was purchased in the spaces 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. \_\_\_\_\_

Date Purchased \_\_\_\_\_

## ONE YEAR LIMITED WARRANTY

Sanborn Manufacturing Company (the Company) warrants, that for a period of twelve (12) months from the date of purchase, it will replace or repair, free of charge, for the original retail purchaser only, any part or parts, manufactured by the Company, found upon examination by the Company at Springfield, Minnesota, to be defective in material or workmanship or both. All transportation charges for parts submitted for replacement or repair under this warranty must be borne by the original retail purchaser. This is the exclusive remedy under this warranty.

Failure by the original retail purchaser to install, maintain and operate said equipment in accordance with good industry practices and failure to comply with the specific recommendations of the Company set forth in the owner's manual, shall render this warranty null and void. The Company shall not be liable for any repairs, replacements or adjustments to the equipment, or any costs for labor performed by the purchaser without the Company's prior written approval. The effects of corrosion, erosion and normal wear and tear are specifically excluded from this warranty.

THE COMPANY MAKES NO OTHER WARRANTY OR REPRESENTATION OF ANY KIND WHATSOEVER, EXPRESSED OR IMPLIED, EXCEPT THAT OF TITLE. ALL IMPLIED WARRANTIES, INCLUDING ANY WARRANTY OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE HEREBY DISCLAIMED. LIABILITY FOR CONSEQUENTIAL AND INCIDENTAL DAMAGES UNDER ANY AND ALL WARRANTIES, OTHER THAN CONTRACT, NEGLIGENCE, OTHER TORTS, OR OTHERWISE, ARE EXCLUDED TO THE EXTENT EXCLUSION IS PERMITTED BY LAW.

Notwithstanding the above, any legal claim against the Company shall be barred if legal action thereon is not commenced within twenty-four (24) months from the date of purchase or delivery whichever occurs last. This warranty constitutes the entire agreement between the Company and the original retail purchaser and no representative or agent is authorized to alter the terms of same without expressed written consent of the Company.

# SANBORN

## AIR COMPRESSORS

SANBORN MANUFACTURING COMPANY  
118 West Rock Street  
P.O. Box 206  
Springfield, Minnesota 56087

## MODEL IDENTIFICATIONS

STANDARD DOMESTIC MODELS	STANDARD CANADIAN MODELS
112A300-22	112A300-10C
112A300-30N	112A300-20C
112A300-30A*	112A300-30C

\*All compressor model numbers followed by an \* feature an A.S.M.E. coded tank. All other models feature a non-code tank.

- A.S.M.E.** . . . . American Society of Mechanical Engineers.
- C.S.A.** . . . . . Canadian Standards Association.
- Domestic** . . . . Any model air compressor to be sold in the United States.
- Canadian** . . . . Any model air compressor approved for sale in Canada. Model numbers having the letter "C" at the end are C.S.A. approved, and meet Canadian safety codes.
- Coded** . . . . . Refers to an air receiver that is certified by the manufacturer to conform with the A.S.M.E. pressure vessel code.
- Non-Code** . . . Refers to an uncertified receiver which may or may not conform to the A.S.M.E. pressure vessel code.

## SAFETY INFORMATION

**WARNING! | THIS UNIT STARTS AUTOMATICALLY! MAKE SURE POWER CORD IS UNPLUGGED BEFORE ATTEMPTING ANY SERVICE WORK.**

1. Never do any work on the air compressor without first (1) removing the electrical cord from the outlet, and (2) bleeding all air from the tank.
2. Do not re-adjust the pressure switch for any reason. It has been preset at the factory for maximum pressure for this unit.
3. Pull the safety valve ring on the control panel periodically to assure that it is functioning properly and to clear the safety valve of all obstructions.
4. Do not use long extension cords of undersized wire as they may cause a low voltage condition. Use a longer air hose rather than an extension cord. (See wire chart on page 8).
5. Fasten the compressor down when transporting. The unit may tip over resulting in damage.
6. Protect air lines and power cords from damage or puncture.
7. Check the air hose, and the electric cord for weak or worn spots. Replace if any of these conditions exist.
8. After a few days of operation, remove the belt guard, adjust the belt tension and tighten all pulleys and fittings and check all other bolts to make sure they are tight. A periodic check of these parts is also recommended.
9. **BE SURE TO RE-INSTALL GUARD. All moving parts should be guarded.**
10. Welding or any other alterations to this unit voids all warranties.
11. High temperatures may be generated by the motor and pump. Keep children away from the compressor to prevent possible burns or other injuries.
12. **Drain moisture from the tank on a daily basis.** A clean, dry tank will help guard against corrosion. See "Maintenance" section on page 8.

## START UP INSTRUCTIONS

Except for the few details listed below, your SANBORN Air Compressor is ready for operation as received.

1. Before starting the compressor, be sure the pump is full of a good grade SAE 30, non-detergent oil. Air compressor oil in handy, one quart containers are available from SANBORN (see "Lubrication" section on back page). Lighter weight oil (SAE 10) is recommended in temperatures below 20 degrees. (See "Accessories" section).
2. After you unpack the unit check carefully that no damage occurred in transit. Insert the handle in the ferrules in the sides of the base the motor is setting on and tighten the screws on both sides to hold the handle in place.
3. All model 112 compressors are factory wired for 230 volt current.
4. Be sure to furnish adequate power. Low voltage and/or an overloaded circuit can cause sluggish starting or the circuit breaker to trip. If the motor lags, circuit breakers or fuses blow, and/or lights go dim, low voltage could be the cause. (See, "Motor Overload Protection" on page 8 of this manual).
5. Make sure the Auto/Off switch on the Dial-O-Matic control panel is in the Off position. Plug in the power cord and flip the switch to the Auto position. The compressor will pump up to a factory presetting of approximately 120 p.s.i. and then shut off. When the pressure drops approximately 30 p.s.i. the compressor will start again and recycle. Make sure the Auto/Off switch is in the Off position after you have finished, or the compressor will continue to recycle.
6. Unplug the cord from the outlet and check to see if all connections are tight. A small air leak in your hose or connections will make a big difference in the performance of your compressor.
7. Before putting your new compressor to work, run it for about 20 minutes under no load to lubricate the internal moving parts in order to break it in properly.
8. Locate your compressor so a clean dry air supply is available. The SANBORN air filter element (019-0015) is of sufficient size and design to meet normal filtering requirements if properly serviced. The element should be cleaned as needed. If the compressor is being used in dusty conditions, cleaning the filter may have to be done more frequently.

## STORAGE INSTRUCTIONS

Before storing the air compressor for any length of time, there are a few things which should be done.

1. Using an air hose and blow gun, blow all dust and debris from the unit.
2. Disconnect the power cord from the electrical outlet and coil the cord up.
3. Pull the safety valve ring, located on the Dial-O-Matic Control panel, to release all pressure from the tank.
4. Remove and inspect the filter elements in the compressor pump. Replace the filter elements if they are dirty.
5. Clean the filter housing and reinstall filters.
6. Drain the old oil from the crankcase and refill to the proper level with SANBORN Air Compressor oil, (See the "Accessories" section on page 5).
7. Drain all water from the tank. Open the petcock (no. 110 on page 6) and leave the petcock open even after all the water has drained from the tank. Make certain the petcock is closed before the compressor is used again. (See the "Maintenance" section on page 8).
8. Cover the entire unit to protect it from moisture and dust.

## TROUBLE SHOOTING

### PROBLEM – LOW DISCHARGE PRESSURE OR VOLUME

#### CAUSE & SOLUTION

1. **Air Leaks:** Listen for escaping air. Apply soap suds solution to all fittings and connections. Bubbles will appear at points of leakage. Tighten or replace leaking fittings or connections.
2. **Leaking Valves:** Remove valve plate assembly from the head and inspect component parts for valve breakage, scarred valve seats, foreign materials, etc. Replace inoperative parts and reassemble. If gaskets in head and valve plate assembly are damaged, they must be replaced.
3. **Restricted Air Intake:** Clean the air filter with soapy water, blow out with air, or replace with a new one.
4. **Slipping Belt:** Tighten according to instructions under "Tighten Belt and Pulleys" on page 8.
5. **Blown Gaskets:** Replace any gaskets found to be faulty on inspection.
6. **Low Compression:** May be due to worn rings and cylinder walls. The correction is made by replacing the rings and by re honing the cylinder walls. Low compression can also be caused by leaking or broken valves in which case they should be inspected and repaired or replaced.

### PROBLEM – EXCESSIVE STARTING & STOPPING

#### CAUSE & SOLUTION

1. This occurs due to an air leak in the piping (on machine or outside system). It may also be caused by worn rings or leaking or broken valves.

**TROUBLE SHOOTING (continued)**

<b>PROBLEM—DRAWS EXCESSIVE CURRENT—LIGHTS FLICKER—MOTOR OVERLOADS</b>
<b>CAUSE &amp; SOLUTION</b> <ol style="list-style-type: none"><li>1. Circuit and wiring may be too light for the load being carried. Check for excessive cord length.</li><li>2. Check line voltage and motor terminals for good contact.</li><li>3. Check to see if the V-belt is excessively tight.</li><li>4. Check for restricted air passage.</li><li>5. Check for seized bearings on compressor crankshaft or motor shaft.</li><li>6. Determine if the check valve is malfunctioning. If this is the case, the pump is trying to start against tank pressure.</li></ol>
<b>PROBLEM—KNOCKING</b>
<b>CAUSE &amp; SOLUTION</b> <ol style="list-style-type: none"><li>1. A loose motor pulley or compressor flywheel is a very common cause of compressor knocking. If this is the case retighten the pulley setscrew or flywheel setscrew.</li><li>2. Lack of oil in the crankcase may cause the following to occur: a.) worn or scored connecting rods, piston pin, or crankshaft journal, b.) worn bearings on crankshaft, c.) cylinders or pistons scratched, worn or scored. <b>MAINTAIN YOUR OIL TO THE FULL MARK ON THE CRANKCASE AT ALL TIMES.</b></li><li>3. Check that the belt is tightened properly.</li><li>4. Check for excess carbon on top of piston.</li><li>5. Check for leaking, broken, carbonized or loose valves or restricted air passages. Also, foreign material on top of the piston hitting the valve plate will cause knocking.</li></ol>
<b>PROBLEM—HEATING</b>
<b>CAUSE &amp; SOLUTION</b> <ol style="list-style-type: none"><li>1. <b>Poor Ventilation:</b> Relocate the compressor in an area where there is ample supply of cool, clean, dry and well circulated air. Avoid locations near boilers or other areas where there is high ambient temperature.</li><li>2. <b>Dirty Cooling Surfaces:</b> Keep all cooling surfaces of the compressor and motor clean.</li><li>3. <b>Incorrect Pulley Rotation:</b> Check the arrow on the flywheel for correct rotation. If incorrect, have a competent electrician check for the possibility of having the motor reversed.</li><li>4. Leaking, broken, carbonized or loose valves and restricted air passages may also cause heating to occur.</li></ol>
<b>PROBLEM—OIL IN DISCHARGE AIR</b>
<b>CAUSE &amp; SOLUTION</b> <ol style="list-style-type: none"><li>1. This may be due to worn piston rings. Replace with new rings.</li><li>2. The compressor air intake may be restricted. Clean the filter with soapy water, blow out with air, or replace with a new one. Also check for other restrictions in the air intake system.</li><li>3. The oil level in the compressor may be too high.</li><li>4. If detergent type oil is being used, change to non-detergent oil. (See the Accessories section).</li><li>5. This may also be caused by cylinders or pistons being scratched, worn or scored.</li></ol>
<b>PROBLEM—ABNORMAL PISTON, RING OR CYLINDER WEAR</b>
<b>CAUSE &amp; SOLUTION</b> <ol style="list-style-type: none"><li>1. If the compressor is operated in an extremely dusty atmosphere, change the oil and filter regularly.</li><li>2. During periods of high temperatures, use SANBORN 30 weight oil (part no. 018-0007) and during periods of lower temperatures use SANBORN 10 weight oil (part no. 018-0008).</li></ol>
<b>PROBLEM—EXCESSIVE BELT WEAR</b>
<b>CAUSE &amp; SOLUTION</b> <ol style="list-style-type: none"><li>1. <b>Pulley Out of Alignment:</b> Re-align motor pulley with compressor pulley.</li><li>2. <b>Belt Is Too Loose or Too Tight:</b> Adjust tension of belt to conform with what is recommended.</li><li>3. <b>Belt Slipping:</b> Adjust tension of belt to conform with what is recommended.</li><li>4. <b>Pulley Wobbles:</b> Check for worn crankshaft, keyway, or pulley bore resulting from running the compressor motor with loose pulleys. Also, check for bent pulleys or bent crankshaft.</li></ol>
<b>PROBLEM—STALL</b>
<b>CAUSE &amp; SOLUTION</b> <ol style="list-style-type: none"><li>1. Have a competent electrician examine the motor and wiring to see if the motor is overloaded.</li><li>2. Check to see if the pump has seized (locked-up).</li><li>3. Examine the check valve to see if the tank pressure is going back through to the top of the cylinder piston. If so, the compressor will not start against this pressure.</li></ol>

# ACCESSORIES AND AIR TOOLS

**SANBORN**  
AIR COMPRESSORS

Sanborn Manufacturing Company has a complete line of accessories and air tools to fit your particular air work requirements. Some are listed below. For more detailed information, contact Sanborn Manufacturing Company, or your local SANBORN Air Compressor dealer.

Tool Operation  
Graph for Series  
112A300

OPERATION	
C=Continuous	
I=Intermittent	
PART NO.	OPER.
010-0212	C
010-0331	I
010-0107	I
011-0798	I
009-0001	C
009-0354	I
024-0728	C
024-0788	I
024-0720	C
024-0734	I
024-0710	C
024-0754	I
024-0767	I
024-0865	I

PART NO.	DESCRIPTION
010-0212	Economy spray gun. All-purpose, spray gun. Internal-mix, bleeder type. Not convertible for use with paint tank. Adjustable fluid needle. Operates on pressures from 20 to 45 PSI.
010-0331	Heavy-duty, three-way spray gun. Use as bleeder or non bleeder gun. Internal or external mix allows wide range of spraying applications. Spray latex, laquers and other fine finishes.
010-0107	Production spray gun. High volume, non-bleeder type ideal for rapid production spraying applications. Adjustable air and fluid controls. Quick lock/unlock quart cup.
011-0798	2½ gallon paint tank. A heavy-duty tank with all the features to handle big jobs. Complete with regulator and air gauge. For use with spray guns 010-0331, 010-0107 and 010-0006.
009-0001	Miracle Sand Blaster. A complete sandblasting system offering portability and virtually unlimited applications. No media hopper is required. Ready to use.
009-0354	Sand Blaster Outfit. Includes gun with 3/32" air jet and 3/16" hardened steel nozzle, 15 foot materials hose, 3 gallon steel hopper, face shield hood, quart aluminum canister.
024-0728	3/8" Air Ratchet. High speed 150 RPM run-down ratchet, features improved ratchet head ball type retainer, and ball and needle bearing construction for longer life.
024-0788	3/8" Air Drill. Stall resistant 1/2 HP motor, handle exhaust directs air away from work, it is muffled internally, with planetary ball bearing and needle construction.
024-0720	3/8" Butterfly Air Impact Wrench. Butterfly throttle mechanism for single-handed control of speed and forward and reverse, air inlet swivels 360 degrees, built-in regulator.
024-0734	1/2" Air Impact Wrench. Compact light weight design. Delivers up to 300 ft./lbs. torque. positive action trigger with built-in speed regulator, single-handed operation.
024-0710	Air Hammer/Chisel Kit. Heavy duty with teasing throttle for operator control. Comes with four free air chisels with standard point, .401" shank.
024-0754	6" Dual-Action "Quiet" Orbital Air Sander. Built-in speed regulator, with variable speed trigger and quiet motor insulation. Standard 6" pad or optional 5" pad.
024-0767	Straight Line Sander. Pad size 2½" x 15½" accepts adhesive backed or standard sanding paper. Standard equipment includes automatic release trigger.
024-0865	5" Heavy-Duty Air Sander. Variable speed, pistol grip sander with speed ranges from 4,000 to 18,000 RPM. Includes 3" and 5½" sanding pads.

## OTHER ACCESSORIES

PART NO.	DESCRIPTION	PART NO.	DESCRIPTION
	SANBORN Air Hoses have brass, 1/4" male fittings on each end. They are rated at 200 PSI.	018-0004	1/2" pipe size, 1/2 pint bowl
012-0004	3/8" I.D. x 15' long	018-0003	3/4" pipe size, 1/2 pint bowl
012-0007	3/8" I.D. x 25' long		Filter/Regulator, elements of sintered bronze with relieving type diaphragm. Rated at 150 PSI inlet pressure and 125° Fahrenheit.
012-0006	3/8" I.D. x 50' long	019-0010	1/4" pipe size, two 1/4" NPT gauge ports
	SANBORN Paint Hoses have 3/8" female tapered pipe threads on each end.	019-0009	3/8" pipe size, two 1/4" NPT gauge ports
012-0022	3/8" I.D. x 15' long	019-0008	1/2" pipe size, two 1/4" NPT gauge ports
012-0023	3/8" I.D. x 25' long	019-0007	3/4" pipe size, two 1/4" NPT gauge ports
	Filter, with sintered bronze element, polycarbonate bowl. Rated at 150 PSI. Four pipe sizes.	036-0001	Kwik-Change Coupler Assembly, 1/4" NPT female threads. (includes no. 037-0001 adapter)
019-0006	1/4" pipe size, 1/3 pint bowl	037-0001	Male 1/4" NPT Kwik-Change coupler adapter. (use with most air tools and spray guns)
019-0005	3/8" pipe size, 1/3 pint bowl	038-0001	Female 1/4" NPT Kwik-Change coupler adapter.
019-0004	1/2" pipe size, 1/2 pint bowl	035-0001	Blo-gun Kwik-Changed coupled, 1/4" NPT female threads. OSHA approved. (does not include Kwik-Coupler or adapters.)
019-0003	3/4" pipe size, 1/2 pint bowl	035-0003	Clip-on blo-gun with 8-1/2" spout. Snaps on to most ball-type air chucks.
	Regulator, has relieving type diaphragm, secondary pressure adjustment. Range 5 - 125 PSI, maximum inlet pressure 300 PSI.	035-0004	Clip-on spray cleaner with 1 quart fluid container. Converts any standard ball-type air chuck into a spray cleaner.
020-0004	1/4" pipe size, two 1/4" NPT gauge ports	018-0008	Air compressor oil, (recommended for use below 20 degrees F.) One quart.
020-0003	3/8" pipe size, two 1/4" NPT gauge ports	018-0007	Air compressor oil, (recommended for use above 20 degrees F.) One quart.
020-0002	1/2" pipe size, two 1/4" NPT gauge ports		
020-0001	3/4" pipe size, two 1/4" NPT gauge ports		
	Lubricator, polycarbonate bowl with bowl guard option. Maximum rated operating conditions, 150 PSI and 125° Fahrenheit		
018-0006	1/4" pipe size, 1/3 pint bowl		
018-0005	3/8" pipe size, 1/3 pint bowl		



# PARTS LIST

**SANBORN**  
AIR COMPRESSORS

REF. NO.	PART NO.	DESCRIPTION	QUANT.
<b>COMPRESSOR PUMP REPLACEMENT PARTS</b>			
1	061-0002	Set screw, 5/16"	1
2	044-0014	10" O.D. Flywheel, B-groove	1
3	146-0001	Key, 3/16" x 1" long	1
4	046-0009	Oil seal	1
5	059-0001	Bolt, 5/16" - 18 x 3/4"	10
6	056-0002	Crankcase breather	1
7	054-0010	O-ring	1
8	045-0010	Bearing carrier	1
9	046-0005	Bearing carrier gasket	1
10	051-0003	Sleeve bearing	2
11	060-0001	Fiber washer	2
12	053-0001	Crankshaft	1
13	049-0005	Crankcase	1
14	059-0010	Bolt, 5/16" - 18 x 1-1/4"	4
15	062-0002	1/8" Oil drain plug	1
16	062-0004	3/8" Oil fill plug	1
17	062-0003	Expansion plug	1
18	046-0006	Cylinder gasket	1
19	050-0008	Cylinder	1
20	046-0013	Head gasket	1
21	061-0035	No. 6-32 stickscrew 1/4" long	8
22	155-0021	Stop bar	4
23	155-0020	Flex-Leaf valve	4
24	043-0073	Valve plate	1
25	046-0014	Valve plate gasket	1
26	042-0007	Head	1
27	019-0015	Inlet filter	2
28	059-0026	Bolt, 3/8" - 16 x 2-1/2"	6
29	060-0014	Gasket washer	1
30	054-0019	Compression ring	4
31	054-0020	Oil control ring	2
32	054-0018	Wrist pin retaining ring	4
33	052-0004	Wrist pin	2
34	048-0008	Piston, 2-5/8"	2
35	059-0004	Bolt, 5/16" - 18 x 1-1/4" (socket head)	4
36	047-0008	Connecting rod	2
37	103-0011	Bolt seal, 5/16" I.D.	10

REF. NO.	PART NO.	DESCRIPTION	QUANT.
<b>TANK ASSEMBLY REPLACEMENT PARTS</b>			
90	033-0001	Hub cap, 1/2" for 10 and 12 gallon portable models	2
90	033-0002	Hub cap, 5/8" for 20, 22 & 30 gal. portable models	2
91	095-0010	Wheel, 8" x 1.75" for 22 & 30 gallon portable models	2
91	095-0001	Wheel, 10" x 1.75" for 20 & 30 gallon ASME, and 22 & 30 gallon non-code models	2
92	114-0006	Belt guard bracket	1
93	114-0005	Hose bracket	1
94	059-0012	Lock bolt, 5/16" - 18 x 1/2"	11
95	061-0005	No. 10 sheet metal screw	3
96	127-0019	10 gallon tank	1
96	151-0001	12 gallon ASME tank	1
96	152-0001	20 gallon ASME tank	1
96	130-0002	22 gallon tank	1
96	131-0001	30 gallon tank (portable)	1
96	153-0001	30 gallon ASME tank (portable)	1
96	131-0003	30 gallon tank (horz. stationary)	1
96	153-0003	30 gallon ASME tank (horz. stationary)	1
96	131-0004	30 gallon tank (vert. stationary)	1
96	153-0005	30 gallon ASME tank (vert. stationary)	1
97	112-0002	Handle (for portable models only)	1
98	160-0006	3 HP motor, 230 volt	1
99	071-0002	Strain relief connector	1
100	026-0011	Power cord, 14/3' x 6', 230 volt, 15 amp for Domestic models	1
100	026-0038	Power cord, 14/3' x 6', 230 volt, 15 amp for CSA models	1
101	026-0013	Interconnecting cord, 14/2 x 34" long	1
102	006-0021	Pulley, 2 1/2" O.D., B-width	1
103	146-0001	Key, 3/16" x 1" long	1
104	061-0006	Set screw, 5/16" - 18 x 3/8"	1
105	008-0023	V-belt, 5L-480	1
106	093-0003	Grommet strip	1
107	117-0002	Manifold cover	1
108	142-0003	Belt guard for Domestic models	1
108	142-0012	Belt guard for CSA models	1
109	094-0002	Vibration isolator (portable models only)	1
110	072-0001	1/4" Petcock (tank drain)	1

<b>DIAL-O-MATIC REPLACEMENT PARTS</b>			
60	058-0016 *	1/2" Compression nut & sleeve	2
61	145-0028 *	Transfer tube, 1/2" O.D.	1
62	068-0009 *	Male connector, 1/2" NPT x 1/2" O.D. tube	2
63	079-0002 *	Ball seat	1
64	055-0007	Spring <i>055-0059</i>	1
65	106-0001	Face plate	1
66	032-0001	Gauge, 160 PSI, 1/8" back connect	2
66	032-0005	Gauge, 160 PSI, 1/4" back connect for 30 gallon ASME Vertical models	1
66	032-0003	Gauge, 160 PSI, 1/4" bottom connect for 30 gallon non-code models	1
67	136-0012	Pressure relief valve for all Domestic models	1
67	136-0004	125 lb. A.S.M.E. pressure relief valve for all models with an A.S.M.E. tank	1
67	136-0019	Pressure relief valve assembly for all CSA models with non-code tanks	1
68	137-0001	Knob assembly	1
69	055-0005	Regulator spring	1
70	078-0001	Regulator piston	1
71	054-0007	O-ring	1
72	105-0002	Guide	1
73	054-0040	O-ring	1
74	079-0005	Ball, 1/4"	1
75	064-0028	1/8" NPT 45° street elbow	1
76	041-0003	Manifold	1
77	034-0025	Pressure switch for Domestic models	1
77	034-0012	Pressure switch for CSA models	1
78	093-0001	Rubber grommet	1
78	071-0002	Strain relief connector for all CSA models	1
79	058-0017	1/4" compression nut & sleeve	2
80	145-0008	Bleeder tube 1/4" O.D.	1
81	068-0002	Male connector, 1/8" NPT x 1/4" O.D. tube	1

*139-0010*

<b>ASSEMBLIES &amp; MISCELLANEOUS PARTS</b>		
040-0020	Pump Assembly, model 112 SANBORN	
165-0014	Overhaul Kit, (includes gasket set, filters, valves with screws and ring set)	
054-0067	Complete set of rings	
046-0153	Complete set of gaskets	
043-0074	Valve plate assembly (ref. nos. 20-25)	
048-0024	Piston assembly (ref. nos. 30-34)	
042-0017	Cylinder head assembly (ref. nos. 20-27 & 29)	
012-0004	Hose, 3/8" x 15' (not shown)	
038-0002	Air chuck (on end of hose)	
018-0007	Air compressor oil, SAE 30 (recommended for use above 20° F., 1 quart)	
018-0008	Air compressor oil, SAE 10 (recommended for use below 20° F., 1 quart)	

## 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. All 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.  
**NOTE:** To de-pressurize the tank, simply pull the ring on the relief valve located on the "Dial-O-Matic" control console. Make sure the unit is setting level or tilted slightly toward the drain end. To drain the tank, simply open the petcock located on the bottom of the tank. Ideally, the tank should be drained at the end of each 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. Felt pad filters can be washed out with soapy water or blown out with air. Replace filters that 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.
6. **PRESSURE SWITCH** — The pressure switch should be inspected periodically by an authorized SANBORN Service Center or an authorized SANBORN Service Dealer.

## 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 amperage 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.

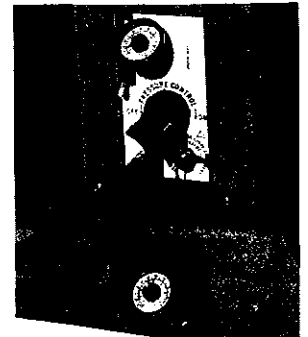
The Dial-O-Matic Control is designed with fewer parts to help eliminate air leaks. The control includes the Dial-O-Matic control knob, plus air gauge which shows regulated pressure, relief valve and Auto/Off pressure switch.

**Pressure Control Knob** — 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 hose is completely shut off.

**Relief Valve Pull Ring** — The relief valve pull ring, located on the Dial-O-Matic control console, is used to depressurize the tank. Simply pull the ring and hold it until ALL pressure is released.

**Auto/Off Switch** — When the switch lever is in the Off position (down) the motor will not run. When the switch lever is in the Auto position (up) the unit will cycle automatically on air demand. Make certain the switch is in the Off position after each use.

**Tank Pressure Gauge** — The tank pressure gauge, located directly below the Dial-O-Matic control panel, lets the operator know what the air pressure (P.S.I.) is in the receiver tank. This is **not** the pressure delivered to the hose. The air hose pressure, or working pressure, is shown on the gauge located on the Dial-O-Matic control panel.



## How to obtain parts and service.

Parts and service are available from your local SANBORN air compressor dealer or direct from the factory. When ordering parts or needing service from the factory, mail to . . . . .

**Compressor Parts — Dept. WCB**  
118 West Rock Street, P.O. Box 206  
Springfield, Minnesota 56087  
or call, 507-723-6211.

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

# SANBORN

## AIR COMPRESSORS